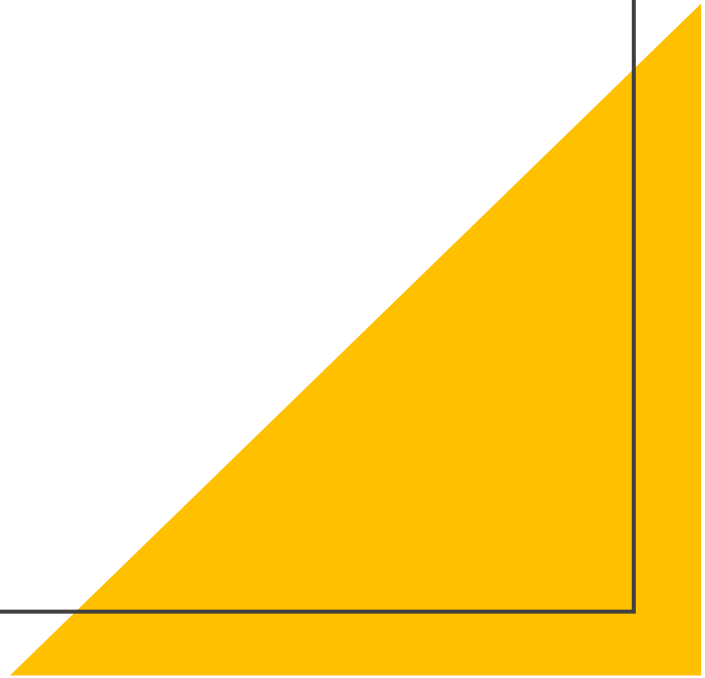


Pumps World Markets

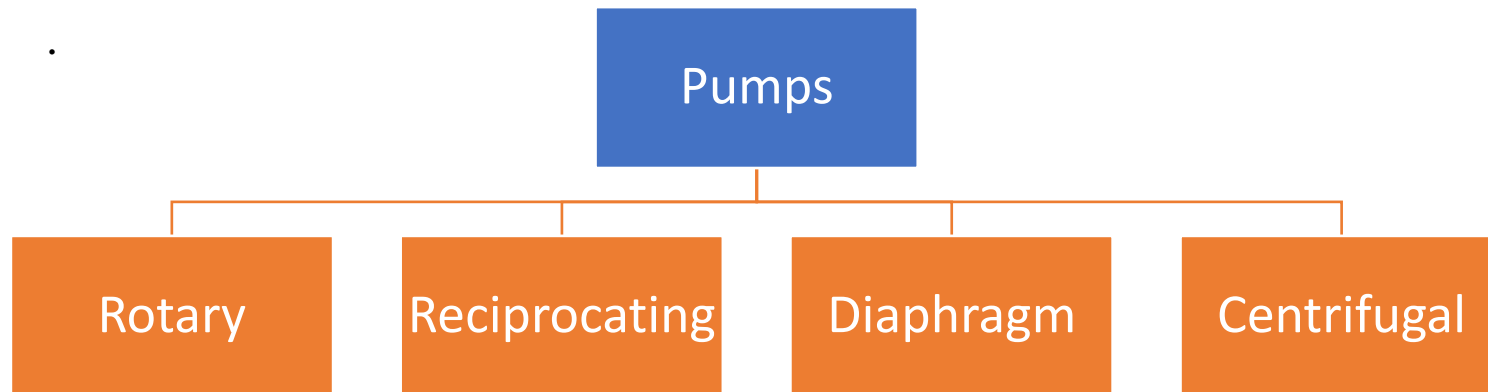


- This report includes an extensive online combination of analyses in addition to an excel spreadsheet. The report has 272,000 forecasts provided in excel charts with periodic updates throughout the year.
- The online analyses include
 - Market shares for hundreds of pump companies
 - Networking Directory
 - Updates
 - Separate analysis of each industry with hundreds of additional pages of analysis
 - Recorded interviews and webinars

