

# Pistons & Piston Rings

PDF Express Edition



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The PDF report is an extract of the main database and provides a number of limited datasets for each of the countries covered. For users needing more information, detailed data on Pistons & Piston Rings is available in several geographic Editions and Database versions. Users can order any other Editions, or the full Database version, as required from the After-Sales Service or from any NIN Dealer at a discount.

This research provides data on **Pistons and Piston Rings**.

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## Express Edition

### Pistons & Piston Rings

NAICS / SIC / SERIES: P35922\_M

This PDF Express edition has 453 pages. Updated monthly.

Years covered: Historic data for the past 7 years, and Forecast data for the next 7 years.

**Price:** \$950

**Delivery:** 24 hours as a downloaded PDF file, or shipped as a DVD.

## Products & Markets

This report covers the following Product and Market Sectors:-

Product & Market data is given in US\$ for each Country, by each Product by each Year: Historic data for the past 7 years, and Forecast data for the next 7 years.

### PISTONS + PISTON RINGS

1. Pistons and Piston Rings
2. Pistons: All types: Aluminium: Motor vehicles, passenger cars, trucks
3. Pistons: All types: Aluminium: Misc. aluminium pistons
4. Pistons: All types: Other than aluminium: Motor cars, trucks, buses etc.
5. Pistons: All types: Other than aluminium: Misc. pistons
6. Piston rings: Oil type: Motor vehicle, passenger cars, trucks & buses
7. Piston rings: Oil type: Misc. oil type piston rings
8. Piston rings: Compression type: Motor vehicles, passenger cars, trucks
9. Piston rings: Compression type: Misc. compression type piston rings

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## NAICS / SIC coded reports and databases

This is a Market database which is designed to be compatible with U.S. government databases.

For NAICS / SIC coded reports and databases, the report structures are an analogue of U.S. Department of Commerce / U.S. Census databases, and are an analogue of U.S. Census data, but in a worldwide context.

For a full explanation of the NAICS coding system see: <http://www.census.gov/eos/www/naics/>

These product / revenue lines codes and definitions are determined by the U.S. Government agencies.

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## Report Description

### Pistons & Piston Rings Report

The Pistons & Piston Rings PDF Express Report gives data on each of the Products & Markets listed by 2 Time series: 7 years Historic data and 7 years Forecast data.

Each of the 10 Products & Markets are quantified in US\$, by each year (7 historic & 7 forecast years).

Financial data is provided for Pistons & Piston Rings, by each year (7 historic & 7 forecast years), including complete aggregated Financials, Balance Sheets and Financial Margins and Ratios, by country.

A range of Industry Data is provided for Pistons & Piston Rings, by country, by year. The Industry Data is based on 296 Companies and Entities which Supply or Distribute Pistons & Piston Rings.

This Pistons & Piston Rings Report is a PDF Express Edition. 453 pages. Updated monthly.

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| 464. | Taiwan Financials Forecast                 | 519. | Uzbekistan Financials Forecast                      |
| 465. | Taiwan Industry Norms                      | 520. | Uzbekistan Industry Norms                           |
| 466. | Tanzania Market Historic : US\$ Million    | 521. | Venezuela Market Historic : US\$ Million            |
| 467. | Tanzania Market Forecast : US\$ Million    | 522. | Venezuela Market Forecast : US\$ Million            |
| 468. | Tanzania Financials Historic               | 523. | Venezuela Financials Historic                       |
| 469. | Tanzania Financials Forecast               | 524. | Venezuela Financials Forecast                       |
| 470. | Tanzania Industry Norms                    | 525. | Venezuela Industry Norms                            |
| 471. | Thailand Market Historic : US\$ Million    | 526. | Vietnam Market Historic : US\$ Million              |
| 472. | Thailand Market Forecast : US\$ Million    | 527. | Vietnam Market Forecast : US\$ Million              |
| 473. | Thailand Financials Historic               | 528. | Vietnam Financials Historic                         |
| 474. | Thailand Financials Forecast               | 529. | Vietnam Financials Forecast                         |
| 475. | Thailand Industry Norms                    | 530. | Vietnam Industry Norms                              |
| 476. | Tunisia Market Historic : US\$ Million     | 531. | Zambia Market Historic : US\$ Million               |
| 477. | Tunisia Market Forecast : US\$ Million     | 532. | Zambia Market Forecast : US\$ Million               |
| 478. | Tunisia Financials Historic                | 533. | Zambia Financials Historic                          |
| 479. | Tunisia Financials Forecast                | 534. | Zambia Financials Forecast                          |
| 480. | Tunisia Industry Norms                     | 535. | Zambia Industry Norms                               |
| 481. | Turkey Market Historic : US\$ Million      |      |                                                     |
| 482. | Turkey Market Forecast : US\$ Million      |      |                                                     |
| 483. | Turkey Financials Historic                 |      |                                                     |
| 484. | Turkey Financials Forecast                 |      |                                                     |
| 485. | Turkey Industry Norms                      |      |                                                     |

## Countries Covered

|                      |             |                      |
|----------------------|-------------|----------------------|
| Algeria              | Greece      | Peru                 |
| Argentina            | Guyana      | Philippines          |
| Australia            | Honduras    | Poland               |
| Austria              | Hong Kong   | Portugal             |
| Azerbaijan           | Hungary     | Romania              |
| Bahrain              | Iceland     | Russia               |
| Bangladesh           | India       | Saudi Arabia         |
| Belarus              | Indonesia   | Serbia & Montenegro  |
| Belgium              | Iran        | Singapore            |
| Bolivia              | Ireland     | Slovakia             |
| Bosnia & Herzegovina | Israel      | Slovenia             |
| Botswana             | Italy       | South Africa         |
| Brazil               | Jamaica     | South Korea          |
| Bulgaria             | Japan       | Spain                |
| Cambodia             | Kazakhstan  | Sri Lanka            |
| Canada               | Kenya       | Suriname             |
| Chile                | Kuwait      | Sweden               |
| Colombia             | Kyrgyzstan  | Switzerland          |
| Costa Rica           | Laos        | Taiwan               |
| Croatia              | Latvia      | Tanzania             |
| Cuba                 | Lebanon     | Thailand             |
| Cyprus               | Lithuania   | The Netherlands      |
| Czech Republic       | Luxembourg  | Tunisia              |
| Denmark              | Malawi      | Turkey               |
| Ecuador              | Malaysia    | Uganda               |
| Egypt                | Mexico      | Ukraine              |
| El Salvador          | Morocco     | United Arab Emirates |
| Estonia              | New Zealand | United Kingdom       |
| Finland              | Nicaragua   | United States        |
| France               | Nigeria     | Uruguay              |
| French Guiana        | Norway      | Uzbekistan           |
| Georgia              | Pakistan    | Venezuela            |
| Germany              | Panama      | Vietnam              |
| Ghana                | Paraguay    | Zambia               |

### Data Caveat

The report databases are designed to give a common definition, unit of measure and quantification of markets in over 200 countries. The reports rely on data collection at various levels of the product flow; this effectively means, the producer, the distribution channels and the end user or consumers. This data is then correlated with any national and international statistical data produced by official agencies. Unfortunately, product flow data gathering in some countries is difficult, and furthermore the official statistical data is both inaccurate and sparse. In such circumstances, in some countries, we have to flag a Data Caveat as a warning. What this means is that in some countries the data is not sufficiently verifiable for statistical purposes and in those cases the data may not be presented.

## Market Notes & Definitions

ALL MARKET DATA FIGURES ARE IN REAL TERMS : US\$

REAL TERMS are figures excluding the effects of inflation, thus the Forecasts and figures given can be readily converted into units or volume. This is done by applying the average prices for the base year and dividing the figures by this price for all years. Thus it is possible to easily ascertain both historic and forecasted product volume.

A "most recent published accounts" base is used because most company accounts are historic and thus clients will be able to compare the figures given in this report with their own company figures without the need for conversion or the need for inflators or multiplying factors.

AVERAGE SALES PRICES ARE NOT APPROPRIATE OR APPLICABLE TO THIS DATABASE

The effect of using Real Terms figures is that the forecasted figures will be depressed, as they do not include inflation, and figures from former years (i.e. before the Base Year) will be increased.

The Current or Base Year is at the convergent point as is the Current cost. This Current Cost usually increases because of the effects of inflation. The Real Terms figures do not include the effects of inflation and thus only increases or decreases if the actual product volume or units increase or decrease. In this way it is possible to evaluate the market and other figures more realistically.

The figures and the Trend figures represent an overall median probability trend line that is plotted to give the most probable course amongst the annual forecast scatter. Thus, the figures do not reflect year-on-year depressions and peaks in absolute terms, but instead represents a year-on-year modified trend line. The various SCENARIOS provided in the database reflect the differential forecasts specific to the factors being forecast.

The U.S. government uses the term Constant dollars (or "real" dollars) and this is defined thus: Output values converted to a base price level, calculated by dividing current (or actual) dollars by a deflator. Use of constant dollars eliminates the effects of price changes between the year of measurement and the base year and allows calculation of real changes in output.

## HISTORIC & FORECAST MARKET DATA TRANSITION PERIODS

The HISTORIC DATA covers the last 7 years, and the MEDIAN FORECAST DATA series covers the years the next 7 years. There is always a transition period; which is in fact during the last two quarters, i.e. whilst the historic data is being collated. In addition the data given for the next two quarters is considered an estimate rather than a forecast. Thus the 12 month period around the database output date is an estimate.

## THE MARKET ENVIRONMENT

There are four basic issues to investigate when considering the market environment:

1. Market Growth
2. Market Structure
3. Market/s Serviced
4. Customer & End User Factors

1. MARKET GROWTH (both short-term and medium term) is fully analysed in other sections and further analysed in these sections. The importance of this factor is of course self-evident and thus not requiring further explanation.

2. THE MARKET STRUCTURE is very critical for profitability. The nature of the market, the location of the Marketplace, the customer base and the supplier structure is fully provided in several other sections of this study and therefore no further discussion is necessary.

3. MARKET SERVICED is the term used to denote the function between the product/s and services offered by companies and the particular market sector the marketing effort reaches. In addition, there is the MARKET AVAILABILITY to consider as this represents the 'real market' available to any particular company or supplier.

## THE TOTAL AVAILABLE MARKET



Thus the Market Area Serviced is the sector of the market for which companies are offering a suitable product or service and Available Markets the sector of the market reached by a company's marketing effort. The areas marked as the overlap in the Market Area Serviced, i.e. the market sector for which companies are offering suitable product/s or services and which may theoretically be reached by a company's marketing activities, but of which part is controlled by either other Purchasers or Suppliers. The Market Availability is the total market perceived by the total Purchaser universe; however the Available Markets the market which is actually available to individual Suppliers.

The Market Area Serviced is the true market in terms of product/s and services, however parts of this market may be difficult or impossible to attain due to the control exerted by either the controlling Purchasers or Suppliers.

## **HISTORIC DATA & TIME SERIES**

### **Last 7 Years to Current Year**

This standard HISTORIC format is the most popular time series demanded by readers. Many readers feel that it is more important to know what is likely to happen in the recent past rather than what has transpired in the long-term past. The HISTORIC DATA in the database covers the years from 1997 to the Current Year.

## **FORECAST DATA & TIME SERIES : MEDIAN MARKET FORECAST**

### **From the Current Year to the next 7 Years**

The MEDIAN FORECAST DATA covers the next 7 years. This standard FORECAST format is the most popular format demanded by readers.

We can of course provide readers with other data on long-range forecast data and this is done as part of the After-Sales Service.

#### **1. ALL FIGURES IN THIS SECTION ARE IN REAL TERMS: Current Year BASE**

REAL TERMS are prices excluding the effects of inflation, thus the Market Consumption figure given can be readily converted into units or volume. This is done by applying the average sales prices for the Current Year and dividing the Market Consumption figures by this price for all years. Thus it is possible to easily ascertain previous and forecasted product volume.

A base year is used because most company accounts are historic and thus readers will be able to compare the figures given in this volume with their own figures without the need for conversion or the need for inflators or multiplying factors.

The effect of using Real Terms figures is that the forecasted figures will be depressed, as they do not include inflation, and figures from former years will be increased.

2. The Market Consumption figures and the Trend figures represent an overall median probability trend line which is plotted to give the most probable course amongst the annual market forecast scatter. Thus the figures do not reflect year-on-year depressions and peaks in absolute terms, but instead represents a year-on-year modified trend line.

3. All analyses are based on correlations of the results of the Surveys of Suppliers, Distribution and Customers. Thus, for example, an analysis of Market Sectors will gain data firstly from the End User Surveys and secondly confirmations and correlations will be gained from the Surveys of Suppliers / Distributors. This in the opinion of the publishers is a very accurate method and is far superior than, for example, that which is used in the compilation of the majority of published governmental statistics.

4. All figures given in this volume refer only to the product/s covered and not to any other product or systems which may be connected or associated with the products covered.

5. The TREND figures given in the Industry section of this volume refers to the average year-on-year change in the period specified.

6. The YEAR-ON-YEAR TREND figures given in this volume refer to the average year-on-year change in the period specified

The AVERAGE GROWTH TRENDS figures refer to the long term trends over the period.

Thus the actual Trend is given by a year-on-year figure and the long-term Trends are given as a Real Terms Forecast.

## **DATABASE LONG-RANGE DATA & TIME SERIES**

### **From 1972 until the Next 28 Years**

The database contains a LONG-RANGE HISTORIC time series which covers the years from 1972. This is the standard long range HISTORIC format. We provide readers with this time series (on request) to enable long range regression analysis for forecasting models which require an extended time period analysis.

The database contains a LONG-RANGE FORECAST time series which covers a period for the next 28 years. This is the standard long range forecast format and is usually used for planning production plant / capital projects, macro-economic trends and demographics data.

We can of course provide readers with other data on long-range historic and forecast data and this is done as part of the After-Sales Service.

## **EXCHANGE RATES + PURCHASING POWER PARITY**

The report database and forecasting models do not use current market or bank exchange rates as these can be deceptive. The rates used are those of the base year in addition to a number of real value factors which reflect the actual or forecasted value of the product in each of the national markets over the period 1974 to 2028. A simple conversion of local currency into U.S. Dollars or any other national currency cannot be used to adequately represent products or services.

The report database and forecasting models are attempting to show the relative values of products or markets free from any extraneous effects of currency movements or government fiscal policy which arbitrarily alter currency exchange rates. Thus the currency calculations and data in the database are indicating relative unit values or the relative cost of the product or service in the national market.

We do not indicate the Currency Conversion Rate that you can use with any calculations and readers will have to apply their own discretion in this respect. Beware however, such calculations involving currency conversions can be artificial and spurious and do not reflect real values of either products or markets.

The diagram shows the problem of relating Product or Market Values or Costs in Real Terms (+), the National Currency Value in Real Terms (i.e. excluding the effects of Inflation) and the Value of another currency (the Converted Currency, given as \$) in relation to the National Currency.

## **PRODUCT PARITY**

The basis of the data provided is to allow users to produce business plans and forecasting models across national and statistically diverse boundaries. Thus it is necessary to adopt a standard product definition which can be then applied across national borders. The product definition chosen is the U.S. government's NAICS product codes (and the previous SIC product codes where relevant). The problem is to apply these product definitions across the national boundaries. The U.S. government stubbornly clings to the imperial system of measurement and this further complicates the matter.

The use of PRODUCT PARITY is intended to allow trans-national business planning and forecasting (however readers can request data based on national product definitions), and in general terms Product Parity means that equivalent products are compared even where the exact technical specification, or quantification, of the product is not the same. Thus a 12 fluid ounce liquid container as defined in the (Imperial measuring system) NAICS product codes is quantitatively equivalent to 355ml, however for the purposes of Product Parity it will be the equivalent of a 333ml liquid container in countries with a Metric measuring system. Similarly in non-Metric markets a 16 ounces or 1 pound Imperial measure, whilst actually equivalent to 454 grams, will equate to a 450 gram product in Metric measure markets.

