

BLEAK OR BRIGHT?

PUMPS MARKET POTENTIAL IN GREEN FUEL APPLICATIONS

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Growing interest in green fuels is creating a buzz across industries in Europe. Why? The answer lies in certain key factors such as: rising demand for energy, soaring energy prices, volatility in oil prices and concerns over the environment. Moreover, Europe's energy dependency, coupled with a lack of political stability in importing nations, resulted in increased focus on bio-fuels.

With pumps being an integral part of green fuel production involved in handling fluids such as acids, slurries and other corrosive substances, this trend is expected to positively impact the growth of the pumps market.

Growth Potential

Accounting for approximately 1 per cent of worldwide oil reserves, Europe depends largely on its neighbors for its energy needs. This, coupled with legal incentives, has resulted in increased European interest in alternative fuels. Pump applications for bio-fuel production involve the handling of corrosive and abrasive substances including lime slurry, acids and waste slurries. With carbon emission reduction target levels set for 2020, investments in this segment are expected to drive new equipment business. These performance critical applications use both centrifugal and positive displacement pump types. Pump types such as peristaltic pumps and reciprocating pumps are used predominantly in these processes. Peristaltic and diaphragm pumps are primarily used in applications involving the injection of enzymes or chemicals. Non-leakage characteristics, less noise, minimum number of external parts have been key in the demand for



these pump types. Diaphragm pumps are expected to replace piston/plunger pumps that are prone to leakage and noise generation.

Trends

Although trends indicate that agro-based fuels offered immediate solutions to counter the fuel threat, investment levels have dropped considerably owing to factors such as competition to food production and the fact that the monetary demands of bio-fuel plants are greater. These factors have resulted in greater focus on products that offer better energy saving and life cycle costs. Low life cycle cost, a feature of peristaltic pumps, resulted in its increased adoption among different end users. Also, low initial cost, no external parts and reduced maintenance resulted in peristaltic pumps cannibalizing into the markets of other positive displacement pump types. In addition, centrifugal pumps are also used in low viscosity applications employed predominantly for fluid transfer. Also, these pump types are used mainly to conserve energy in these applications. Furthermore, the transferred media contribute to pump breakdown in these process critical pump applications thereby offering extensive opportunities in the aftermarket business.

Eastern Europe

The majority of the eastern European nations reportedly on the higher side of

carbon emissions will likely drive interests in bio-fuel investments. Also, the extensive availability of arable land in the Eastern Europe augurs well for bio-fuel investors; Hungary has been pegged as a potential market for bio-fuels because of the large availability of arable land and greater interests in investigating on other crop types. As with Western Europe, bio-fuel plants are expected to operate at reduced production levels due to lack of demand. Germany, the largest producer of bio-diesel, is foreseeing reduced investments because of a lack of favourable government policies and tax regulations. France on the other hand, actively supports bio-fuel investment with government policies, incentives, transportation and environment schemes expected. With a large base of diesel vehicles in Europe, the focus on production and consumption of bio-diesel is expected to be high. Also, with a little over 50 bio-fuel plants still under construction, the potential for growth of pumps is high in this industry. Companies such as Exxon, Shell and Neste Oil are investing in countries like Hungary, Netherlands and the UK.

Pumps Market in Third Generation Bio-fuels

Although, the financial crisis coupled with existing regulatory pressures is hindering the growth of the pumps market in the bio-fuel industry, long term growth is expected with the advent of third generation bio-fuels. Circulator and metering pumps used in bioreactors for algae cultivation and development are considered to be among the predominant pump types used. Although the third generation bio-fuel concept seems promising in terms of environmental protection, the process involved in fuel development is considered costly. Thus, the pumps market in bio-fuel production is expected to reap benefits over the long term. <<



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