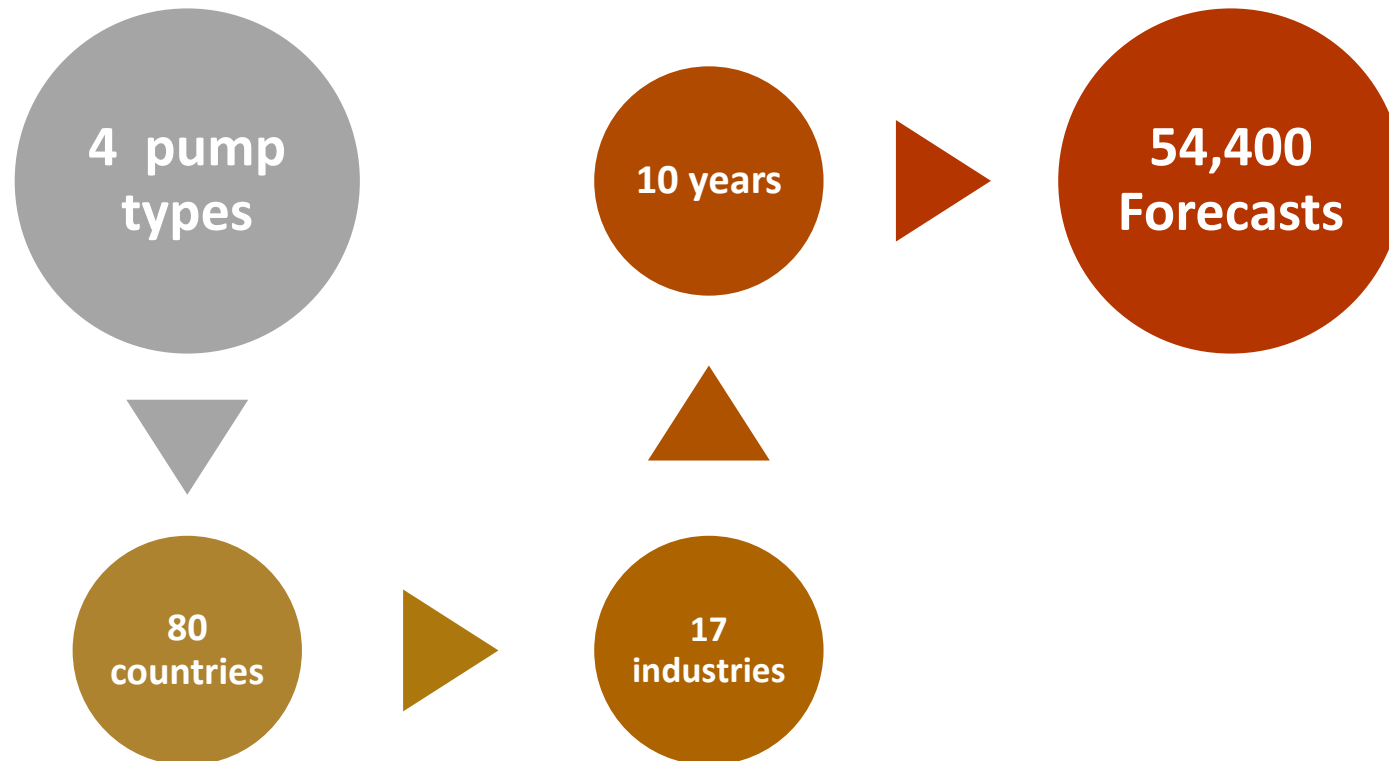


Why has the Pumps World Market Report expanded to include 272,000 individual forecasts and many hundreds of thousands of additional aggregates?

The reason is that each number represents a unique combination of total cost of ownership (TCO) factors.



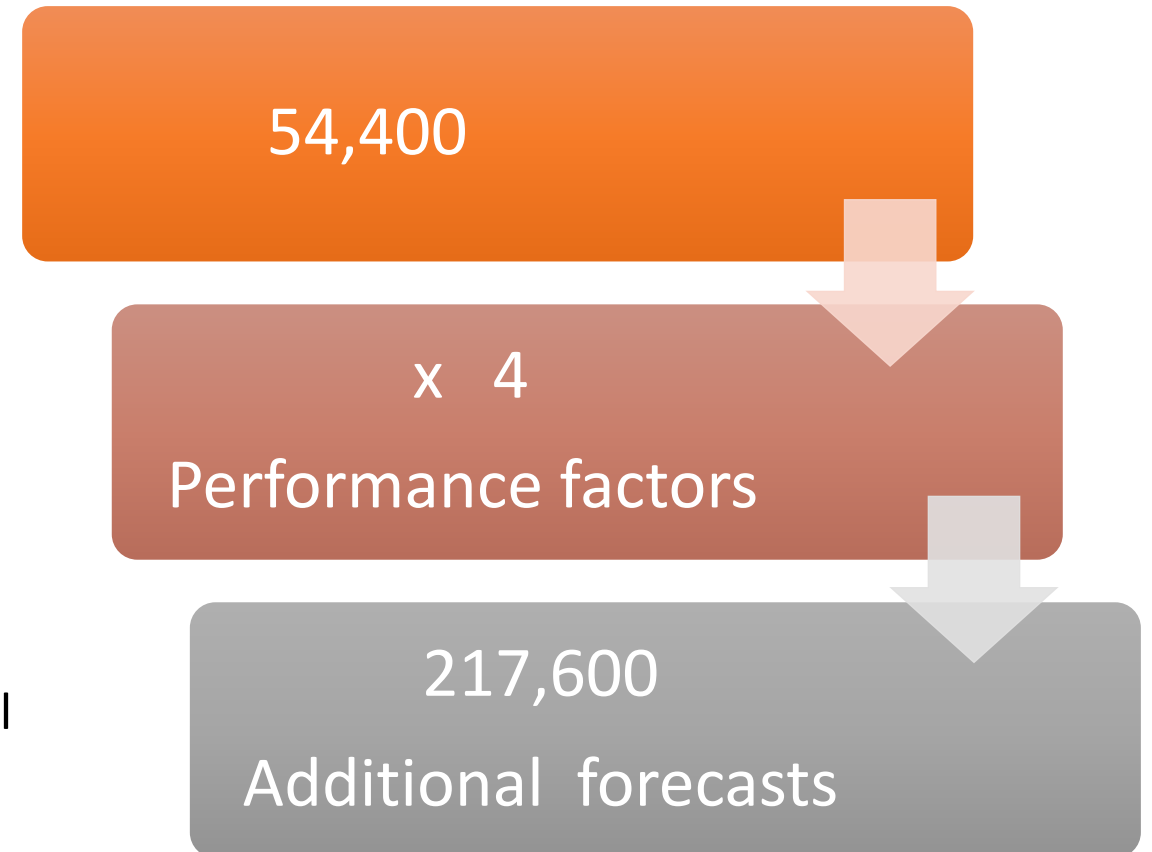
For each pump type, there are forecasts for 80 countries and sub regions further segmented by 17 applications. Forecasts are provided for future years through 2025 and historical revenues from 2016.