For many products this 'Product Parity' will be based on the 'Purchasing Parity unit costs' -v- 'product performance', rather than 'unit cost' -v- 'technical specifications'. This is because national markets impose different technical specifications on products which essentially fulfil the same customer requirement, and thus these products have a Product Parity which can be used for uniform, cross border, business planning and forecasting.

## Financial Notes & Definitions

### HISTORIC & FORECAST FINANCIAL DATA TRANSITION PERIODS

The HISTORIC DATA covers the last 7 years, and the FORECAST DATA series covers the next 7 years. There is always a transition period; which is in fact during the last two quarters, i.e. whilst the historic data is being collated. In addition the data given for the next two quarters is considered an estimate rather than a forecast. Thus the 12 month period around the database output date is an estimate.

For the various Financial Scenarios it must be assumed that the Scenario factor or strategy being considered will not exert an impact on the forecast immediately and will not become evident for some time after its inception. Whilst the forecasting models used operates on a monthly time scale and does also take account of other temporal factors (for example seasonality of demand, industry accounting periods, stock taking scheduling, et al) it would be too pedantic to express the transition year in greater detail. Therefore in the forecast data a straight line plot is produced between the BASE year, through the transition period to the first full forecast year.

The data in this section derives data from 296 worldwide companies and organisations (Suppliers and Distribution Channel members).

ALL FINANCIAL DATA FIGURES ARE IN REAL TERMS

### FINANCIAL BALANCE SHEETS

| Row | TITLE                                                                                                                                                                                                                                                                                                                                          | LEGEND  |
|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
|     | TOTAL SALES                                                                                                                                                                                                                                                                                                                                    |         |
| 1   | The TOTAL SALES figures given are synchronized with the Median Market Forecast and not to the individual Market Scenario Forecasts. This ensures that one can use a standardized market measure to compare the Financial data and not have the additional complication of interpreting the financial data in relation to the market scenarios. |         |
| 2   | DOMESTIC SALES                                                                                                                                                                                                                                                                                                                                 | % Sales |
| 3   | EXPORTS                                                                                                                                                                                                                                                                                                                                        | % Sales |
| 4   | PRE-TAX PROFIT                                                                                                                                                                                                                                                                                                                                 | % Sales |
| 5   | INTEREST PAID                                                                                                                                                                                                                                                                                                                                  | % Sales |
| 6   | NON-TRADING INCOME                                                                                                                                                                                                                                                                                                                             | % Sales |
| 7   | OPERATING PROFIT                                                                                                                                                                                                                                                                                                                               | % Sales |
| 8   | DEPRECIATION: STRUCTURES                                                                                                                                                                                                                                                                                                                       | % Sales |
| 9   | DEPRECIATION: PLANT AND EQUIPMENT                                                                                                                                                                                                                                                                                                              | % Sales |
| 10  | DEPRECIATION: MISCELLANEOUS ITEMS                                                                                                                                                                                                                                                                                                              | % Sales |
| 11  | TOTAL DEPRECIATION                                                                                                                                                                                                                                                                                                                             | % Sales |
| 12  | TRADING PROFIT                                                                                                                                                                                                                                                                                                                                 | % Sales |
| 13  | INTANGIBLE ASSETS                                                                                                                                                                                                                                                                                                                              | % Sales |
| 14  | INTERMEDIATE ASSETS                                                                                                                                                                                                                                                                                                                            | % Sales |
| 15  | FIXED ASSETS: STRUCTURES                                                                                                                                                                                                                                                                                                                       | % Sales |
| 16  | FIXED ASSETS: PLANT AND EQUIPMENT                                                                                                                                                                                                                                                                                                              | % Sales |
| 17  | FIXED ASSETS: MISCELLANEOUS ITEMS                                                                                                                                                                                                                                                                                                              | % Sales |
| 18  | FIXED ASSETS                                                                                                                                                                                                                                                                                                                                   | % Sales |
| 19  | CAPITAL EXPENDITURE ON STRUCTURES                                                                                                                                                                                                                                                                                                              | % Sales |
| 20  | CAPITAL EXPENDITURE ON PLANT AND EQUIPMENT                                                                                                                                                                                                                                                                                                     | % Sales |
| 21  | CAPITAL EXPENDITURE ON VEHICLES                                                                                                                                                                                                                                                                                                                | % Sales |
| 22  | CAPITAL EXPENDITURE ON DATA PROCESSING EQUIPMENT                                                                                                                                                                                                                                                                                               | % Sales |
| 23  | CAPITAL EXPENDITURE ON MISCELLANEOUS ITEMS                                                                                                                                                                                                                                                                                                     | % Sales |

## Pistons & Piston Rings

| Row | TITLE                                             | LEGEND      |
|-----|---------------------------------------------------|-------------|
| 24  | TOTAL CAPITAL EXPENDITURE                         | % Sales     |
| 25  | RETIREMENTS: STRUCTURES                           | % Sales     |
| 26  | RETIREMENTS: PLANT AND EQUIPMENT                  | % Sales     |
| 27  | RETIREMENTS: MISCELLANEOUS ITEMS                  | % Sales     |
| 28  | TOTAL RETIREMENTS                                 | % Sales     |
| 29  | TOTAL FIXED ASSETS                                | % Sales     |
| 30  | FINISHED PRODUCT STOCKS                           | % Sales     |
| 31  | WORK IN PROGRESS AS STOCKS                        | % Sales     |
| 32  | MATERIALS AS STOCKS                               | % Sales     |
| 33  | TOTAL STOCKS & INVENTORY                          | % Sales     |
| 34  | DEBTORS                                           | % Sales     |
| 35  | MISCELLANEOUS CURRENT ASSETS                      | % Sales     |
| 36  | TOTAL CURRENT ASSETS                              | % Sales     |
| 37  | TOTAL ASSETS                                      | % Sales     |
| 38  | CREDITORS                                         | % Sales     |
| 39  | SHORT TERM LOANS                                  | % Sales     |
| 40  | MISCELLANEOUS CURRENT LIABILITIES                 | % Sales     |
| 41  | TOTAL CURRENT LIABILITIES                         | % Sales     |
| 42  | NET ASSETS / CAPITAL EMPLOYED                     | % Sales     |
| 43  | SHAREHOLDERS FUNDS                                | % Sales     |
| 44  | LONG TERM LOANS                                   | % Sales     |
| 45  | MISCELLANEOUS LONG TERM LIABILITIES               | % Sales     |
| 46  | WORKERS                                           | persons     |
| 47  | HOURS WORKED                                      | Hours       |
| 48  | WORK IN 1ST QUARTER                               | % of Annual |
| 49  | WORK IN 2ND QUARTER                               | % of Annual |
| 50  | WORK IN 3RD QUARTER                               | % of Annual |
| 51  | WORK IN 4TH QUARTER                               | % of Annual |
| 52  | TOTAL EMPLOYEES                                   | persons     |
| 53  | RAW MATERIALS COST                                | % Sales     |
| 54  | FINISHED MATERIALS COST                           | % Sales     |
| 55  | FUEL COST                                         | % Sales     |
| 56  | ELECTRICITY COST                                  | % Sales     |
| 57  | TOTAL INPUT SUPPLIES / MATERIALS AND ENERGY COSTS | % Sales     |
| 58  | PAYROLL COSTS                                     | % Sales     |
| 59  | WAGES                                             | % Sales     |
| 60  | DIRECTORS' REMUNERATIONS                          | % Sales     |
| 61  | EMPLOYEE BENEFITS                                 | % Sales     |
| 62  | COMMISSIONS & INCENTIVES PAID                     | % Sales     |
| 63  | TOTAL REMUNERATIONS                               | % Sales     |
| 64  | SUB CONTRACTORS                                   | % Sales     |
| 65  | RENTAL & LEASING: STRUCTURES                      | % Sales     |
| 66  | RENTAL & LEASING: PLANT AND EQUIPMENT             | % Sales     |
| 67  | TOTAL RENTAL & LEASING COSTS                      | % Sales     |

## Pistons & Piston Rings

| Row | TITLE                                        | LEGEND  |
|-----|----------------------------------------------|---------|
| 68  | MAINTENANCE: STRUCTURES                      | % Sales |
| 69  | MAINTENANCE: PLANT AND EQUIPMENT             | % Sales |
| 70  | TOTAL MAINTENANCE COSTS                      | % Sales |
| 71  | SERVICES PURCHASED                           | % Sales |
| 72  | COMMUNICATIONS COSTS                         | % Sales |
| 73  | MISCELLANEOUS EXPENSES                       | % Sales |
| 74  | SALES PERSONNEL VARIABLE & COMMISSION COSTS  | % Sales |
| 75  | SALES EXPENSES AND COSTS                     | % Sales |
| 76  | SALES MATERIALS COSTS                        | % Sales |
| 77  | TOTAL SALES COSTS                            | % Sales |
| 78  | DISTRIBUTION FIXED COSTS                     | % Sales |
| 79  | DISTRIBUTION VARIABLE COSTS                  | % Sales |
| 80  | WAREHOUSING FIXED COSTS                      | % Sales |
| 81  | WAREHOUSING VARIABLE COSTS                   | % Sales |
| 82  | PHYSICAL HANDLING FIXED COSTS                | % Sales |
| 83  | PHYSICAL HANDLING VARIABLE COSTS             | % Sales |
| 84  | PHYSICAL PROCESS FIXED COSTS                 | % Sales |
| 85  | PHYSICAL PROCESS VARIABLE COSTS              | % Sales |
| 86  | TOTAL DISTRIBUTION AND HANDLING COSTS        | % Sales |
| 87  | MAILING & CORRESPONDENCE COSTS               | % Sales |
| 88  | MEDIA ADVERTISING COSTS                      | % Sales |
| 89  | ADVERTISING MATERIALS & PRINT COSTS          | % Sales |
| 90  | POS & DISPLAY COSTS                          | % Sales |
| 91  | EXHIBITION & EVENTS COSTS                    | % Sales |
| 92  | TOTAL ADVERTISING COSTS                      | % Sales |
| 93  | PRODUCT RETURNS & REJECTION COSTS            | % Sales |
| 94  | PRODUCT INSTALLATION & RE-INSTALLATION COSTS | % Sales |
| 95  | PRODUCT BREAKDOWN & POST INSTALLATION COSTS  | % Sales |
| 96  | PRODUCT SYSTEMS & CONFIGURATION COSTS        | % Sales |
| 97  | PRODUCT SERVICE & MAINTENANCE COSTS          | % Sales |
| 98  | CUSTOMER PROBLEMS & CUSTOMER COMPLAINT COSTS | % Sales |
| 99  | TOTAL AFTER-SALES COSTS                      | % Sales |
| 100 | TOTAL MARKETING COSTS                        | % Sales |
| 101 | NEW TECHNOLOGY EXPENDITURE                   | % Sales |
| 102 | NEW PRODUCTION TECHNOLOGY EXPENDITURE        | % Sales |
| 103 | TOTAL RESEARCH AND DEVELOPMENT EXPENDITURE   | % Sales |
| 104 | TOTAL OPERATIONAL & PROCESS COSTS            | % Sales |
| 105 | DEBTORS WITHIN AGREED TERMS                  | % Sales |
| 106 | DEBTORS OUTSIDE AGREED TERMS                 | % Sales |
| 107 | UN-RECOVERABLE DEBTS                         | % Sales |

## FINANCIAL DATA DEFINITIONS

| Data given on:                   | Definition:                                                                                                                                                                                                                                                                                      |
|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| % OF CUSTOMERS = 50% SALES       | The best estimate of the percentage of immediate customers accounting for 50% of the sales of the business.                                                                                                                                                                                      |
| % SHARE OF 4 LARGEST FIRMS       | The combined market shares of the four leading firms in the industry, expressed as a percentage.                                                                                                                                                                                                 |
| ACTUAL RETURN ON INVESTMENT      | The actual, pre-tax net income expressed as a percentage of investment for the business, used to adjust the future estimates of ROI.                                                                                                                                                             |
| ASSET UTILIZATION                | Sales as a ratio of total sales.                                                                                                                                                                                                                                                                 |
| AVERAGE REMUNERATION             | Total employee remuneration divided by the number of employees.                                                                                                                                                                                                                                  |
| BORROWING RATIO                  | Total debt as a ratio of net worth.                                                                                                                                                                                                                                                              |
| CAPACITY UTILIZATION             | The average % percentage of standard capacity utilized during the year. Standard capacity is the sales value of the maximum output the business can sustain with:<br><br>a) facilities normally in operation and<br>b) current constraints (e.g. technology, work rules, labour practices, etc.) |
| CAPITAL EMPLOYED                 | The sum of long term liabilities. It represents the counterpart of the net assets employed by the firm.                                                                                                                                                                                          |
| CREDIT PERIOD                    | Debtors over sales times 365 days.                                                                                                                                                                                                                                                               |
| CREDITORS RATIO                  | Creditors over sales times 365 days.                                                                                                                                                                                                                                                             |
| CREDITORS                        | Trade creditors and bills payable within one year.                                                                                                                                                                                                                                               |
| CURRENT RATIO                    | Current assets as a ratio of current liabilities.                                                                                                                                                                                                                                                |
| DEBT GEARING RATIO               | Long term loans as a ratio of net worth.                                                                                                                                                                                                                                                         |
| DEBTORS                          | Trade debtors and trade bills receivable due within one year.                                                                                                                                                                                                                                    |
| DEPRECIATION                     | Includes amounts written off tangible fixed assets, including leased assets.                                                                                                                                                                                                                     |
| DIRECTORS REMUNERATION           | Includes all payments made to directors including pension fund contributions, ex-gratia payments and payments to directors' family.                                                                                                                                                              |
| DISCOUNT CASH FLOW YIELD RATE    | The internal rate of return after tax earned in this business when this strategy is executed. It is the time discount rate at which discounted cash flow plus residual is equal to initial investment.                                                                                           |
| DISCOUNTED CASH FLOW             | The cash generated over ten years from net income, less the cash absorbed by increases in the net investment in the business. The annual cash flows are discounted to a present value, using the time discount rate.                                                                             |
| DISCOUNTED NET INCOME (10 YEARS) | From pre-tax net income in each year is deducted a capital charge on the increase in investment since the base period to reflect the cost of these funds. The time discount rate is then applied to obtain the present value of the income stream for the 10 year period.                        |
| DOMESTIC SALES                   | Wherever applicable, domestic Sales represent the proportion of total turnover generated locally less exports produced by the same companies.                                                                                                                                                    |
| EMPLOYEES UNIONIZED              | The percentage of total employees of the business who are unionized.                                                                                                                                                                                                                             |
| EQUITY GEARING                   | Shareholders' funds as a ratio of total liabilities.                                                                                                                                                                                                                                             |
| EXPORTS / SALES                  | Exports divided by sales.                                                                                                                                                                                                                                                                        |
| EXPORTS                          | This figure will be shown where it has been disclosed.                                                                                                                                                                                                                                           |
| FIFO VALUATION                   | The accounting method used for inventory valuation FIFO, or other method (e.g. LIFO).                                                                                                                                                                                                            |
| FIXED ASSETS / EMPLOYEES         | Fixed assets divided by the number of employees.                                                                                                                                                                                                                                                 |
| FIXED ASSETS                     | Property, plant, fixtures and fittings, office equipment and motor vehicles wholly owned and shown at their written down book value.                                                                                                                                                             |
| FIXED CAPITAL INTENSITY          | Gross book value of plant & equipment expressed as a percentage of sales. Gross book value includes original value of buildings, real estate manufacturing & transportation equipment.                                                                                                           |