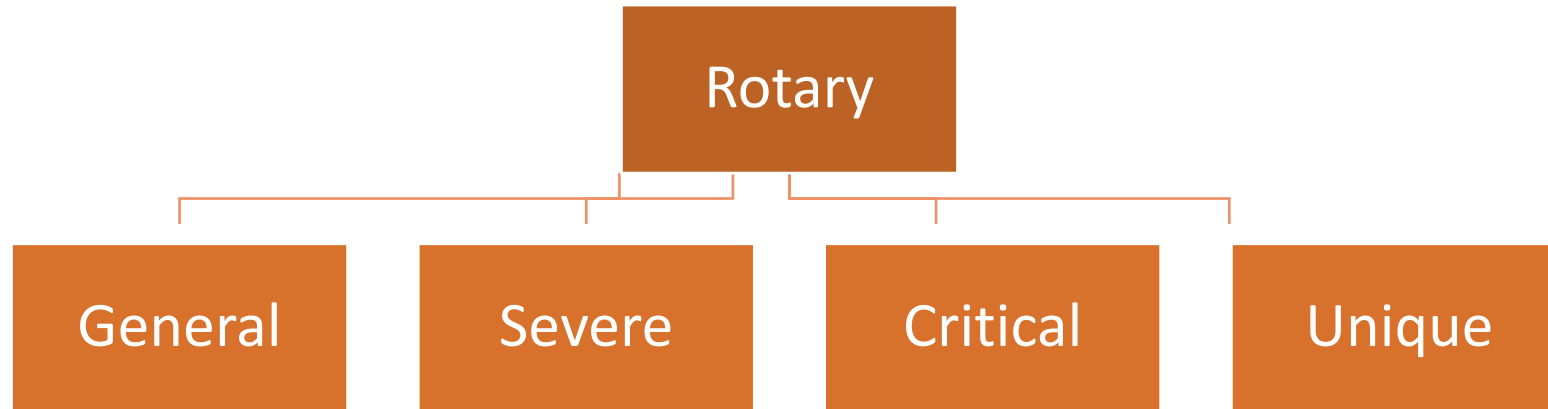
The excel spreadsheets provide aggregations by various geographical entities or by industries resulting in many thousands of additional forecasts.

Now there is further segmentation by four performance factors.

The performance segments are general, severe, critical and unique. Each has a different set of TCO factors.

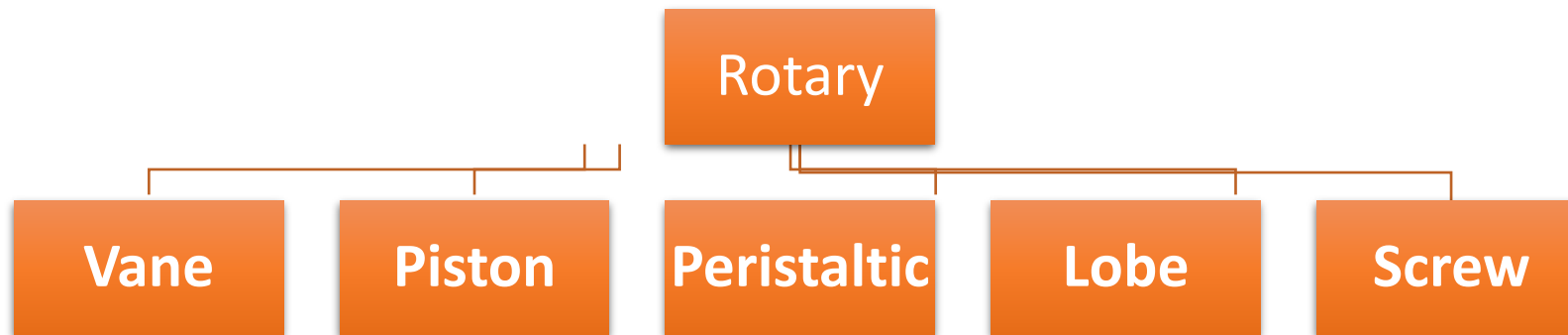


General service pumps are sold based on price and delivery. Severe service pumps are sold based on abrasive, temperature and corrosion resistance. Critical service includes hygienic applications. Unique covers custom designs. Each has its own TCO factors.



Profit is maximized by focusing on the niches where the lowest TCO can be achieved. For most companies, these niches are even smaller than provided in the basic report.

The major pump types can be further divided into many sub segments.



The 17 industries each have individual segments with unique TCO factors. Large countries such as the U.S. often need to be segmented by State or Province

Water split into municipal and flood control

Pumps: World Markets provides forecasts for 17 different industries. These forecasts are updated continually during the year. Excel spreadsheets are supplied along with on-line displays.

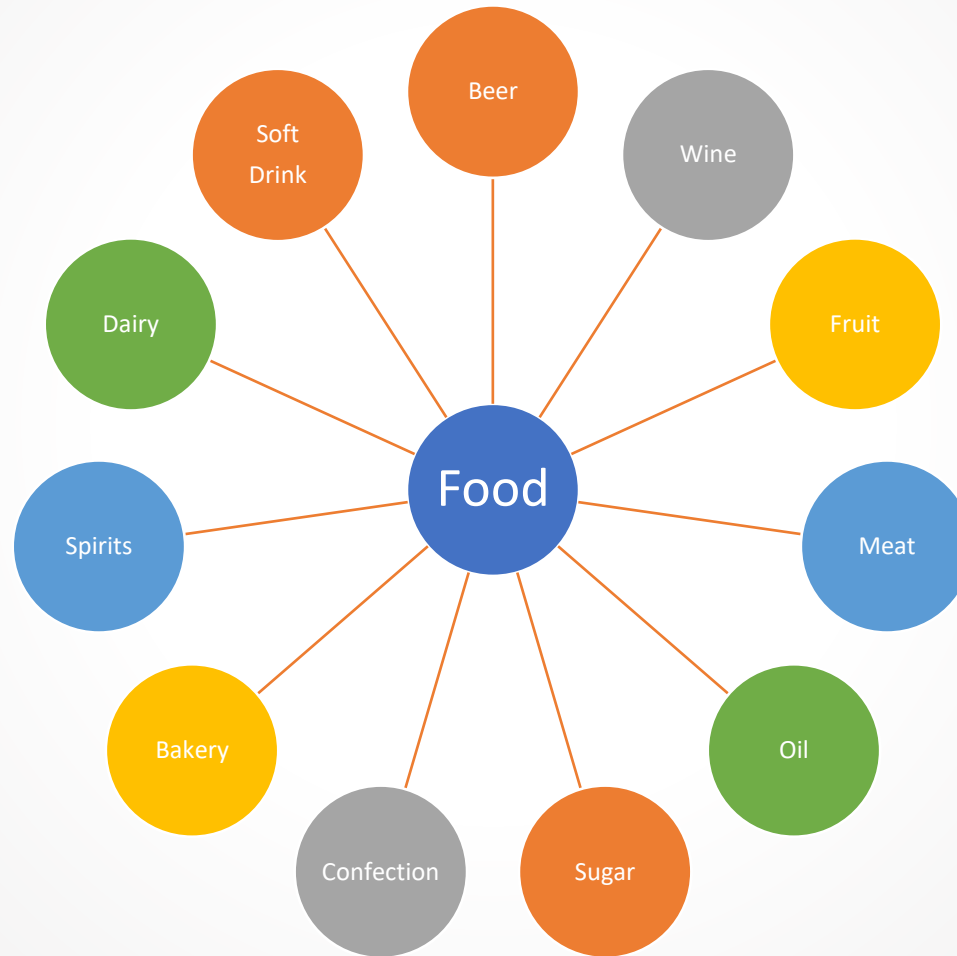
Pump purchases for the top 100 customers are included. There are some in each industry but oil and gas, chemical, and refining have more than the others.



Oil and gas split into upstream and midstream



Food Market Segments



The basic report provides food pump forecasts by type of pump and country.

Further segmentations are available for each industry in each country.

Edible oil forecasts are available for corn oil, palm oil and other oils.

Sugar can be segmented into cane and beet.

It can also be segmented by process.

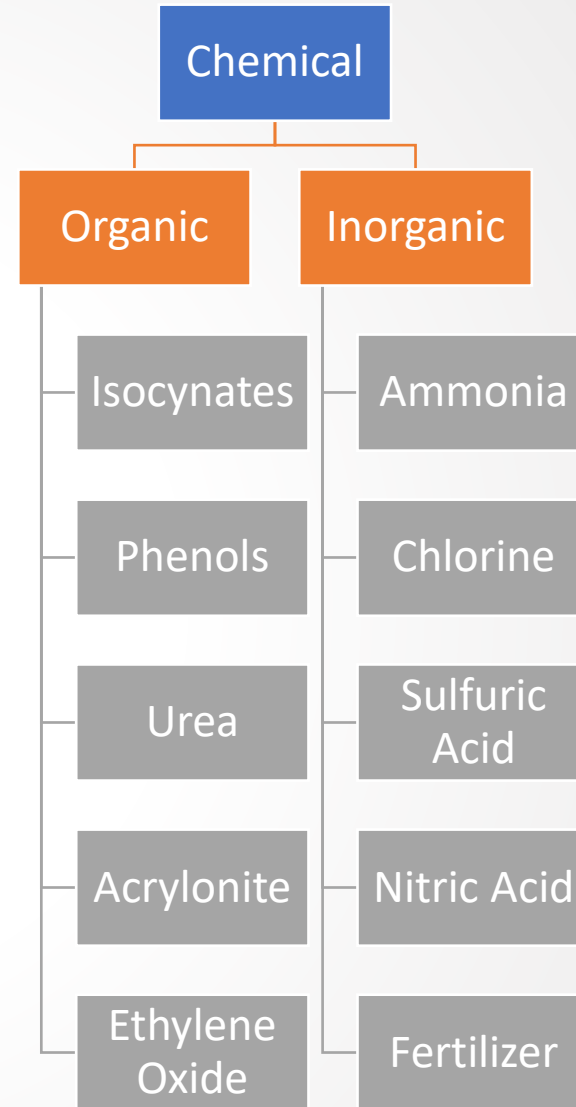
Cane sugar plants often produce power with bagasse combustion.

This adds to the pump potential for these plants in India, Brazil and elsewhere

The chemical industry can be segmented by two major categories and then by 10 subcategories.

Each subcategory can also be further segmented. For example, some chlorine manufacturers also have processes which use the chlorine which is produced.

The use of special plastic lined pumps for each application can be and has been analyzed.