## Pistons & Piston Rings

|                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|---------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FIXED CAPITAL INTENSITY                     | The gross book value of plant and equipment, expressed as a percentage of sales.                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| FORECAST REAL MARKET GROWTH RATE (% / YEAR) | An estimate of the future annual real growth rate of the served market.                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| FORECAST SELLING GROWTH RATE % p.a.         | A forecast of the annual growth rate of the selling prices.                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| IMMEDIATE CUSTOMER FRAGMENTATION            | The proportion of the total number of immediate customers accounting for 50% of total sales, expressed as a percentage. For example, if 5 of a business's 100 immediate customers represent 50% of sales, immediate customer fragmentation is 5%.                                                                                                                                                                                                                                                                         |
| INCOME GEARING                              | Interest paid as a percentage of profit before tax and before interest paid.                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| INDUSTRY (SIC/NAICS) GROWTH, LONG RUN       | The annual long term (10 year) growth rate of the SIC/NAICS industry in which the business is located, expressed as a percentage.                                                                                                                                                                                                                                                                                                                                                                                         |
| INDUSTRY CONCENTRATION RATIO                | The amount of industry shipments accounted for by the four largest firms in the industry expressed as a percentage.                                                                                                                                                                                                                                                                                                                                                                                                       |
| INTANGIBLE ASSETS                           | Non-tangible assets such as good will, trademarks, patents and copyrights owned.                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| INTEREST PAID                               | Gross interest paid. It should be noted that many private companies either do not disclose this figure in full or aggregate short-term, long-term and hire purchase interest together.                                                                                                                                                                                                                                                                                                                                    |
| INTERMEDIATE ASSETS                         | Includes investments in subsidiary and associated companies, trade investments and other unquoted investments, insurance premiums on life policies, and Advanced Corporation Tax recoverable. In addition, amounts due from other Group companies (as necessary), associated and affiliated companies, receivable after one year and with no stated fixed repayment terms will be included. Long term portions of trade and sundry debtors will also be included, wherever they are disclosed separately in the accounts. |
| INVENTORY / SALES                           | The sum of raw materials, work-in-process inventory and finished goods inventory (each net of reserve for losses) as a percentage of sales.                                                                                                                                                                                                                                                                                                                                                                               |
| INVESTMENT / SALES                          | Investment as a percentage of sales. Investment can be measured in any of the following ways:<br>a) net book value of plant and equipment plus working capital<br>b) equity plus long-term debt<br>c) total assets employed minus current liabilities attributable to the business.                                                                                                                                                                                                                                       |
| INVESTMENT / VALUE ADDED                    | Investment expressed as a percentage of value added. Value added is adjusted for profits to minimize that portion of the relationship with ROI which is caused by under or overstated earnings.                                                                                                                                                                                                                                                                                                                           |
| INVESTMENT PER EMPLOYEE                     | Average investment, expressed in monetary units per employee.                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| LONG TERM LOANS                             | Includes long term portions of bank & other institutional loans, mortgages, hire purchase repayments and leasing obligations, all of which are due after one year. Also, amounts due to group, associated & affiliated companies payable after one year are included.                                                                                                                                                                                                                                                     |
| MARKET POSITION                             | A factor combining:<br><br>a) MARKET SHARE: the share of the served market for the business, expressed as a percentage.<br>b) RELATIVE MARKET SHARE: the market share of the business relative to the combined market share of the three leading competitors, expressed as a percentage. For example if ones business has 30% of the market and the three largest competitors have 20%, 10% and 10%: 30 divided by (20+10+10) = 75%.                                                                                      |
| MARKET SHARE GROWTH RATE                    | The annual growth rate of market share expressed as a percentage.                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| MARKET SHARE INSTABILITY                    | The instability of the market share of the business, measured as the sum of the absolute values of the business's annual market share changes.                                                                                                                                                                                                                                                                                                                                                                            |
| MARKET SHARE                                | The share of the served market expressed as a percentage.                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| MARKETING EXPENSES / SALES                  | The sum of salesforce, advertising, promotion and other marketing expenses expressed as a percentage of sales. Does not include costs of physical distribution.                                                                                                                                                                                                                                                                                                                                                           |
| MISCELLANEOUS CURRENT ASSETS                | Cash and near cash items such as quoted investments and tax reserve certificates. Also sundry debtors, prepayments & accrued income due within one year, plus amounts due from group companies, associated & affiliated companies receivable within one year.                                                                                                                                                                                                                                                             |
| MISCELLANEOUS CURRENT LIABILITIES           | Sundry creditors, accrued expenses and prepaid income including dividends, corporation tax, social security and other sundry amounts payable within one year.                                                                                                                                                                                                                                                                                                                                                             |

## Pistons & Piston Rings

|                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MISCELLANEOUS LONG TERM LIABILITIES      | Deferred and future taxation, minority interests, pension funds and similar liabilities, provisions for liabilities and charges due.                                                                                                                                                                                                                                                                                                                                               |
| NET ASSETS                               | The net assets employed are obtained by subtracting total current liabilities from the total assets.                                                                                                                                                                                                                                                                                                                                                                               |
| NET WORTH                                | Equals shareholders' funds less the intangible assets.                                                                                                                                                                                                                                                                                                                                                                                                                             |
| NEW PRODUCT SALES / SALES                | Percentage of sales accounted for by new products. New products are those products introduced during the three preceding years.                                                                                                                                                                                                                                                                                                                                                    |
| NEWNESS OF PLANT & EQUIPMENT (NBV / GBV) | Newness of plant and equipment, measured as the ratio of Net Book Value to Gross Book Value.                                                                                                                                                                                                                                                                                                                                                                                       |
| NON-TRADING INCOME                       | Comprises Investment income received, such as income from quoted & unquoted investments, rents received, share of profit from associated companies; as well as Reserves adjustments, such as transfers from capital grant reserve, interest relief grants.                                                                                                                                                                                                                         |
| NUMBER OF EMPLOYEES + THEIR REMUNERATION | The average number of employees together with their aggregate wages and salaries.                                                                                                                                                                                                                                                                                                                                                                                                  |
| OPERATING PROFIT MARGIN                  | Operating profit as a percentage of sales.                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| OPERATING PROFIT                         | Pre-tax profit plus interest, less non-trading income.                                                                                                                                                                                                                                                                                                                                                                                                                             |
| PRE-TAX PROFIT MARGIN                    | Pre-tax profits as a percentage of sales.                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| PRE-TAX PROFIT                           | The net trading profit figure declared after deducting all operating expenses including depreciation & finance charges but before deduction of tax, dividends, subventions or group relief and other appropriations. Consolidated data is included where applicable in respect of the share of profits & losses of associated companies. Items described as exceptional are included. Those described as extraordinary items are excluded.                                         |
| PROFIT / EMPLOYEES                       | Profit before tax divided by the number of employees.                                                                                                                                                                                                                                                                                                                                                                                                                              |
| PURCHASE AMOUNT IMMEDIATE CUSTOMERS      | The typical amount of products or services bought by an immediate customer in a single transaction.                                                                                                                                                                                                                                                                                                                                                                                |
| QUICK RATIO                              | Current assets less stocks as a ratio of current liabilities.                                                                                                                                                                                                                                                                                                                                                                                                                      |
| RESEARCH & DEVELOPMENT EXPENSES / SALES  | Product or Service R & D expenses plus Process R & D expenses expressed as a % of sales. Product or Service R&D expenses include all expenses for innovation & advances in the products or services; including improvements in packaging, product design, features and functions. Process R & D expenses include all expenses for process improvements to reduce the cost of producing, processing and handling of goods. Sales are the net sales billed including lease revenues. |
| REAL MARKET GROWTH, SHORT-RUN            | The annual growth rate of the size of served market, deflated by the selling price index, expressed as a percentage.                                                                                                                                                                                                                                                                                                                                                               |
| REAL MARKET GROWTH RATE                  | The historical annual real (unit) growth rate of the market which the business serves, expressed as a percentage.                                                                                                                                                                                                                                                                                                                                                                  |
| RELATIVE COMPENSATION                    | The average of hourly wage rates relative to leading competitors and salary levels relative to competitors. Competitors' wage rates and salary levels are 100%; if ones wage rates and salary levels are 5% higher, ones relative hourly wage rates are 105%, relative salaries are 105%, and ones average relative compensation is 105%.                                                                                                                                          |
| RELATIVE INTEGRATION BACKWARD            | The degree of backward vertical integration (i.e. toward suppliers) of the business relative to its leading competitors.                                                                                                                                                                                                                                                                                                                                                           |
| RELATIVE INTEGRATION FORWARD             | The degree of forward vertical integration (i.e. toward customers) of the business relative to its leading competitors (less than, the same as, more than).                                                                                                                                                                                                                                                                                                                        |
| RELATIVE MARKET SHARE                    | The market share of the business, relative to the combined market shares of the three leading competitors, expressed as a percentage.                                                                                                                                                                                                                                                                                                                                              |
| RELATIVE PRICE                           | The average level of selling prices of the products & services relative to the average level of the leading competitors. The average price of the competitors is 100%; if the average prices of the business are 5% higher when its price relative to competition is 105%.                                                                                                                                                                                                         |
| RELATIVE PRODUCT QUALITY                 | The percentage of sales volume from products and service that, from the perspective of the consumer, are judged as superior to those available from leading competitors minus the percentage judged as inferior.                                                                                                                                                                                                                                                                   |
| RETURN ON ASSETS                         | Pre-tax profits as a percentage of total assets.                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| RETURN ON CAPITAL                        | Pre-tax profits as a percentage of capital employed.                                                                                                                                                                                                                                                                                                                                                                                                                               |

## Pistons & Piston Rings

|                               |                                                                                                                                                                                                                                                        |
|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RETURN ON SHAREHOLDERS FUNDS  | Pre-tax profits as a percentage of shareholders' funds.                                                                                                                                                                                                |
| ROI = NET INCOME / INVESTMENT | Pre-tax net income, including special non-recurring costs, minus corporate overhead costs, as a percentage of average investment including fixed and working capital at book value, but excluding corporate investment not particular to the business. |
| SALES / EMPLOYEES             | Sales divided by the number of employees.                                                                                                                                                                                                              |
| SALES / FIXED ASSETS          | Sales as a ratio of fixed assets.                                                                                                                                                                                                                      |
| SALES                         | Gross turnover recorded, including overseas sales, inter-group sales and exports, but excluding Value Added Tax or Sales Tax.                                                                                                                          |
| SALES                         | The net sales billed, including lease revenues.                                                                                                                                                                                                        |
| SELLING PRICE GROWTH RATE     | The annual growth rate of selling prices charged, expressed as a percentage.                                                                                                                                                                           |
| SHAREHOLDERS FUNDS            | The sum of issued, ordinary, and preference share capital, all reserves, the profit and loss balance (retained profits) and government grants.                                                                                                         |
| SHORT TERM LOANS              | Includes short term portions of loans, bank overdrafts, hire purchase repayments & leasing obligations, due within one year. Plus amounts due to affiliated entities within one year.                                                                  |
| STANDARD PRODUCTS / SERVICES  | The products or services of the business more or less standardized for all customers, or are they designed or produced to order for individual customers.                                                                                              |
| STOCK TURNOVER                | Sales as a ratio of stocks.                                                                                                                                                                                                                            |
| STOCKS                        | Stocks and work in progress (net of progress repayments) held.                                                                                                                                                                                         |
| TOTAL CURRENT ASSETS          | The sum of stocks, debtors and other current assets, representing the portion assets which is realizable within a year.                                                                                                                                |
| TOTAL CURRENT LIABILITIES     | The sum of trade creditors, short term debt and other current liabilities.                                                                                                                                                                             |
| TOTAL DEBT / WORKING CAPITAL  | Total debt as a ratio of working capital.                                                                                                                                                                                                              |
| TOTAL DEBT                    | This amount is obtained by adding short term loans to the long term loans.                                                                                                                                                                             |
| TOTAL LIABILITIES             | The sum of capital employed and total current liabilities.                                                                                                                                                                                             |
| TRADING PROFIT MARGIN         | Trading profit as a percentage of sales.                                                                                                                                                                                                               |
| TRADING PROFIT                | Operating profit plus depreciation.                                                                                                                                                                                                                    |
| VALUE ADDED / EMPLOYEES       | Value added (adjusted for profits) expressed in monetary terms per employee.                                                                                                                                                                           |
| VERTICAL INTEGRATION          | Value added as a percentage of sales. Both value added & sales are adjusted for profits to minimize that portion of the relationship with ROI affected by under or overstated earnings.                                                                |
| WAGES / SALES                 | Employee remuneration divided by sales.                                                                                                                                                                                                                |
| WORKING CAPITAL / SALES       | Working capital over sales.                                                                                                                                                                                                                            |
| WORKING CAPITAL               | The short-term funding to carry out day to day trading activities, it is obtained by subtracting total current liabilities from the current assets.                                                                                                    |

## Industry Norms Definitions

The data in this section derives data from 296 worldwide companies and organisations (Suppliers and Distribution Channel members).

Norms for the Product industry are shown in this section. This represents the major industry sector data for the industry in each country and as such forms the basis of international comparison.

Only the most critical factors should be compared with the various scenarios given above as industry averages can at best represent an indication and not a specific point of measure.

Reliance on Industry Norms is often used by analysts in order to support theories and suppositions and these are in turn used for investment scenarios. In fact Industry Norms or Averages are not tangible as they combine and manipulate data from companies in wide ranging activities.

Much of the benefit in the analysis of Industry Norms is to use the data to provide guide-lines or parameters which can be seen to define and identify issues for the target industry sector.

Since these Industry Norms should be representative of the entire industry it is wise to provide an average which encompasses all the major countries in the trade cell.

## INDUSTRY NOTES + DEFINITIONS

- |     |                                                          |
|-----|----------------------------------------------------------|
| 01. | OEM & Manufacturers Market Level                         |
| 02. | Wholesale & Distributor Market Level                     |
| 03. | Retailer & Added Value Retailer Market Level             |
| 04. | End User & Consumer Market Level                         |
| 05. | Discounted & Promotional Market Level                    |
| 06. | Plant & Equipment Average Annual Investment              |
| 07. | Product Prices / Market Average Index                    |
| 08. | New Products Introduction Index                          |
| 09. | Relative output of Products of a Superior Quality Index  |
| 10. | Index of Comparative Salesforce and Selling Expenditure  |
| 11. | Index of Comparative Advertising Expenditure             |
| 12. | Index of Comparative General Promotional Expenditure     |
| 13. | Product Adoption Rates                                   |
| 14. | Product Sales Conversion Rates                           |
| 15. | Average Annual Sales Growth Rate                         |
| 16. | Capacity Utilization as a measure of Standard Capacity   |
| 17. | Standardized Products & Services Index                   |
| 18. | Relative Employee Compensation Index                     |
| 19. | Instable Market Share as an Index of Total Market Share  |
| 20. | Relative Forward Integration Index                       |
| 21. | Plant and Equipment Investment greater than Depreciation |
|     | Plant and Equipment Investment Equal to Depreciation     |
|     | Plant and Equipment Investment Less than Depreciation    |
|     | Plant and Equipment Investment - Unallocated             |
| 22. | Plant and Equipment in Use within the range 0-3 years    |
|     | Plant and Equipment in Use within the range 3-6 years    |

- Plant and Equipment in Use within the range 6-9 years
- Plant and Equipment in Use over years 9 old / Unallocated
- 23. Supplier Concentration = 8 Largest
- Supplier Concentration = 20 Largest
- Supplier Concentration = 50 Largest
- Supplier Concentration = Unspecified / Unallocated
- 24. Immediate Wholesale & Retail Customers
- Immediate OEM and Manufacturing Customers
- Immediate Consumer and End User Customers
- Immediate Non-Specific Customers / Unallocated
- 25. Enterprises within the Range 1-19 Employees
- Enterprises within the Range 20-99 Employees
- Enterprises within the Range 100+ Employees
- Enterprises within Unspecified / Unallocated Employee Ranges
- 26. Buyer Age Profile in the range 0-19 Years
- Buyer Age Profile in the range 20-24 Years
- Buyer Age Profile in the range 25-34 Years
- Buyer Age Profile in the range 35-44 Years
- Buyer Age Profile in the range 45-54 Years
- Buyer Age Profile in the range 55-64 Years
- Buyer Age Profile in the range 65+ / Unallocated Years
- 27. Buyer Profile in the AB Social Group
- Buyer Profile in the C1 Social Group
- Buyer Profile in the C2 Social Group
- Buyer Profile in the DE / Unallocated Social Group
- 28. End User Age Profile in the range 0-19 Years
- End User Age Profile in the range 20-24 Years
- End User Age Profile in the range 25-34 Years
- End User Age Profile in the range 35-44 Years
- End User Age Profile in the range 45-54 Years
- End User Age Profile in the range 55-64 Years
- End User Age Profile in the range 65+ / Unallocated Years
- 29. End User Profile in the AB Social Group
- End User Profile in the C1 Social Group
- End User Profile in the C2 Social Group
- End User Profile in the DE / Unallocated Social Group

## **Pistons & Piston Rings**

### **Upgrade to the full Database Edition at a reduced cost**

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## Pistons & Piston Rings

# Database Editions



[www.datagroup.org](http://www.datagroup.org)

## **Editions available**

### **Pistons & Piston Rings**

The report on Pistons & Piston Rings is available in several editions, and also there are various additional elements available from the After-Sales Service.