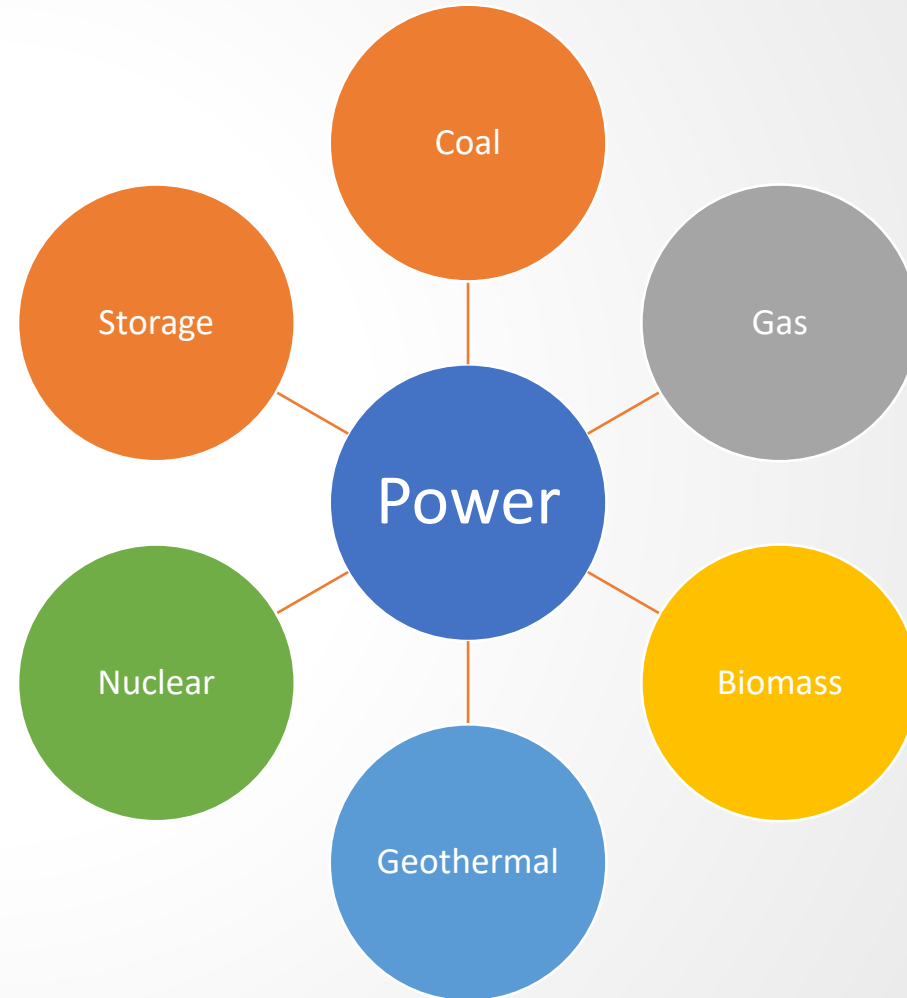


Power

The largest use of pumps in the power industry is for coal fired generators.

Gas turbines is next followed by nuclear and then biomass. Geothermal and hydro require pumps but solar and wind have few pumps with the exception of lubrication and in the case of solar, the molten salt technology.

The 15 largest power producers buy more than 50% of the pumps. There are only 900 power generators with more than 1000 MW of capacity. Shenua Goudian has 200,000 MW.

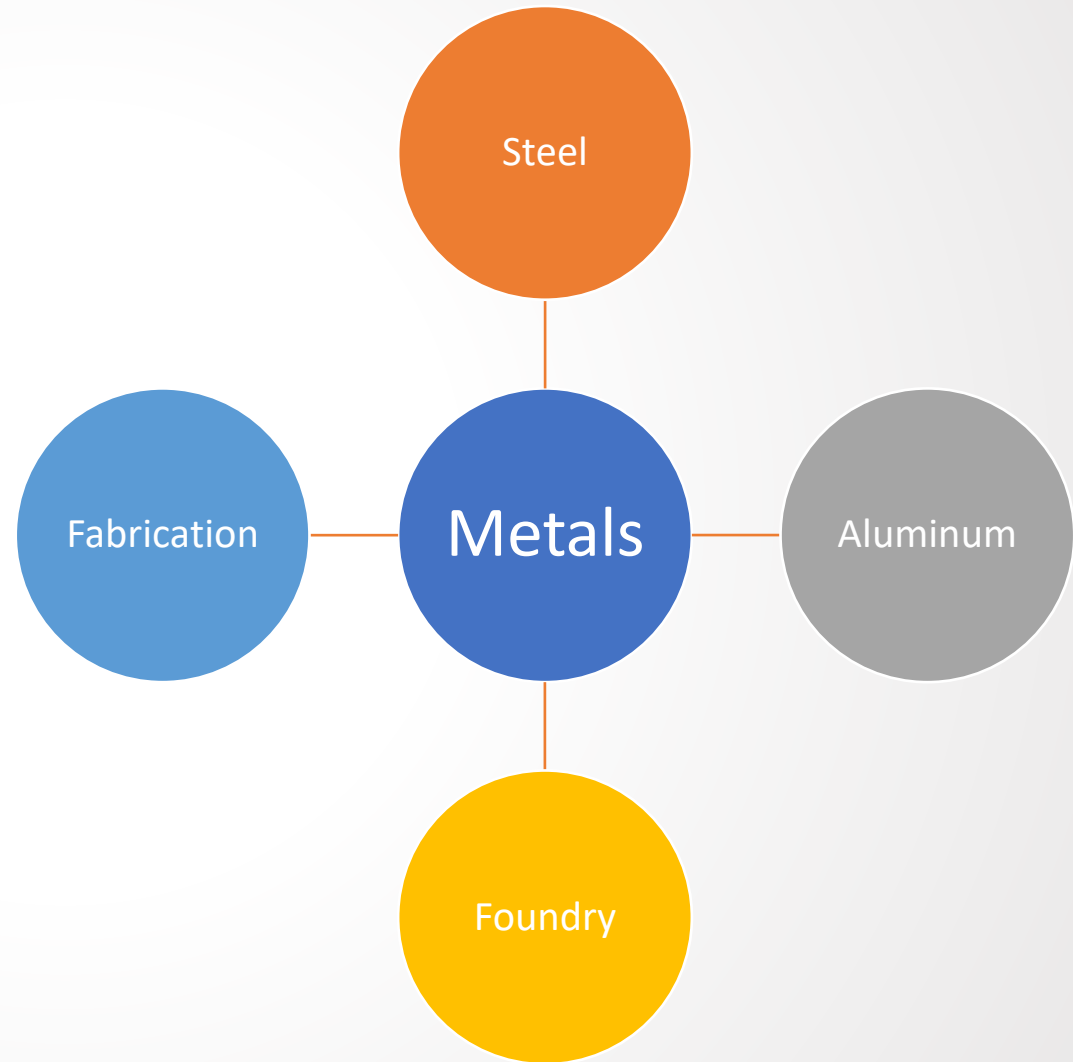


Metals

Most large producers have plants in multiple countries. Arcelor Mittal has plants throughout the world and centralizes much of the decision making for flow and treat products in Belgium.