## **World Report**

The World Report gives market data for Pistons & Piston Rings on each of the Product and Market Sectors for about 200 countries. There are data caveats on country data because in certain countries the data may not be available.

## **Regional Report**

There are 9 Regional reports available which give market data for Pistons & Piston Rings on each of the Product and Market Sectors for countries in a particular Region. There are data caveats for some country data because in certain countries the data may not be available.

1. Canada & USA
2. Central America (31 Countries)
3. South America (13 Countries)
4. Europe (44 Countries)
5. Eurasia (4 Countries)
6. Middle East (19 Countries)
7. Africa (54 Countries)
8. Asia (24 Countries)
9. Oceania (17 Countries)

See the countries in each Regional Report [Appendix 1](#)

## **Country Report**

There are Pistons & Piston Rings Country Reports available for most countries. Country Reports provide detailed information on the target country.

## **Country & City Report**

The Pistons & Piston Rings Country + City Reports provides users with commercial intelligence on markets and industry in a particular country, plus market, financial and industry data on each of the significant Cities and Towns in the country. For the larger countries, like China, India, the USA, Brazil, et al, the data is generally limited to the top 500 Cities and Towns within the country.

---

## Pistons & Piston Rings

### Markets & Products

The report will give market data for each of the below Pistons & Piston Rings Product and Market Sectors, by year Historic: from 1997, and a Forecast by year to 2040. Data will be given for about 200 countries.

To see what such Country spreadsheets looks like (*illustrative examples only*):

[http://www.datagroup.org/XLS\\_File\\_Samples/MOM.xls](http://www.datagroup.org/XLS_File_Samples/MOM.xls)

[http://www.datagroup.org/XLS\\_File\\_Samples/Germany\\_Market.xls](http://www.datagroup.org/XLS_File_Samples/Germany_Market.xls)

[http://www.datagroup.org/XLS\\_File\\_Samples/Germany\\_Market\\_Values.xls](http://www.datagroup.org/XLS_File_Samples/Germany_Market_Values.xls) (US\$, Euros, Yen & Yuan)

In addition aggregate Market data is given (*illustrative examples only*):

World / Global Totals (in US\$, Euros, Yen and Yuan)

[http://www.datagroup.org/XLS\\_File\\_Samples/WORLD\\_Market\\_Values\\_Dollar\\_Euro.xls](http://www.datagroup.org/XLS_File_Samples/WORLD_Market_Values_Dollar_Euro.xls)

[http://www.datagroup.org/XLS\\_File\\_Samples/WORLD\\_Market\\_Values\\_Yen\\_Yuan.xls](http://www.datagroup.org/XLS_File_Samples/WORLD_Market_Values_Yen_Yuan.xls)

9 Regional (Canada & USA, Central America, South America, Europe, Eurasia, Middle East, Africa, Asia, Oceania) Totals (in US\$, Euros, Yen and Yuan):

[http://www.datagroup.org/XLS\\_File\\_Samples/Europe\\_Market\\_Values\\_Dollar\\_Euro.xls](http://www.datagroup.org/XLS_File_Samples/Europe_Market_Values_Dollar_Euro.xls)

[http://www.datagroup.org/XLS\\_File\\_Samples/Europe\\_Market\\_Values\\_Yen\\_Yuan.xls](http://www.datagroup.org/XLS_File_Samples/Europe_Market_Values_Yen_Yuan.xls)

Year / Country Totals (1997 to 2040).

[http://www.datagroup.org/XLS\\_File\\_Samples/Year\\_2010\\_Country\\_Values\\_Dollars.xls](http://www.datagroup.org/XLS_File_Samples/Year_2010_Country_Values_Dollars.xls)

NAICS / SIC Product definition: P35922\_M : Pistons and Piston Rings

### Products covered:

#### PISTONS + PISTON RINGS

1. Pistons and Piston Rings
2. Pistons: All types: Aluminium: Motor vehicles, passenger cars, trucks
3. Pistons: All types: Aluminium: Misc. aluminium pistons
4. Pistons: All types: Other than aluminium: Motor cars, trucks, buses etc.
5. Pistons: All types: Other than aluminium: Misc. pistons
6. Piston rings: Oil type: Motor vehicle, passenger cars, trucks & buses
7. Piston rings: Oil type: Misc. oil type piston rings
8. Piston rings: Compression type: Motor vehicles, passenger cars, trucks
9. Piston rings: Compression type: Misc. compression type piston rings

## World Database Description

### Pistons & Piston Rings Report

The Pistons & Piston Rings World Report + Database provides data on the net market for the Products and Services covered in each of 205 countries. The Products and Services covered (Pistons and Piston Rings) are classified by the Major Products and each Product / Service is then further defined and analysed by subsidiary Product.

10 Products/Markets are covered, 2107 pages, 10091 spreadsheets, 9638 database tables, 512 illustrations.

Updated monthly. 12 month After-Sales Service.

### Overview

#### **PISTONS + PISTON RINGS WORLD REPORT + DATABASE**

The Pistons & Piston Rings World Report + Database gives Market Consumption for Products + Services for over 200 countries by each Product by 3 Time series: From 2007, Forecast to 2028 & 2045.

Countries covered: Albania, Algeria, Angola, Argentina, Armenia, Aruba, Australia, Austria, Azerbaijan, Bahamas, Bahrain, Bangladesh, Barbados, Belarus, Belgium, Belize, Bolivia, Bosnia and Herzegovina, Botswana, Brazil, Bulgaria, Cambodia, Cameroon, Canada, Chile, China, Colombia, Costa Rica, Cote d'Ivoire, Croatia, Cuba, Cyprus, Czech Republic, Denmark, Dominica, Dominican Republic, Ecuador, Egypt, Eire, El Salvador, Eritrea, Estonia, Ethiopia, Finland, France, French Guiana, Gabon, Gambia, Georgia, Germany, Ghana, Greece, Guadeloupe, Guatemala, Guinea, Guinea-Bissau, Guyana, Haiti, Honduras, Hungary, Iceland, India, Indonesia, Iran, Iraq, Israel, Italy, Jamaica, Japan, Jordan, Kazakhstan, Kenya, Kuwait, Kyrgyzstan, Laos, Latvia, Lebanon, Lesotho, Liberia, Libya, Lithuania, Luxembourg, Macedonia, Madagascar, Malawi, Malaysia, Malta, Martinique, Mexico, Moldova, Montenegro, Morocco, Mozambique, Namibia, Netherlands, Netherlands Antilles, New Zealand, Nicaragua, Nigeria, Norway, Oman, Pakistan, Panama, Papua New Guinea, Paraguay, Peru, Philippines, Poland, Portugal, Puerto Rico, Qatar, Reunion, Romania, Russia, Saudi Arabia, Senegal, Sierra Leone, Singapore, Slovakia, Slovenia, South Africa, South Korea, Spain, Sri Lanka, Sudan (2 states), Suriname, Swaziland, Sweden, Switzerland, Syria, Taiwan, Tajikistan, Tanzania, Thailand, Trinidad and Tobago, Tunisia, Turkey, Turkmenistan, Uganda, Ukraine, United Arab Emirates, United Kingdom, United States, Uruguay, Uzbekistan, Venezuela, Vietnam, Zambia, Zimbabwe.

SPREADSHEET CHAPTERS: Market Consumption - in US\$ by Country by Product/Service by Year. Market, Financial, Competitive, Market Segmentation, Industry, Critical Parameters, Marketing Costs, Markets, Decision Makers, Performance, Product Launch.

WORLD & COUNTRY DATA  
MARKET DATABASES & SPREADSHEETS  
FINANCIAL DATABASES & SPREADSHEETS  
INDUSTRY DATABASES & SPREADSHEETS

Data includes Market Consumption by individual Product / Service, Per-Capita Consumption, Marketing Costs & Margins, Product Launch Data, Buyers, End Users & Customer Profile, Consumer Demographics. Historic Balance Sheets, Forecast Financial Data, Industry Profile, National Data.

The report and database is supplied as a Zip file containing the reports and databases.

10 Products/Markets covered.

The World Report + Database will contain about 21,000 files, including:

1. World Summary Report (PDF) of about 408 pages
2. World Summary Report (Word Format) of about 408 pages
3. Executive Summary (.htm) about 900 pages
4. Executive Briefing (.htm) about 90 pages
5. Data Pages about 2107 pages
6. Chapters and General (.htm) Pages: about 9,000 pages
7. Reference documents (PDF): 140
8. Templates which can be used to produce internal reports or documents (Word): 160
9. Excel spreadsheet: about 10091
10. 4 Access databases: about 9638 tables
11. Excel templates, Software tools & utilities, and reference documents: 200 documents
12. Maps & Diagrams: 512

Note:

All HTM (.htm) files can be opened in Word and are designed to be paginated and indexed; and can then be output as a Word document, a PDF document, a PowerPoint file, printed hardcopy, et cetera.

All Excel spreadsheets can be opened and processed with Excel; and can be used to produce other Microsoft office document formats, PDF files, printed hardcopy, et cetera.

All Access database tables can be used and processed programmatically. The database are not locked or protected in any way.

Merge text, tables & databases for your own reports, spreadsheet calculations & modelling.

The Excel spreadsheets and Access tables are designed to be an analogue of the U.S. Government databases, specifically the U.S. Census of Manufactures and the U.S. Business Census. As such these reports are presented as Excel spreadsheets and Access tables which are compatible in structure and field names to U.S. Government databases.

There are a large number of Excel spreadsheets and Access tables in each report which are compatible with governmental and NGO databases as well as proprietary database handling software.

The Report + Database are dynamically generated, date stamped and output for each client order; and the client name is shown on the reports & databases.

Clients usually receive their orders via a download link in about 2-3 hours after the publishers receive the order.

Updated monthly. 12 month After-Sales Service.

A 65 page Methodology Manual is available on request.

Toolkits are available on request: 5 DVDs containing over 20GB of Reference documents, Database Utilities, Enterprise Planning, Integrated Development Environment tools, Statistical tools, Software packages, Server add-ons, et al.

## Contents

### **PISTONS + PISTON RINGS WORLD REPORT + DATABASE**

The Market for Pistons & Piston Rings in each country by Products & Services.

The Pistons & Piston Rings World Report + Database covers:

TIME SERIES: Historic from 2007, Forecast to 2028 & 2045. Data given at industry / distribution channel / service or product line level.

### **PRODUCTS & MARKETS COVERED**

#### **PISTONS + PISTON RINGS**

1. Pistons and Piston Rings
2. Pistons: All types: Aluminium: Motor vehicles, passenger cars, trucks
3. Pistons: All types: Aluminium: Misc. aluminium pistons
4. Pistons: All types: Other than aluminium: Motor cars, trucks, buses etc.
5. Pistons: All types: Other than aluminium: Misc. pistons
6. Piston rings: Oil type: Motor vehicle, passenger cars, trucks & buses

7. Piston rings: Oil type: Misc. oil type piston rings
8. Piston rings: Compression type: Motor vehicles, passenger cars, trucks
9. Piston rings: Compression type: Misc. compression type piston rings

## **59 MARKET RESEARCH CHAPTER**

- 1 Administration
- 2 Advertising
- 3 Buyers - Commercial Operations
- 4 Buyers - Competitors
- 5 Buyers - Major City
- 6 Buyers - Products
- 7 Buyers - Trade Cell
- 8 Competitive Industry Analysis
- 9 Competitor Analysis
- 10 Country Focus
- 11 Distribution
- 12 Business Decision Scenarios
- 13 Capital Costs Scenarios
- 14 Cashflow Option Scenarios
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- 19 Market Climate Scenarios
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- 52 Profit Risk Scenarios
- 53 Promotional Mix
- 54 Salesforce Decisions
- 55 Sales Promotion
- 56 Surveys
- 57 Targets - Product + Market
- 58 Technology
- 59 Trade Cell Analysis.

## **SPREADSHEET CHAPTERS**

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## Geographic Coverage

|                      |                      |                      |
|----------------------|----------------------|----------------------|
| Albania              | Germany              | Nicaragua            |
| Algeria              | Ghana                | Nigeria              |
| Angola               | Greece               | Norway               |
| Argentina            | Guadeloupe           | Oman                 |
| Armenia              | Guatemala            | Pakistan             |
| Aruba                | Guinea               | Panama               |
| Australia            | Guinea-Bissau        | Papua                |
| Austria              | Guyana               | Paraguay             |
| Azerbaijan           | Haiti                | Peru                 |
| Bahamas              | Honduras             | Philippines          |
| Bahrain              | Hong Kong            | Poland               |
| Bangladesh           | Hungary              | Portugal             |
| Barbados             | Iceland              | Puerto Rico          |
| Belarus              | India                | Qatar                |
| Belgium              | Indonesia            | Reunion              |
| Belize               | Iran                 | Romania              |
| Bhutan               | Iraq                 | Russia               |
| Bolivia              | Ireland              | Saudi Arabia         |
| Bosnia + Herzegovina | Israel               | Senegal              |
| Botswana             | Italy                | Serbia + Montenegro  |
| Brazil               | Jamaica              | Sierra Leone         |
| Brunei               | Japan                | Singapore            |
| Bulgaria             | Jordan               | Slovakia             |
| Burma                | Kazakhstan           | Slovenia             |
| Cambodia             | Kenya                | South Africa         |
| Cameroon             | Korea South          | Spain                |
| Canada               | Kuwait               | Sri Lanka            |
| Chile                | Kyrgyzstan           | Sudan                |
| China                | Laos                 | Suriname             |
| Colombia             | Latvia               | Swaziland            |
| Republic of Congo    | Lebanon              | Sweden               |
| D R Congo - Zaire    | Lesotho              | Switzerland          |
| Costa Rica           | Liberia              | Syria                |
| Cote d'Ivoire        | Libya                | Taiwan               |
| Croatia              | Lithuania            | Tajikistan           |
| Cuba                 | Luxembourg           | Tanzania             |
| Cyprus               | Macedonia            | Thailand             |
| Czech Republic       | Madagascar           | Trinidad             |
| Denmark              | Malawi               | Tunisia              |
| Dominica             | Malaysia             | Turkey               |
| Dominican Republic   | Martinique           | Turkmenistan         |
| Ecuador              | Mauritius            | Uganda               |
| Egypt                | Micronesia           | Ukraine              |
| El Salvador          | Mexico               | United Arab Emirates |
| Estonia              | Moldova              | United Kingdom       |
| Ethiopia             | Mongolia             | United States        |
| Finland              | Morocco              | Uruguay              |
| France               | Mozambique           | Uzbekistan           |
| French Guiana        | Namibia              | Venezuela            |
| Gabon                | Netherlands          | Vietnam              |
| Gambia               | Netherlands Antilles | Zambia               |
| Georgia              | New Zealand          | Zimbabwe             |

See Data Caveat *below*.

## Financial Data

The databases will give Financial data for each of the below Pistons & Piston Rings Financial Data and Margins, by country, by year Historic from 1997, and a Forecast by year to 2040. Data will be given for EACH of the countries covered.

## Balance Sheet Data

To see what such a spreadsheet looks like: [http://www.datagroup.org/XLS\\_File\\_Samples/FOM.xls](http://www.datagroup.org/XLS_File_Samples/FOM.xls)

Total Sales, Domestic Sales, Exports, Pre-tax Profit, Interest Paid, Non-trading Income, Operating Profit, Depreciation: Structures, Depreciation: Plant and Equipment, Depreciation: Miscellaneous Items, Total Depreciation, Trading Profit, Intangible Assets, Intermediate Assets, Fixed Assets: Structures, Fixed Assets: Plant and Equipment, Fixed Assets: Miscellaneous Items, Fixed Assets, Capital Expenditure on Structures, Capital Expenditure on Plant and Equipment, Capital Expenditure on Vehicles, Capital Expenditure on Data Processing Equipment, Capital Expenditure on Miscellaneous Items, Total Capital Expenditure, Retirements: Structures, Retirements: Plant and Equipment, Retirements: Miscellaneous Items, Total Retirements, Total Fixed Assets, Finished Product Stocks, Work in Progress as Stocks, Materials as Stocks, Total Stocks / Inventory, Debtors, Total Maintenance Costs, Services Purchased, Miscellaneous Current Assets, Total Current Assets, Total Assets, Creditors, Short Term Loans, Miscellaneous Current Liabilities, Total Current Liabilities, Net Assets / Capital Employed, Shareholders Funds, Long Term Loans, Miscellaneous Long Term Liabilities, Workers, Hours Worked, Work in 1st Quarter, Work in 2nd Quarter, Work in 3rd Quarter, Work in 4th Quarter, Total Employees, Raw Materials Cost, Finished Materials Cost, Fuel Cost, Electricity Cost, Total Input Supplies / Materials and Energy Costs, Payroll Costs, Wages, Directors' Remunerations, Employee Benefits, Employee Commissions, Total Employees Remunerations, Sub Contractors, Rental & Leasing: Structures, Rental & Leasing: Plant and Equipment, Total Rental & Leasing Costs, Maintenance: Structures, Maintenance: Plant and Equipment, Communications Costs, Miscellaneous Expenses, Sales Personnel Variable & Commission Costs, Sales Expenses and Costs, Sales Materials Costs, Total Sales Costs, Distribution Fixed Costs, Distribution Variable Costs, Warehousing Fixed Costs, Warehousing Variable Costs, Physical Handling Fixed Costs, Physical Handling Variable Costs, Physical Process Fixed Costs, Physical Process Variable Costs, Total Distribution and Handling Costs, Mailing & Correspondence Costs, Media Advertising Costs, Advertising Materials & Print Costs, POS & Display Costs, Exhibition & Events Costs, Total Advertising Costs, Product Returns & Rejection Costs, Product Installation & Re-Installation Costs, Product Breakdown & Post Installation Costs, Product Systems & Configuration Costs, Product Service & Maintenance Costs, Customer Problem Solving & Customer Complaint Costs, Total After-Sales Costs, Total Marketing Costs, New Technology Expenditure, New Production Technology Expenditure, Total Research and Development Expenditure, Total Operational & Process Costs, Debtors within Agreed Terms, Debtors Outside Agreed Terms, Un-recoverable Debts.

## Financial Margins & Ratios Data

To see what such a spreadsheet looks like: [http://www.datagroup.org/XLS\\_File\\_Samples/GOM.xls](http://www.datagroup.org/XLS_File_Samples/GOM.xls)

Return on Capital, Return on Assets, Return on Shareholders' Funds, Pre-tax Profit Margins, Operating Profit Margin, Trading Profit Margin, Return on Investment, Assets Utilisation (given as a ratio of Sales to Total Assets), Sales as a ratio of Fixed Assets, Stock Turnover (Sales as a ratio of Stocks), Credit Period, Creditors' Ratio (given as Creditors divided by Sales times 365 days), Default Debtors given as a Ratio of Total Debtors, Un-Recoverable Debts given as a Ratio of Total Debts, Working Capital / Sales, Materials & Energy Costs as a % of Sales, Added Value, Investment as a Ratio of Added Value, Value of Plant & Equipment as a % of Sales, Vertical Integration (Value Added as a % of Sales), Research & Development Investment as a % of Sales, Capital Expenditure Investment as a % of Sales, Marketing Costs as a % of Sales, Current Ratio (Current Assets as a ratio of Current Liabilities), Quick Ratio, Borrowing Ratio (or Total Debt as a ratio of Net Worth), Equity Ratio (Shareholders Funds as a ratio of Total Liabilities), Income Gearing, Total Debt as a ratio of Working Capital, Debt Gearing Ratio (Long Term Loans as a ratio of Net Worth), Average Remuneration (all employees - full and part), Profit per Employee, Sales per Employee, Remunerations / Sales, Fixed Assets per Employee, Capital Employed per Employee, Total Assets per Employee, Value of Average Investment per Employee, Value Added per Employee, Materials Costs as a % of Sales, Wage Costs as a % of Sales, Payroll and Wages as a Ratio to Materials, Variable Costs as a % of Sales, Fixed Costs as a % of Sales, Fixed Costs as a Ratio of Variable Costs, Distribution Costs as a % of Sales, Warehousing Costs as a % of Sales, Physical Costs as a % of Sales, Fixed as a Ratio of Variable Distribution Costs, Fixed as a Ratio of Variable Warehousing Costs, Fixed as a Ratio of Variable Physical Costs, Fixed as a Ratio of Variable Total Distribution & Handling Costs, Product Returns & Rejections Costs as a % of Sales, Product Installation & Associated Costs as a % of Sales, Product Breakdown & Associated Costs as a % of Sales, Product Systems & Associated Costs as a % of Sales, Product Service & Associated Costs as a % of Sales, Customer Complaint & Associated Costs as a % of Sales, Stock Work in Progress & Materials as a Ratio of Finished Products, Stock Materials as a Ratio of Work in Progress, Un-recoverable Debts as a Ratio of Total Debt, Un-recoverable Debts as a Ratio of Debts Within Agreed Terms, Total Sales Costs as a % of Sales, Total Distribution & Handling Costs as a % of Sales, Total Advertising Costs as a % of Sales, Total After-Sales Costs as a % of Sales, Total Customer Compensation Costs as a % of Sales, Total Variable Marketing Costs as a % of Sales, Total Fixed Marketing Costs as a % of Sales, Total Fixed Marketing Costs as a Ratio of Total Variable Marketing Co, Variable Sales Personnel Costs as a Ratio of Marketing Costs, Variable Distribution & Handling Costs as a Ratio of Marketing Costs, Variable Advertising Costs as a Ratio of Marketing Costs, Variable After-Sales Costs as a Ratio of Marketing Costs, Sales Personnel Variable Costs as a Ratio of Sales, Sales Personnel Variable Costs as a Ratio of Debtors, Sales Personnel Variable Costs as a Ratio of Un-Recoverable Debtors, Exports as a % of Sales, \$ Hourly Pay Rate, \$ Hourly Wage Rate, Capital Employed.

## General Contents

### Pistons & Piston Rings World Report

This report provides users with commercial intelligence on markets and industries in over 200 countries. The report analyses the world markets with a basic point of reference, namely a base country. The Client can select the base reference country when ordering the database.

These reports are formatted to give both a narrative description of the various matters covered as well as provide readers with the ability to directly use the Chapters (via Microsoft Word or compatible word processors) to produce their own reports and documentation. Experienced users will be able to use the spreadsheet and databases to generate highly detailed narrative reports, charts and graphics - as well as sophisticated business and commercial forecasts and models. The databases are provided in both Excel spreadsheets and an Access database. Explanatory notes are provided as Word documents or in PDF formats.

As an entry level product the narrative is necessarily illustrative in its terminology and seeks to provide a basic degree of business logic and theory which indicates the rational applied in the forecasting and modelling methodology.

The databases are specifically designed to provide users with a uniform and consistent numeric measure of both (normally) quantifiable values as well as conceptual factors which are (usually) only capable of qualification. Experienced users will know how to apply forecasting and modelling software to the numeric data provided to generate highly detailed and discrete business planning models. The databases provided in this report can be used directly with databases on other product, markets and industries in other countries. The databases are specifically designed to be transnational, currency neutral, inflation and purchasing parity adjusted, product parity and product equivalent adjusted, opportunity cost adjusted, and numerically compatible; they all can be linked or merged programmatically in business planning models to provide multi-national and multi-level analysis.

The report databases are designed to give a common definition, unit of measure and quantification of markets in over 200 countries. These reports rely on data collection at various levels of the product flow; this effectively means, the producer, the distribution channels and the end user or consumers. This data is then correlated with any national and international statistical data produced by official agencies. Unfortunately, product flow data gathering in some countries is difficult, and furthermore the official statistical data is both inaccurate and sparse. In such circumstances, in some countries, we have to flag a Data Caveat as a warning.

### Choice of Base Reference Country

As report databases are generated specifically for each client order, the client can select which Base Country the database uses. The choice of a Base Country is important as it puts the database into the client's own perspective. This is important, for example, in respect of Purchasing Parity data or the results of End User Survey data where the world data is presented from the relative position of the Base Country. Where a client does not specify a Base Reference country, the database is generated with the Base Reference country being the same country as the client.

## Database Edition Market Research Contents

Please also see the Notes to the contents: [Notes](#)

Within each heading there are links with detailed descriptions and explanation of the contents; these can be opened when the link is clicked.

| Chapters | Pages | Volumes      | Diagrams, Maps & Illustrations | Spreadsheets & Database tables                   |
|----------|-------|--------------|--------------------------------|--------------------------------------------------|
| 59       | 2151  | Online & DVD | c. 500                         | Excel Spreadsheets: 10063<br>Access tables: 9716 |

## Databases & Structures

| Pistons & Piston Rings Report Database                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|---------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Root Folder</b>                                                                    | <p>This folder contains a number of general files, plus the various main Chapter Files.</p> <p><b>Summary Documents</b></p> <p>The Report contains 2 Summary documents for the Market Research which can be opened in a Browser or as a Word document and paginated.</p> <p>If required these files can then be saved as PDF files:-</p> <ol style="list-style-type: none"> <li>1. <a href="#">MR_Executive_Summary_Brief.html</a> will render into about 70 pages.</li> <li>2. <a href="#">MR_Executive_Summary.html</a> will render into about 950 pages.</li> </ol> |
| •  | <b>Market Research</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|                                                                                       | This folder contains the main Market Research files.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| •  | <b>Corporate Research</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|                                                                                       | Where the database is specified as having Corporate Intelligence, this folder contains the main Corporate Research files.                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| •  | <b>Research Data</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|                                                                                       | This folder contains the Market Research files which are specific to this edition of the report.                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| •  | <b>BUSINESS PLANNING</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|                                                                                       | This folder contains the Business Plan Documents & Boilerplates                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|                                                                                       | <b>Also see the Business Plan Images folder in Toolkit 1</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| •  | <b>BASE_FOLDERS</b> Significant folders include:-                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| •  | <b>CHAPTERS in HTM</b> HTM files listing the Chapter contents                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| •  | <b>Cities</b> HTM files listing Cities & Towns in the database                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| •  | <b>HELP</b> Help documents <b>Also see the HELP folder in Toolkit 1</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| •  | <b>MAPS</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| •  | <b>MDB</b> Access databases                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| •  | MarketResearch.mdb                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                                                                                       |  MarketResearch.mdb Table List                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

-  World.mdb  
 World.mdb Table List
-  World\_Product\_Sectors.mdb  
 World\_Product\_Sectors.mdb Table List
-  Corporate.mdb  
 Corporate.mdb Table List
-  Base.mdb General & Database Reference tables in 'Base\_mdb\_Database.zip' file [Size 75.8MB]
-  Data.exe Supplemental Database extraction [Optional. 547 databases for Modelling Level products. Size 2.56GB]
-  Auxiliary\_Data.exe Auxiliary Database extraction [Optional. 44 databases for Modelling Level products. Size 298MB]
-  Data\_Help.exe Help file extraction [Optional. 10,400 help files for Modelling Level products. Size 34MB]
-   **NAICS** Classifications
-  **REFERENCE** Reference documents:   &  links to external databases  
**Also see the REFERENCE folder in Toolkit 1**
-  **XLS**  Business Planning & Database Reference Spreadsheets
-  **XLS\_Corporate**  Corporate Spreadsheets  
 Corporate File List
-  **XLS\_MarketResearch**  Market Research Spreadsheets  
 Market Research File List

## Documents & Manuals

There are additional resources to be found in Toolkit 1 which can be used to assist the interpretation and manipulation of the database. These are:-

1. Data Manuals on the Report Contents
2. Documents & Templates on the Report Contents
3. Help files on the Report Contents
4. Manuals & Templates on the Report Contents

For a detailed Table of Contents for each chapter, database or spreadsheet: **click** on the **Blue headings shown below**. This will open a **page in your browser** which **fully specifies the contents of** that heading.