There are hundreds of niche applications in the metals segment. Analysis can be made for any one or many. A list with the NAICS code for each application in the metals sector is included along with analysis in the basic pump report. However, forecasts in the report are only for the entire sector.

Lubrication and cooling applications in metal working require many pumps and those pursuing this market can justify further segmentation

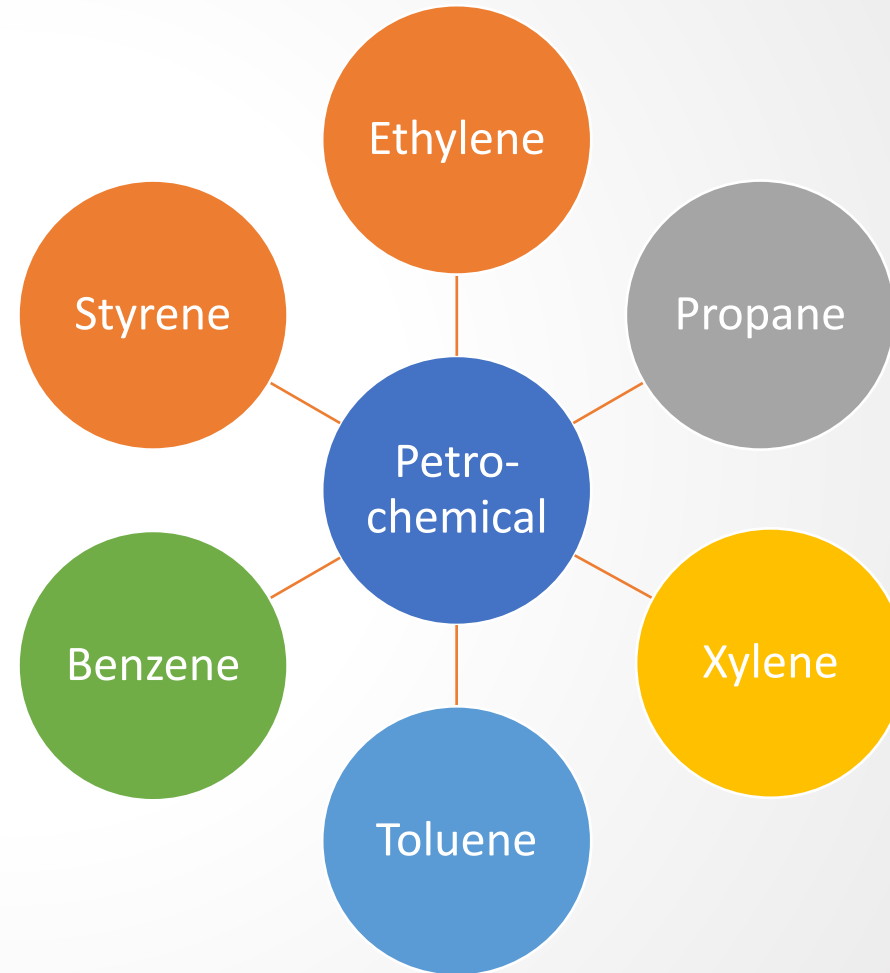


Petrochemical

Process flow diagrams and analysis for each pump requirement can be provided.

With hydraulic fracturing and ethane production there is a big market to take advantage of this inexpensive feed stock for ethylene production in the U.S.

One alternative is the gasification of coal which is quite popular in China. This source is the feedstock for 25% of the petrochemicals in China.