## Spreadsheets

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[Industry](#) 

[Market](#) 

[Competitive](#) 

[Critical Parameters](#) 

[Decision Makers](#) 

[Market Segmentation](#) 

[Marketing Costs](#) 

[Performance](#) 

[Product Launch](#) 

## Chapters

- 1 [OVERSEAS DEVELOPMENT](#)
- 2 [ADMINISTRATION](#)
- 3 [ADVERTISING](#)
- 4 [BUYERS – COMMERCIAL OPERATIONS](#)
- 5 [BUYERS – COMPETITORS](#)
- 6 [BUYERS – MAJOR CITY](#)
- 7 [BUYERS – PRODUCTS](#)
- 8 [BUYERS – TRADE CELL](#)
- 9 [COMPETITIVE INDUSTRY ANALYSIS](#)
- 10 [COMPETITOR ANALYSIS](#)
- 11 [COUNTRY FOCUS](#)
- 12 [DISTRIBUTION](#)
- 13 [FINANCIAL - BUSINESS DECISION SCENARIOS](#)
- 14 [FINANCIAL - CAPITAL COSTS FINANCIAL SCENARIOS](#)
- 15 [FINANCIAL - CASHFLOW OPTION SCENARIOS](#)
- 16 [FINANCIAL - COST STRUCTURE SCENARIOS](#)
- 17 [FINANCIAL - HISTORIC INDUSTRY BALANCE SHEET](#)
- 18 [FINANCIAL - HISTORIC MARKETING COSTS & MARGINS](#)
- 19 [FINANCIAL - INVESTMENT + COST REDUCTION SCENARIOS](#)
- 20 [FINANCIAL - MARKET CLIMATE SCENARIOS](#)
- 21 [FINANCIAL – MARKETING COSTS](#)
- 22 [FINANCIAL - MARKETING EXPENDITURE SCENARIOS](#)
- 23 [FINANCIAL – MARKETING MARGINS](#)
- 24 [FINANCIAL - STRATEGIC OPTIONS SCENARIOS](#)
- 25 [FINANCIAL - SURVIVAL SCENARIOS](#)
- 26 [FINANCIAL - TACTICAL OPTIONS SCENARIOS](#)

|    |                                           |
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| 28 | INDUSTRY - NORMS                          |
| 29 | MAJOR CITY MARKET ANALYSIS                |
| 30 | MARKET CAPITAL ACCESS SCENARIOS           |
| 31 | MARKET CASHFLOW SCENARIOS                 |
| 32 | MARKET ECONOMIC CLIMATE SCENARIOS         |
| 33 | MARKET INVESTMENT + COSTS SCENARIOS       |
| 34 | MARKET MARKETING EXPENDITURE SCENARIOS    |
| 35 | MARKET RISK SCENARIOS                     |
| 36 | MARKET STRATEGIC OPTION SCENARIOS         |
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| 39 | MARKETING EXPENDITURE -v- MARKET SHARE    |
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| 47 | PRODUCT ANALYSIS                          |
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| 50 | PRODUCT MIX                               |
| 51 | PRODUCT SUMMARY                           |
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| 56 | SURVEYS                                   |
| 57 | TARGETS - PRODUCT + MARKET                |
| 58 | TECHNOLOGY                                |
| 59 | TRADE CELL ANALYSIS                       |

| Countries            | Market | Market Forecast | Financial Forecast | Financial Margins | Historic Financial | Historic Costs | Industry Norms |
|----------------------|--------|-----------------|--------------------|-------------------|--------------------|----------------|----------------|
| Albania              | Market | Forecast        | Forecast           | Forecast          | Historic           | Historic       | Norms          |
| Algeria              | Market | Forecast        | Forecast           | Forecast          | Historic           | Historic       | Norms          |
| Angola               | Market | Forecast        | Forecast           | Forecast          | Historic           | Historic       | Norms          |
| Argentina            | Market | Forecast        | Forecast           | Forecast          | Historic           | Historic       | Norms          |
| Armenia              | Market | Forecast        | Forecast           | Forecast          | Historic           | Historic       | Norms          |
| Aruba                | Market | Forecast        | Forecast           | Forecast          | Historic           | Historic       | Norms          |
| Australia            | Market | Forecast        | Forecast           | Forecast          | Historic           | Historic       | Norms          |
| Austria              | Market | Forecast        | Forecast           | Forecast          | Historic           | Historic       | Norms          |
| Azerbaijan           | Market | Forecast        | Forecast           | Forecast          | Historic           | Historic       | Norms          |
| Bahamas              | Market | Forecast        | Forecast           | Forecast          | Historic           | Historic       | Norms          |
| Bahrain              | Market | Forecast        | Forecast           | Forecast          | Historic           | Historic       | Norms          |
| Bangladesh           | Market | Forecast        | Forecast           | Forecast          | Historic           | Historic       | Norms          |
| Barbados             | Market | Forecast        | Forecast           | Forecast          | Historic           | Historic       | Norms          |
| Belarus              | Market | Forecast        | Forecast           | Forecast          | Historic           | Historic       | Norms          |
| Belgium              | Market | Forecast        | Forecast           | Forecast          | Historic           | Historic       | Norms          |
| Belize               | Market | Forecast        | Forecast           | Forecast          | Historic           | Historic       | Norms          |
| Bermuda              | Market | Forecast        | Forecast           | Forecast          | Historic           | Historic       | Norms          |
| Bhutan               | Market | Forecast        | Forecast           | Forecast          | Historic           | Historic       | Norms          |
| Bolivia              | Market | Forecast        | Forecast           | Forecast          | Historic           | Historic       | Norms          |
| Bosnia & Herzegovina | Market | Forecast        | Forecast           | Forecast          | Historic           | Historic       | Norms          |
| Botswana             | Market | Forecast        | Forecast           | Forecast          | Historic           | Historic       | Norms          |
| Brazil               | Market | Forecast        | Forecast           | Forecast          | Historic           | Historic       | Norms          |
| Brunei               | Market | Forecast        | Forecast           | Forecast          | Historic           | Historic       | Norms          |
| Bulgaria             | Market | Forecast        | Forecast           | Forecast          | Historic           | Historic       | Norms          |
| Cambodia             | Market | Forecast        | Forecast           | Forecast          | Historic           | Historic       | Norms          |
| Cameroon             | Market | Forecast        | Forecast           | Forecast          | Historic           | Historic       | Norms          |
| Canada               | Market | Forecast        | Forecast           | Forecast          | Historic           | Historic       | Norms          |
| Chad                 | Market | Forecast        | Forecast           | Forecast          | Historic           | Historic       | Norms          |
| Chile                | Market | Forecast        | Forecast           | Forecast          | Historic           | Historic       | Norms          |
| China                | Market | Forecast        | Forecast           | Forecast          | Historic           | Historic       | Norms          |
| Colombia             | Market | Forecast        | Forecast           | Forecast          | Historic           | Historic       | Norms          |
| Costa Rica           | Market | Forecast        | Forecast           | Forecast          | Historic           | Historic       | Norms          |
| Cote d'Ivoire        | Market | Forecast        | Forecast           | Forecast          | Historic           | Historic       | Norms          |
| Croatia              | Market | Forecast        | Forecast           | Forecast          | Historic           | Historic       | Norms          |
| Cuba                 | Market | Forecast        | Forecast           | Forecast          | Historic           | Historic       | Norms          |
| Cyprus               | Market | Forecast        | Forecast           | Forecast          | Historic           | Historic       | Norms          |
| Czech Republic       | Market | Forecast        | Forecast           | Forecast          | Historic           | Historic       | Norms          |
| Denmark              | Market | Forecast        | Forecast           | Forecast          | Historic           | Historic       | Norms          |
| Dominica             | Market | Forecast        | Forecast           | Forecast          | Historic           | Historic       | Norms          |
| Dominican Republic   | Market | Forecast        | Forecast           | Forecast          | Historic           | Historic       | Norms          |
| Ecuador              | Market | Forecast        | Forecast           | Forecast          | Historic           | Historic       | Norms          |
| Egypt                | Market | Forecast        | Forecast           | Forecast          | Historic           | Historic       | Norms          |
| El Salvador          | Market | Forecast        | Forecast           | Forecast          | Historic           | Historic       | Norms          |
| Estonia              | Market | Forecast        | Forecast           | Forecast          | Historic           | Historic       | Norms          |
| Ethiopia             | Market | Forecast        | Forecast           | Forecast          | Historic           | Historic       | Norms          |
| Finland              | Market | Forecast        | Forecast           | Forecast          | Historic           | Historic       | Norms          |
| France               | Market | Forecast        | Forecast           | Forecast          | Historic           | Historic       | Norms          |
| French Guiana        | Market | Forecast        | Forecast           | Forecast          | Historic           | Historic       | Norms          |
| Gabon                | Market | Forecast        | Forecast           | Forecast          | Historic           | Historic       | Norms          |
| Gambia               | Market | Forecast        | Forecast           | Forecast          | Historic           | Historic       | Norms          |
| Georgia              | Market | Forecast        | Forecast           | Forecast          | Historic           | Historic       | Norms          |
| Germany              | Market | Forecast        | Forecast           | Forecast          | Historic           | Historic       | Norms          |
| Ghana                | Market | Forecast        | Forecast           | Forecast          | Historic           | Historic       | Norms          |
| Greece               | Market | Forecast        | Forecast           | Forecast          | Historic           | Historic       | Norms          |
| Guadeloupe           | Market | Forecast        | Forecast           | Forecast          | Historic           | Historic       | Norms          |
| Guatemala            | Market | Forecast        | Forecast           | Forecast          | Historic           | Historic       | Norms          |
| Guinea               | Market | Forecast        | Forecast           | Forecast          | Historic           | Historic       | Norms          |
| Guinea-Bissau        | Market | Forecast        | Forecast           | Forecast          | Historic           | Historic       | Norms          |
| Guyana               | Market | Forecast        | Forecast           | Forecast          | Historic           | Historic       | Norms          |

## Pistons & Piston Rings

|                      |        |          |          |          |          |          |       |
|----------------------|--------|----------|----------|----------|----------|----------|-------|
| Haiti                | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Honduras             | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Hong Kong            | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Hungary              | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Iceland              | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| India                | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Indonesia            | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Iran                 | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Iraq                 | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Ireland              | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Israel               | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Italy                | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Jamaica              | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Japan                | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Jordan               | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Kazakhstan           | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Kenya                | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Kuwait               | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Kyrgyzstan           | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Laos                 | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Latvia               | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Lebanon              | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Lesotho              | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Liberia              | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Libya                | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Liechtenstein        | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Lithuania            | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Luxembourg           | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Macedonia            | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Madagascar           | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Malawi               | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Malaysia             | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Malta                | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Martinique           | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Mauritius            | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Mexico               | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Moldova              | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Monaco               | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Mongolia             | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Morocco              | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Mozambique           | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Namibia              | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Nepal                | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Netherlands          | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Netherlands Antilles | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| New Caledonia        | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| New Zealand          | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Nicaragua            | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Nigeria              | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Norway               | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Oman                 | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Pakistan             | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Panama               | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Papua New Guinea     | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Paraguay             | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Peru                 | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Philippines          | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Poland               | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Portugal             | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Puerto Rico          | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Qatar                | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Reunion              | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Romania              | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |

## Pistons & Piston Rings

|                      |        |          |          |          |          |          |       |
|----------------------|--------|----------|----------|----------|----------|----------|-------|
| Russia               | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Saudi Arabia         | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Senegal              | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Serbia & Montenegro  | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Sierra Leone         | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Singapore            | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Slovakia             | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Slovenia             | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| South Africa         | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| South Korea          | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Spain                | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Sri Lanka            | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Suriname             | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Swaziland            | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Sweden               | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Switzerland          | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Syria                | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Taiwan               | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Tajikistan           | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Tanzania             | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Thailand             | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Trinidad & Tobago    | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Tunisia              | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Turkey               | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Turkmenistan         | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Uganda               | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Ukraine              | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| United Arab Emirates | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| United Kingdom       | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| United States        | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Uruguay              | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Uzbekistan           | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Venezuela            | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Vietnam              | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Virgin Islands       | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Zambia               | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |
| Zimbabwe             | Market | Forecast | Forecast | Forecast | Historic | Historic | Norms |

### The Data Caveat

The report databases are designed to give a common definition, unit of measure and quantification of markets in over 200 countries. These reports rely on data collection at various levels of the product flow; this effectively means, the producer, the distribution channels and the end user or consumers. This data is then correlated with any national and international statistical data produced by official agencies. Unfortunately, product flow data gathering in some countries is difficult, and furthermore the official statistical data is both inaccurate and sparse. In such circumstances, in some countries, we have to flag a Data Caveat as a warning. What this means is that in some countries the data is not sufficiently verifiable for statistical purposes and in those cases the data may not be presented.

## Methodology

For more information on methodology please download a copy of the Methodology Manual:

[http://www.datagroup.org/Methodology\\_Manual.pdf](http://www.datagroup.org/Methodology_Manual.pdf)

## Deliverables

The report will be provided as follows:

1. Executive Summary at Word document (900 pages) + Executive Summary as a PDF (900 pages)  
World Edition: Executive Brief (90 html pages) + Executive Summary (900 html pages).
2. Online downloadable Zipped version of the report.
3. Back-up DVD with Report and Report Database (Optional).
4. 12 months After-Sales Service.
5. 1-2 hour Teleconference / Teamviewer presentation of the report findings if required. See After-Sales Service
6. Dedicated web site access for the report & databases if required. See After-Sales Service.

## About this Database

As an entry level product the narrative is necessarily illustrative in its terminology and seeks to provide a basic degree of business logic and theory which indicates the rational applied in the forecasting and modelling methodology. First time users should read the Database Introduction as well as the Notes and Definitions links found in each Chapter. There are subtle statistical nuances to some of the spreadsheets and databases which will help the user to fine-tune their models and forecasts to obtain maximum effect and greater accuracy.

### Data Product levels

Because of the sheer volume of data potentially available it has been necessary to create a number of product levels which can provide clients with as little or as much data as needed. Clients can upgrade their Product level if required.

#### Database Entry level

Entry level products provide the most basic degree of information supplied. This product can be used to build upon for various business forecasting and planning application. A World Report will have a database of over 9,000 record sets.

#### Corporate Modelling level

The Corporate level modelling products provide the tools and information for medium and long term corporate forecasting and planning. Typically this level will produce a count of over 24,000 record sets.

#### Econometric Modelling level

The Econometric level modelling products provide the tools and information for industry level, national, and international medium & long term forecasting and planning. Typically this has a database of over 39,000 record sets.

#### Presentation level

The Presentation level products provide the information sought by a client company is a graphical or audio-visual format which is bespoke for the particular needs and applications of the client.

## Real Time Support

The After-Sales Service can offer client Real-Time Support. This usually involves using a software utility called TeamViewer (an installation program can be found in the Toolkit on your DVD or Hard Disk Drive) which allows the After-Sales Service support staff to directly link to the client's computer and work with the users in real time.

## Toolkits

To assist users there are various Toolkits available on request:

The Files, Data, Documents, Software, Tools, Utilities and other items provided on these DVDs are supplied for the sole use of the recipient. These items are the property of the publishers concerned and they may not be released or distributed without the express permission of the publisher of each item.

### Toolkit 1

1. Data Manuals
2. Document Templates
3. Help files
4. Manuals Templates
5. Microsoft Utilities
6. OpenOffice
7. Business Plan Images
8. Reference files
9. US Census Data Tools \*
10. Utilities & Tools

\* All our databases are directly compatible with U.S. Government databases (the Department of Commerce, US census, NIST, Treasury, et al) it is sometimes useful for users to use US Government data handling tools to manage not only US Government data, but also the data provided by us. Alternatively, if you are already using this US Government software you can simply access our databases with the same software. In general our databases use the same database parameters, structures and field names as those found in US Government databases, and thus users can correlate and query databases without undue difficulty.

### Toolkit 2

11. Database Utilities
  12. Enterprise Resource Planning
  13. Integrated Development Environment
- If you intend to implement our databases online (internet or intranet) then an Integrated Development Environment is often the easiest route to data dissemination and data manipulation.

### Toolkit 3

There are about 40 Statistical packages provided in this Toolkit. These are Open-Source packages which are generally free to use. The following packages are available:-

acsIX, ADaMSoft, ADMB, AMPL, Analyse-it, Analytica, Angoss, APMonitor, ASReml, Automlab, Baudline, Bayesian Filtering Library, BMDP, BV4.1, CalEst, Ch, Chronux, COMSOL Script, CSPRO, DADISP, DAP, Data Applied, Dataplot, Demetra+, EJS, ELKI, Epi Info, Euler Mathematical Toolbox, EViews, FAME, FEniCS Project, Fityk, FlexPro, GAUSS, Genedata Analyst, GenStat, GeoDA, GLIM, GNU Data Language, GraphPad InStat, GraphPad Prism, gretl, Hermes, IBM SPSS Modeler, IBM SPSS Statistics, IDAMS/WinIDAMS, IDL, IGOR Pro, IMSL Numerical Libraries, Izenda, JAGS, JHepWork, JMP, JMulTi, Julia, KPP, LabPlot, LISREL, Macsyma, Madagascar, MadArtSoft, Madeline, Maple, Mathcad, Mathemagix, Mathematica, MATLAB, MCSim, MedCalc, Minitab, MINUIT, MLwiN, Mondrian, NCAR Command Language, NCSS, NMath Stats, numberGo Publisher, NumXL, Octave, O-Matrix, OpenBUGS, OpenEpi, OpenMx, OptimJ, Orange, Origin, OriginPro, PARI/GP, Partek, PAW, Perl Data Language, Ploticus, Primer-E Primer, PSPP, PV-WAVE, Q research software, QtiPlot, Quantum, R, R Commander, R Rattle GUI, RapidMiner, RATS, Revolution Analytics, ROOT, Sage, SALOME, Salstat, SAS, scikit-learn, Scilab, SciPy, SHAZAM, Shogun, SigmaStat, SigmaXL, Simfit, Simul, SOCR, SOFA Statistics, SPC XL, Speakeasy, S-PLUS, SPSS, Stata, Statgraphics, STATISTICA, Statistical Lab, Stat-JR, Stats Helper, StatXact, SUDAAN, Systat, The Unscrambler, Trilinos, Unistat, VisSim, Waffles, Weka, WinBUGS, Winpepi, X-12-ARIMA, XLfit, Xlisp-stat, XploRe, Yorick.

### Toolkit 4

Microsoft Server 2003 utilities and resources. These are for clients implementing databases on Microsoft Server 2003 systems.

### Toolkit 5

Microsoft Server 2008 utilities and resources for clients implementing databases on those systems. Microsoft Server 2012 migration utilities are also in this Toolkit.

## Proprietary Software package compatibility

If you use proprietary corporate planning software then it is easy to use these databases as they are compatible with the following packages:-

### Some Compatible Software products (See the Database Support site for a full list)

**Project Management Software:** 24SevenOffice, Assembla, AtTask, Basecamp, Central Desktop, Cerebro, Clarizen, codeBeamer, Collabtive, Concerto, Contactizer, CredAbility.info, dotProject, Easy Projects .NET, eGroupWare, FastTrack Schedule, Feng Office Community Edition, FogBugz, GanttProject, Gemini, Genius Inside, Glasscubes, Huddle, Hyperoffice, InLoox, JIRA, Journyx, Kayako, KForge, KPlato, Launchpad, LiquidPlanner, LisaProject, MacProject, MantisBT, MatchWare MindView 3 Business, Merlin, MicroPlanner X-Pert, Microsoft Office Project Server, Microsoft Project, Mingle, O3spaces, OmniPlan, Open Workbench, OpenProj, Oracle Project Portfolio Management, Planisware 5, Planner Suite, Pmplus+, Primavera Project Planner, Project KickStart, Project.net, Project-Open, Projectplace, ProjectSpaces, Projektron BCS, PSNext, QdPM, QuickBase, Redmine, Rachota, SAP RPM, Smartsheet, TaskJuggler, Teamcenter, Teamwork, Tenrox, Trac, TrackerSuite.Net, Ubidesk, VPMi, WorkLenz, WorkPLAN Enterprise, workspace.com, WebSPOC, Wrike, Zoho Projects

**ERP Packages:** Adempiere, BlueErp, Compiere, Dolibarr, Fedena, GNU Enterprise, JFire, Kuali Foundation, LedgerSMB, OFBiz, Openbravo, OpenERP, Opentaps, Postbooks, SQL-Ledger, Tryton, WebERP, 1C:Enterprise, 24SevenOffice Start / Premium / Professional, abas ERP, Accpac, Agresso Business World, AMS Advantage, BatchMaster ERP, Bowen & Groves, CGram Enterprise, Clear Enterprise, Comarch Altum, Compass ERP, Compiere, Comprehensive Patient Administrator, COA Solutions Ltd - Smart Business Suite, Consona Corporation – Intuitive / Made2manage / AXIS / Cimnet / Encompix / DTR, Epicor Enterprise, Global Shop Solutions One-System ERP Solutions, HansaWorld, ERP Adage (Adage), ERP LN (Baan), ERP LX (BPCS), ERP SL (SyteLine), ERP Swan, ERP SX.Enterprise (SX.Enterprise), ERP VE (Visual Enterprise), ERP XA (MAPICS), IFS Applications, JD Edwards EnterpriseOne & JD Edwards World, JustFoodERP.com, kVASy4, Kingdee, Lawson M3 / Movex, Lawson S3, Log-net, Maximo (MRO), Microsoft Dynamics AX, Microsoft Dynamics GP, Microsoft Dynamics NAV, Microsoft Dynamics SL, Momentum, MyWorkPLAN, NetSuite, Openda QX, OpenMFG, Oracle e-Business Suite, Paradigm, PeopleSoft, Plex Online, QAD Enterprise Applications, Ramco Enterprise Series 4.x, Ramco e.Applications, Ramco On Demand ERP, MAS 90, MAS 200, MAS 500, Technology One, SAGE ACCPPAC, SAGE Pro ERP, SAGE ERP X3, SAP Business Suite, SAP Business ByDesign, SAP Business One, SAP Business All-in-One, TaskHub, SYSPRO, SYS-APPS, mySAP, Visibility.net, WorkPLAN Enterprise

**Enterprise Feedback Management Systems:** SynGro, Perseus (Vovici), Clicktools, DatStat, Inquisite, SPSS, FIRM (Confirmit), NetReflector, Allegiance, Enetrix, Satmetrix, RightNow Technologies, Mindshare Technologies, Data Illusion, KeySurvey (WorldAPP), Kinetic Data, CustomerSat, Medallia, Interview SA, Surveynomics, Invoke Solutions, Qualtrics, Fizzback, Grimmersoft, QuestManager, QuestBack, Globalpark, DataCycles, Dub Studios, eLustro, Kinesis Survey Technologies, Knowledge Wave, myK (myKnowledge), mySurveyLab.com, QuickSearch, Ransys, ResponseTek Networks Corp., TalkFreely, XTCO, Zarca

## Resource Web

Sometimes clients also want the data loaded onto a password protected dedicated website for the use of their staff and any other persons they may authorise.

The main benefit of these Resource Webs is that the data is available to all the client's staff and professional advisors wherever they may be, and also when data is updated, or new data is added, then there is a common point of access for that data. Resource Webs are maintained for the use of the client for a period of 12 months from the last update to that site. These dedicated web sites are provided by the After-Sales Service.

For a detailed view of a typical Resource Web: <http://www.eni-italy.info> produced for ENI, the Italian Oil group

## Research & Survey Methodology Analysis

Some client may wish to understand the statistical and methodological basis of the specific research conducted and this can be provided as part of the After-Sales Service.

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### Statistical Appraisal of Datasets (via the After-Sales Service)

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- **Sampling**
    - External Validity
    - Sampling Terminology
    - Statistical Terms in Sampling
    - Probability Sampling
    - Nonprobability Sampling
  - **Measurement**
    - Construct Validity
      - Measurement of Validity Types
      - Construct Validity
      - Convergent & Discriminant Validity
      - Threats to Construct Validity
      - Nomological Networks
      - Multi-trait / Multi-method Matrix
      - Pattern Matching Construct Validity
    - Reliability
      - True Score
      - Measurement Error
      - Reliability
      - Type of Reliability Analysis
      - Validity
    - Levels of Measurement
    - Survey Research
      - Survey Type
      - Selecting the Survey Method
      - Construction of the Survey
        - Questions
        - Question Content
        - Response Format
        - Question Wording
        - Question Placement
      - Interviews
      - Appraisal of Survey Method
    - Scaling
      - General Issues in Scaling
      - Thurstone Scaling
      - Likert Scaling
      - Guttman Scaling
    - Qualitative Measures
      - Qualitative Discussion
      - Qualitative Data
      - Qualitative Approach
      - Qualitative Method
      - Qualitative Validity
    - Unobtrusive Measures
  - **Design**
    - Internal Validity
      - Establishing Cause & Effect
      - Single Group Threats
        - Regression to the Mean
      - Multiple Group Threats
      - Social Interaction Threats
    - Design Development
    - Design Type
    - Experimental Designs
      - Two-Group Experimental Design
        - Probabilistic Equivalence
        - Random Selection & Assignment
      - Classifying Experimental Designs
      - Factorial Design
        - Factorial Design Variations
      - Randomized Block Design
      - Covariance Design
      - Hybrid Experimental Design
    - Quasi-Experimental Designs
      - Non-equivalent Groups Design
      - Regression-Discontinuity Design
      - Other Quasi-Experimental Design
    - Relationships of Pre-Post Designs
    - Formulation of the Designs
    - Modification & Experimentation
  - **Analysis**
    - Conclusion Validity
      - Threats to Validity
      - Validity Improvements
      - Statistical Control
    - Data Preparation
    - Descriptive Statistics
      - Correlation
    - Inferential Statistics
      - T-Test
      - Indicator Variables
      - General Linear Model
      - Post-test-Only Analysis
      - Factorial Design Analysis
      - Randomized Block Analysis
      - Analysis of Covariance
      - Non-equivalent Group Analysis
      - Regression-Discontinuity Analysis
      - Regression Displacement Analysis
-

## Appendix 1 : Regional Report country coverage

### Canada & USA

[Canada](#)  
[United States](#)

### Central America

[Antigua and Barbuda](#)\*  
[Aruba](#)  
[Bahamas](#)  
[Barbados](#)  
[Belize](#)  
[Bermuda](#)\*  
[Cayman Islands](#)\*  
[Costa Rica](#)  
[Cuba](#)  
[Dominica](#)  
[Dominican Republic](#)  
[El Salvador](#)  
[Grenada](#)\*  
[Guadeloupe](#)  
[Guatemala](#)  
[Haiti](#)  
[Honduras](#)  
[Jamaica](#)  
[Martinique](#)  
[Mexico](#)  
[Netherlands Antilles](#)  
[Nicaragua](#)  
[Panama](#)  
[Puerto Rico](#)  
[Saint Kitts and Nevis](#)\*  
[Saint Lucia](#)\*  
[Saint Vincent  
Grenadines](#)\*  
[Trinidad and Tobago](#)  
[US Virgin Islands](#)\*

### South America

[Argentina](#)  
[Bolivia](#)  
[Brazil](#)  
[Chile](#)  
[Colombia](#)  
[Ecuador](#)  
[French Guiana](#)  
[Guyana](#)  
[Paraguay](#)  
[Peru](#)  
[Suriname](#)  
[Uruguay](#)  
[Venezuela](#)

### Europe

[Albania](#)  
[Andorra](#)\*  
[Armenia](#)  
[Austria](#)  
[Belarus](#)  
[Belgium](#)  
[Bosnia + Herzegovina](#)  
[Bulgaria](#)  
[Croatia](#)  
[Cyprus](#)  
[Czech Republic](#)  
[Denmark](#)  
[Finland](#)  
[France](#)  
[Eire](#)  
[Estonia](#)  
[Georgia](#)  
[Germany](#)  
[Greece](#)  
[Greenland](#)\*  
[Hungary](#)  
[Iceland](#)  
[Italy](#)  
[Latvia](#)  
[Liechtenstein](#)\*  
[Lithuania](#)  
[Luxembourg](#)  
[Macedonia](#)  
[Malta](#)\*  
[Moldova](#)  
[Montenegro](#)  
[Netherlands](#)  
[Norway](#)  
[Poland](#)  
[Portugal](#)  
[Romania](#)  
[Serbia](#)\*  
[Slovakia](#)  
[Slovenia](#)  
[Spain](#)  
[Sweden](#)  
[Switzerland](#)  
[United Kingdom](#)  
[Ukraine](#)

### Eurasia

[Kazakhstan](#)  
[Kyrgyzstan](#)  
[Russia](#)  
[Uzbekistan](#)

### Middle East

[Afghanistan](#)\*  
[Azerbaijan](#)  
[Bahrain](#)  
[Iran](#)  
[Iraq](#)  
[Israel](#)  
[Jordan](#)  
[Kuwait](#)  
[Lebanon](#)  
[Oman](#)  
[Pakistan](#)  
[Qatar](#)  
[Saudi Arabia](#)  
[Syria](#)  
[Tajikistan](#)  
[Turkey](#)  
[Turkmenistan](#)  
[United Arab Emirates](#)  
[Yemen](#)\*

### Asia

[Bangladesh](#)  
[Brunei](#)\*  
[Burma](#)\*  
[Cambodia](#)  
[China](#)  
[India](#)  
[Indonesia](#)  
[Japan](#)  
[Laos](#)  
[Malaysia](#)  
[Mongolia](#)\*  
[Nepal](#)\*  
[North Korea](#)\*  
[Philippines](#)  
[Singapore](#)  
[South Korea](#)  
[Sri Lanka](#)  
[Taiwan](#)  
[Thailand](#)  
[Vietnam](#)

### Oceania

[Australia](#)  
[Fiji Islands](#)\*  
[French Polynesia](#)\*  
[Kiribati](#)\*  
[Micronesia](#)\*  
[New Caledonia](#)\*  
[New Zealand](#)  
[Papua New Guinea](#)

### Africa

[Algeria](#)  
[Angola](#)  
[Benin](#)\*  
[Botswana](#)  
[Burkina Faso](#)\*  
[Burundi](#)\*  
[Cameroon](#)  
[Cape Verde](#)\*  
[Cen African Rep](#)\*  
[Chad](#)\*  
[Cote d'Ivoire](#)  
[Democratic  
Republic Congo](#)\*  
[Djibouti](#)\*  
[Egypt](#)  
[Equatorial Guinea](#)\*  
[Eritrea](#)  
[Ethiopia](#)  
[Gabon](#)  
[Gambia](#)  
[Ghana](#)  
[Guinea](#)  
[Guinea-Bissau](#)  
[Kenya](#)  
[Lesotho](#)  
[Liberia](#)  
[Libya](#)  
[Madagascar](#)  
[Malawi](#)  
[Mali](#)\*  
[Mauritania](#)\*  
[Morocco](#)  
[Mozambique](#)  
[Namibia](#)  
[Niger](#)\*  
[Nigeria](#)  
[Republic Congo](#)\*  
[Rwanda](#)\*  
[S Tome Principe](#)\*  
[Senegal](#)  
[Seychelles](#)\*  
[Sierra Leone](#)  
[Somalia](#)\*  
[South Africa](#)  
[Sudan](#)\*  
[Swaziland](#)  
[Tanzania](#)  
[Tunisia](#)  
[Uganda](#)  
[Zambia](#)  
[Zimbabwe](#)

The countries marked \* indicate a data caveat due to local survey conditions.

## Appendix 2 : About the After-Sales Service

The After-Sales Service is most effective if users plan their orders sequentially, i.e. extract the basic data which will then lead to more complex data or correlations. This also helps to reduce costs as the use of automated data processing and standard data formats are always less expensive to produce than Ad Hoc work.

### Modular Research

Once the After-Sales Service understands the general data requirements they will send the Client a Modular Proposal as a Word document. The Client can then select the Parts required, and amend or modify the information objectives.

The best method to organise the ordering of data is as follows:-

- 1 Additional Market Research Data
- 2 Distribution Channels & End Users
- 3 Survey Data
- 4 Corporate Data
- 5 Additional Requirements

Once a client has specified exactly what data is needed, and that specification is available, then the After-Sales Service will produce a written quotation of cost and delivery time.

#### 1. Market Research

##### Markets & Products

Clients can order data for additional Product and Market Sectors. This will always include data, by year Historic: from 1997, and a Forecast by year to 2040. Data can be provided for up to 200 countries.

The client can specify Product & Market breakdowns as needed:

#### 2. Distribution Channels & End Users Data

##### Distribution Channels

This section can investigate the Product Distribution Channels in the selected Markets. The data is based on a series of existing Databases. The client can specify information as needed.

##### End Users

This section can investigate the End Users of the Products in the selected markets. The data is based on a series of existing Databases. The client can specify information as needed.