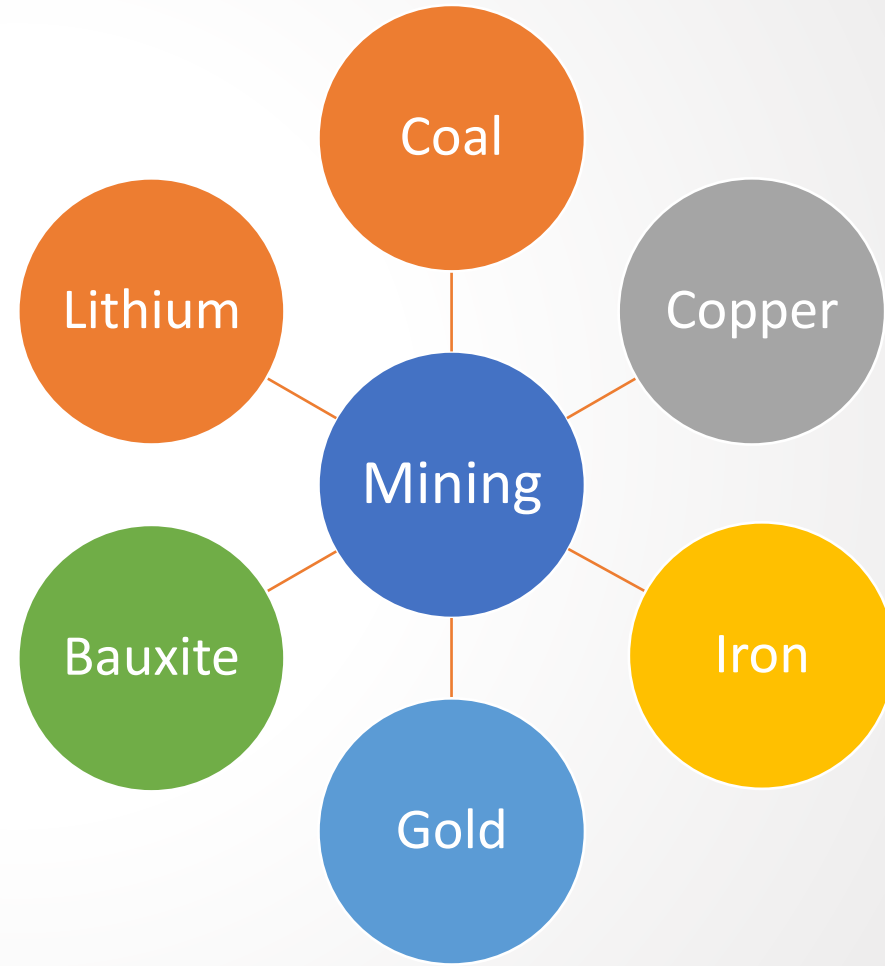


Mining

Pumps are used in ore extraction, processing, and ore transport. There is a large market for pipeline transport of ores in a slurry form.

The markets vary considerably depending on the ore and country e.g. Chile for copper and Australia for lithium as well as iron ore.

The market is concentrated with just 50 companies purchasing the majority of pumps



Oil and Gas

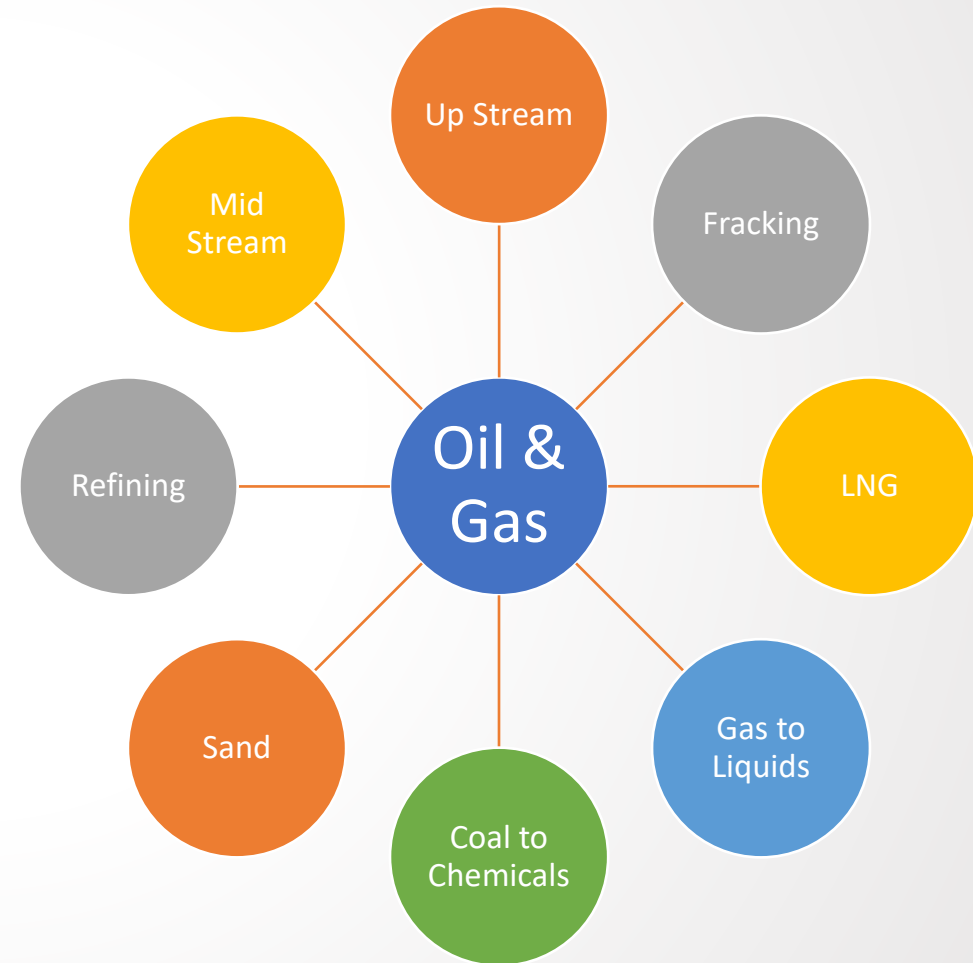
This is a big market for pumps. It warrants segmentation and even sub-segmentation.

LNG can be further segmented into liquefaction, transport and regasification.

Special analyses are available for hydraulic fracturing and other challenging processes.

Sub-sea pumps have high pressure and other unique requirements.

Coal to chemicals is a growing market in Asia. Direct liquefaction uses large and expensive slurry pumps in the purification of hydrogenated slurry

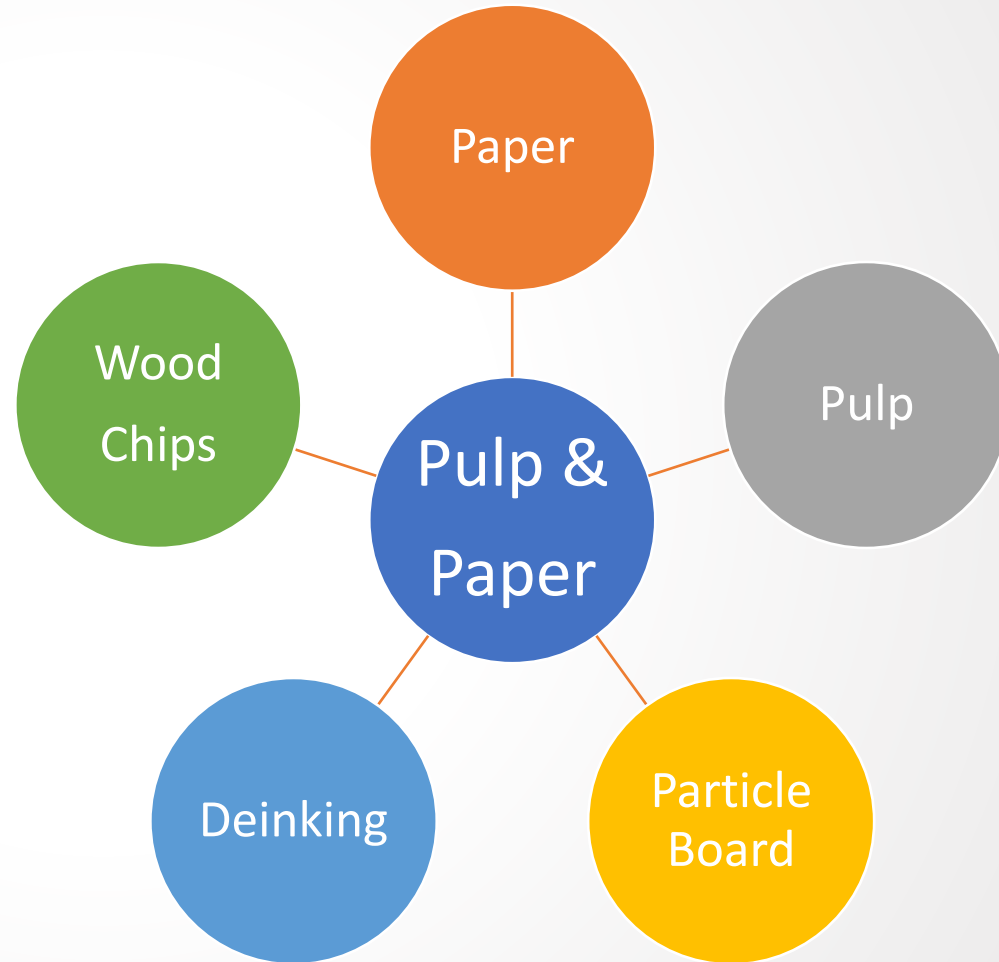


Pulp and Paper

Recycled pulp using deinking and processing of scrap paper is a growing segment.

Wood chips are being supplied for use in plants switching from coal to renewable fuels. Environmentalists are saying that this approach sucks the CO2 out of the air and see the planting of a trillion trees as the solution to greenhouse gas emissions.

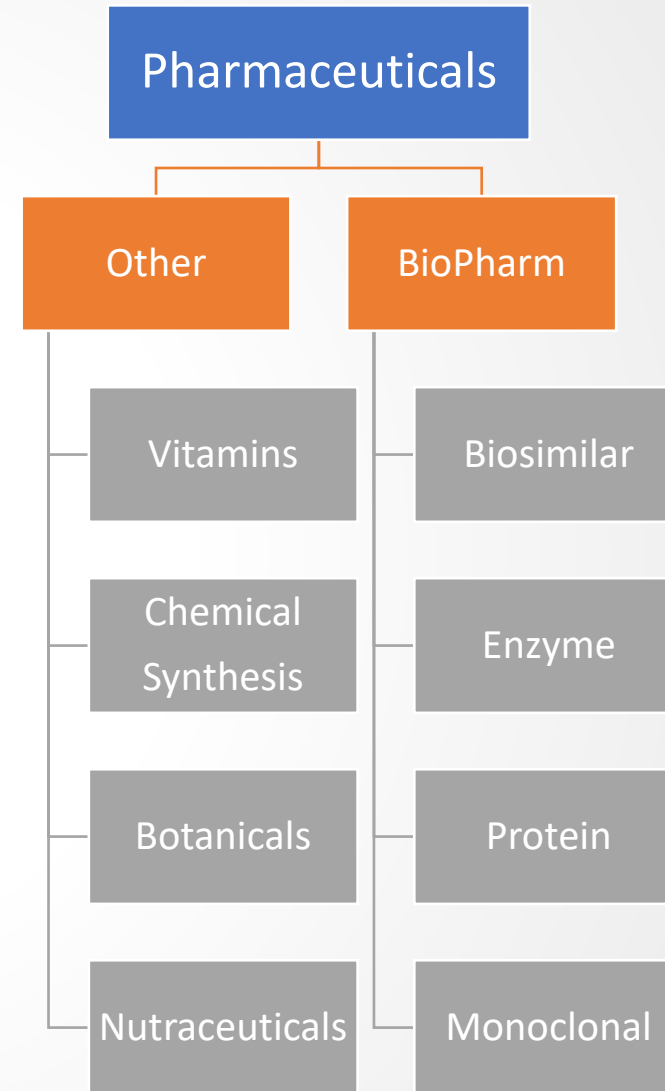
The black liquor recovery boiler is a challenging pump application.



Pharmaceuticals

The biopharmaceutical industry is growing rapidly. Gene therapy (monoclonal) is growing at double digit rates. Closed systems require special pumps to allow safe transfer of product from one process to another. Relatively few producers buy most of the pumps.

Some of the market is now in small cell therapy facilities making very expensive drugs. The trend toward pre fabricated facilities means that companies such as Danaher now can supply a plant on a trailer complete with installed pumps and accelerate the time from order to plant operation for a new biopharmaceutical plant. This is critical due to the limited life before patents expire. This approach shifts some of the pump decision making to the system supplier and away from the operator.



- A sample excel spreadsheet is displayed from a link on this description page.
- A video tour of the actual report is also provided and linked from this description page.
- There is the potential to expand the report to include all the niche markets important to an individual supplier. This is explained at www.mcilvaine.com and the Most Profitable Market Support Services

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or 847 226 2391