### 3. Survey Data

#### Supplementary Survey Data for the selected Products & Markets

Each survey (Suppliers, Distribution Channels, Decision Makers, and End Users) contains 5 sub-sets for Products, Supplier Operations, Buyer & End Users, Trading Area, & Competitors in the selected Markets.

|                                            |                                               |
|--------------------------------------------|-----------------------------------------------|
| <b>Products</b>                            | The client can specify information as needed. |
| <b>Operations</b>                          | The client can specify information as needed. |
| <b>Buyer &amp; Decision Maker Profiles</b> | The client can specify information as needed. |
| <b>Trading Area</b>                        | The client can specify information as needed. |
| <b>Competitors</b>                         | The client can specify information as needed. |

These surveys cover the Markets, Products, Competitors, Operations and Product Flows in terms of the Suppliers, Distributors, Decision Makers, and End Users.

#### Industry & Supplier Performance

One can investigate the product Industry in the selected Markets. Industry Performance Survey results. **The client can specify information as needed.**

#### Distribution Channels

One can investigate the product Distribution Channels in the selected Markets. Distribution Survey results. **The client can specify information as needed.**

#### Decision Makers

One can investigate the product Buyers and Purchasing Decision Makers in the selected Markets. Purchasing Decision Makers Survey results. **The client can specify information as needed.**

#### End Users

One can investigate the End Users in the selected Markets. End User & Buyer Survey results. **The client can specify information as needed.**

## 4. Corporate Data

**This database contains data on 296 significant Companies (Suppliers and Distribution Channel members) worldwide.**

This part is provided as a  PDF file or a  Word file, as specified by the client.

### Data Objectives for each Target Company

The data objectives have to be set by the client and where possible these will be achieved by the research. For example:-

1. Financials: historical sales, forecasted sales, gross profit margin.
  - a. By industry sector and application sector as defined by the client.

For example, for the sales made by a Target Company those products sold to specific categories of customers, how much of their revenue is generated from providing various products, or application to specific categories of customers, et cetera.
2. A list of products produced by the Target Company or sourced from other suppliers.
3. Type of distribution channel, e.g. direct sales to End Users, OEM sales, via specifiers, via importers or distributor, partnering with third party providers, et cetera.
4. Partners by type (e.g. specifiers, product distributor, customer service partner) per country
5. Pricing by product sector defined by the client.
6. Discount structures
7. Capacity by product/market defined
8. Availability of products (% of product in stock versus product to be ordered)
9. Sales by the type of Support for all categories specified by the client.
10. The average Modernization and Upgrades period by Product Sector defined by the client.
11. Customer Perceptions
12. The size (in terms of number) of management team per country, number of field sales persons per country, number of customer service staff per country.
13. Countries covered by the competitors, production sites (city), customer service sites (city), headcount, documentation.
14. Technology and innovation: innovative technology or application developments.
15. Et cetera... **The client can specify any particular data which needs to be covered.**

### List of Target Companies

The Client may either select the target themselves, or can specify the Top 10 or Top 15 in the World / Europe / individual Country / et cetera. **The client can specify here which Target Companies are to be covered.**

## Base data objectives for the Target Company

### Key Personnel:

1. Chairman
2. Chief Executive
3. Directors:
4. Executives:

### Corporate Summary:

5. Company Description
6. Company History
7. Legal Entity & Ownership
8. Company Facilities
9. Company Key Assets
10. Mainline product / service
11. Product / services provided
12. Parent Company
13. Bankers
14. Year established
15. Current employees
16. Issued capital
17. Shareholders
18. Last published turnover
19. Subsidiaries
20. Associated companies
21. Companies represented
22. Agencies
23. Physical processing locations
24. Capital investment
25. Advertising expenditure
26. Advertising media
27. Advertising posture
28. Sales promotion activity
29. Method of selling
30. Distribution
31. Distribution network
32. Use of distribution channels

### Corporate Observations:

33. Premises
34. Product Brands
35. Product Sales Channels
36. Products Carried & Services Offered
37. Consumer Features & Benefits
38. Current Market Analysis
39. Competition
40. Competitive Advantage
41. Target Markets
42. Target Customers
43. Current Strategy & Implementation
44. Current Management
45. Current Financial Plan
46. Investment Fund Sources & Use of Funds
47. Future Target Customers
48. Future Process Trends
49. Future Market Analysis
50. Projected Market Size
51. Planned Products & Services
52. Development Plans

### SWOT Analysis:

53. Strengths

## Pistons & Piston Rings

- 54. Weaknesses
- 55. Opportunities
- 56. Threats

### Future Strategy Planning & Implementation:

- 57. Philosophy
- 58. Product Development
- 59. Internet Strategy
- 60. Marketing Strategy
- 61. Sales Strategy
- 62. Strategic Alliances
- 63. Operations

### Goals:

- 64. Renovating premises, stocking, staff hiring and marketing.
- 65. Market Penetration
- 66. Penetrate and raise awareness in the targeted markets.
- 67. Achieving a higher profit margin.
- 68. Building the customer base.
- 69. Generate repeat and referral sales.
- 70. Expansion potential.
- 71. Reputation as a quality Supplier.

### Exit Strategies

#### Management:

- 72. Organisational Structure
- 73. Leadership
- 74. Staff Members

#### Financial Plans:

- 75. Finance Requirements
- 76. Use of Funds
- 77. Cash Flow
- 78. Balance Sheet Topics
- 79. Financial Assumptions

## Specific Additional corporate data required on Target Companies

The client can specify any particular corporate data which is needed:

- 80. -
- 81. -
- 82. - .../

These above items are a qualitative analysis of the Target Company. This data is derived from the Surveys of Industry sources, Distribution Channels and Buyers of the products supplied by the target company. This data is not quantified, but is presented as the qualified and subjective opinions of those responding to the surveys.

## Financial Data for the Target Company

The financial data is provided in sections:-

1. the most salient Management figures and margins, and
2. a full Balance Sheet and Management Accounts simulation.

## Management Accounts

Management figures for the Target Company:  as an Excel file:

- |                                          |                                         |
|------------------------------------------|-----------------------------------------|
| 1. Product Revenue                       | 21. Total Fixed Assets                  |
| 2. Product Profitability as a % of Sales | 22. Finished Product Stocks             |
| 3. Total Process Space                   | 23. Work in Progress as Stocks          |
| 4. Average Site Process Space            | 24. Materials as Stocks                 |
| 5. Average Site Revenues                 | 25. Total Stocks / Inventory            |
| 6. Average Site Establishment Cost       | 26. Debtors                             |
| 7. Fixed Assets: Premises                | 27. Miscellaneous Current Assets        |
| 8. Fixed Assets: Equipment               | 28. Total Current Assets                |
| 9. Fixed Assets: Miscellaneous Items     | 29. Total Assets                        |
| 10. Fixed Assets                         | 30. Creditors                           |
| 11. Capital Expenditure on Premises      | 31. Short Term Loans                    |
| 12. Capital Expenditure on Plant         | 32. Miscellaneous Current Liabilities   |
| 13. Capital Expenditure on Equipment     | 33. Total Current Liabilities           |
| 14. Cap. Expend. on Data Processing      | 34. Net Assets / Capital Employed       |
| 15. Capital Expenditure on Misc. Items   | 35. Long Term Loans                     |
| 16. Total Capital Expenditure            | 36. Miscellaneous Long Term Liabilities |
| 17. Retirements: Premises                | 37. Shareholders' Funds                 |
| 18. Retirements: Plant & Equipment       | 38. Process Workers                     |
| 19. Retirements: Miscellaneous Items     | 39. Total Employees                     |
| 20. Total Retirements                    |                                         |

## Specific Additional Financial data required on Target Companies

The client can specify any particular Financial data which is needed.

## Balance Sheet and Management Ratios

Balance Sheet and Management Accounts for the Target Company:  as an Excel file:

- |                                                         |                                                              |
|---------------------------------------------------------|--------------------------------------------------------------|
| 1. Return on Capital                                    | 61. Un-recoverable Debts Ratio of Total Debt                 |
| 2. Return on Assets                                     | 62. Un-recoverable Debts Ratio Within Terms                  |
| 3. Return on Shareholders' Funds                        | 63. Total Sales Costs as a % of Sales                        |
| 4. Pre-tax Profit Margins                               | 64. Total Distribution Costs as a % of Sales                 |
| 5. Operating Profit Margin                              | 65. Total Advertising Costs as a % of Sales                  |
| 6. Trading Profit Margin                                | 66. Total After-Sales Costs as a % of Sales                  |
| 7. Return on Investment                                 | 67. Total Customer Compensation Costs                        |
| 8. Assets Utilisation (Sales to Total Assets)           | 68. Total Variable Marketing Costs % of Sales                |
| 9. Sales as a ratio of Fixed Assets                     | 69. Total Fixed Marketing Costs % of Sales                   |
| 10. Stock Turnover (Sales as a ratio of Stocks)         | 70. Total Fixed Marketing Costs : Ratio Variable Costs       |
| 11. Credit Period                                       | 71. Variable Sales Personnel Costs: Marketing                |
| 12. Creditors' Ratio (Creditors / Sales times 365 days) | 72. Variable Distribution Ratio Marketing Costs              |
| 13. Default Debtors / Ratio of Total Debtors            | 73. Variable Advertising Costs : Marketing                   |
| 14. Un-Recoverable Debts Ratio of Total Debts           | 74. Variable After-Sales Costs as a Ratio of Marketing Costs |
| 15. Working Capital / Sales                             | 75. Sales Personnel Variable Costs : Sales                   |
| 16. Materials & Energy Costs as a % of Sales            | 76. Sales Personnel Variable Costs : Debtors                 |
| 17. Added Value                                         | 77. Sales Personnel Variable Costs                           |
| 18. Investment as a Ratio of Added Value                | 78. Exports as a % of Sales                                  |
| 19. Value of Plant & Equipment % of Sales               | 79. \$ Hourly Pay Rate                                       |
| 20. Vertical Integration (Value Added % Sales)          | 80. \$ Hourly Wage Rate                                      |
| 21. Research & Development Investment % Sales           | 81. Capital Employed                                         |
| 22. Capital Expenditure Investment % of Sales           | 82. Return on Capital                                        |
| 23. Marketing Costs as a % of Sales                     | 83. Return on Assets                                         |
| 24. Current Ratio (Current Assets/Liabilities)          | 84. Return on Shareholders' Funds                            |

## Pistons & Piston Rings

|                                                           |                                                           |
|-----------------------------------------------------------|-----------------------------------------------------------|
| 25. Quick Ratio                                           | 85. Pre-tax Profit Margins                                |
| 26. Borrowing Ratio Total Debt ratio of Net Worth)        | 86. Operating Profit Margin                               |
| 27. Equity Ratio (Shareholders Funds : Total Liabilities) | 87. Trading Profit Margin                                 |
| 28. Income Gearing                                        | 88. Return on Investment                                  |
| 29. Total Debt as a ratio of Working Capital              | 89. Assets Utilisation (Sales : Total Assets)             |
| 30. Debt Gearing Ratio (Long Term Loans: Net Worth)       | 90. Sales / Fixed Assets Materials Ratio Work in Progress |
| 31. Average Remuneration (all employees)                  | 91. Stock Turnover (Sales as a ratio of Stocks)           |
| 32. Profit per Employee                                   | 92. Credit Period                                         |
| 33. Sales per Employee                                    | 93. Creditors' Ratio                                      |
| 34. Remunerations / Sales                                 | 94. Default Debtors Ratio of Total Debtors                |
| 35. Fixed Assets per Employee                             | 95. Un-Recoverable Debts Ratio of Total Debts             |
| 36. Capital Employed per Employee                         | 96. Working Capital / Sales                               |
| 37. Total Assets per Employee                             | 97. Materials & Energy Costs as a % of Sales              |
| 38. Value of Average Investment per Employee              | 98. Added Value                                           |
| 39. Value Added per Employee                              | 99. Investment as a Ratio of Added Value                  |
| 40. Materials Costs as a % of Sales                       | 100. Value of Plant & Equipment as a % of Sales           |
| 41. Wage Costs as a % of Sales                            | 101. Vertical Integration Ratio                           |
| 42. Payroll and Wages as a Ratio to Materials             | 102. Research & Development Investment as a % of Sales    |
| 43. Variable Costs as a % of Sales                        | 103. Capital Expenditure Investment % Sales               |
| 44. Fixed Costs as a % of Sales                           | 104. Marketing Costs as a % of Sales                      |
| 45. Fixed Costs as a Ratio of Variable Costs              | 105. Current Ratio                                        |
| 46. Distribution Costs as a % of Sales                    | 106. Quick Ratio                                          |
| 47. Warehousing Costs as a % of Sales                     | 107. Borrowing Ratio                                      |
| 48. Physical Costs as a % of Sales                        | 108. Equity Ratio                                         |
| 49. Fixed as a Ratio of Variable Distribution Costs       | 109. Income Gearing                                       |
| 50. Fixed as a Ratio of Variable Warehousing Costs        | 110. Total Debt as a ratio of Working Capital             |
| 51. Fixed as a Ratio of Variable Physical Costs           | 111. Debt Gearing Ratio                                   |
| 52. Fixed Ratio of Variable Total Distribution Costs      | 112. Average Remuneration (all employees)                 |
| 53. Product Returns Costs % of Sales                      | 113. Profit per Employee                                  |
| 54. Product Installation Costs as a % of Sales            | 114. Sales per Employee                                   |
| 55. Product Breakdown Costs as a % of Sales               | 115. Remunerations / Sales                                |
| 56. Product Systems Costs as a % of Sales                 | 116. Fixed Assets per Employee                            |
| 57. Product Service & Associated Costs % of Sales         | 117. Capital Employed per Employee                        |
| 58. Customer & Associated Costs % Sales                   | 118. Total Assets per Employee                            |
| 59. Work in Progress / Materials Ratio Finished Products  | 119. Value of Average Investment / Employee               |
| 60. Stock                                                 | 120. Value Added per Employee                             |

## 5. Additional Data

The client can specify information as needed.

This section can be used to specify non-Market or non-Corporate data and research, for example:-

- Product Data
- Distribution Data
- Processes
- Technologies
- Macro-Economic Issues
- Political Issues
- National Legislation and Regulations
- Product Certification and Conformity Issues
- Demographic Data
- Physical & Geographical data (for example, Highways, Elevations, et al)
- Business Resources
- Et cetera...

## Database Products supported by the After-Sales Service

The After-Sales Service support all products and databases, including those shown below.

## Database Compatibility

The increased use of Database Management Systems, Business Planning and Control Systems, Enterprise Resource Planning, Management Information Systems, and other tools amongst management professionals has produced a critical need for the harmonisation of data across various software applications and systems platforms. The After-Sales Service ensures that its output, where required, will be fully compatible with every product and database.

For this reason all the databases use harmonised database and data sets; thereby users can obtain any database from any of the publishers, for any of their brands, with the assurance that these databases are fully compatible and can be used in conjunction with one another and the various platforms, operating systems and software.



Since 2007, we have undertaken the harmonisation and convergence of the database specifications and definitions of the various database providers. This is to allow users a uniform and standardised reference to use with their planning and forecasting; and to allow cross-database functionality.

The data sets, modules and standards shown are now fully harmonised and standardised to allow data and software interflow and cross-platform usage of the databases. Users may obtain older data dictionaries and standards, and/or data sets and data dictionaries for their own national standards. The standard product and market definitions have been harmonised and are provided (in the standard database products supplied), often as the NAICS classifications. Users wishing to remain with the previous SIC classifications may obtain these databases under that classification system. Users requiring other (U.N., European, Japanese, et cetera) classification definitions and norms may obtain those as necessary. Accounting standards are also harmonised according to the U.S. regulatory norms; however other norms are available. Data dictionary and data definition bridges and converters are available to allow users to update or standardise their databases. We have undertaken to maintain support for the older data dictionary standards and definitions until 2025; however users are urged to update at their earliest convenience.



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