



CHEMICAL INDUSTRY

Economical and high performance solutions
... at the height of productivity!

Whether for pumping, mixing, mechanical dehydration or ventilation, motors are used everywhere in the chemical industry. They account for 65% of the electrical consumption of a production site. Optimising the drive systems therefore forms an important source of potential savings.

Using its expertise in the design and manufacture of electric motors, geared motors and variable speed drives, Leroy-Somer has developed an extensive range of solutions enabling operators to reduce their production costs and meet the environmental concerns with which they are increasingly confronted.

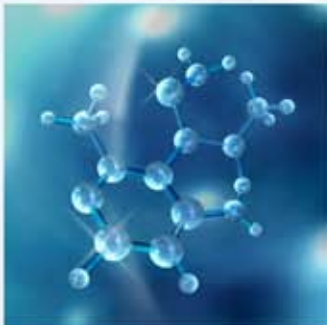
The findings are startling: the improvement in the efficiency of fixed-speed motors already allows a reduction of approximately 10% of the electrical energy consumption of a site, whilst the use of variable speed, as soon as possible, generally allows savings of over 30% to be made on the drive system concerned.

FIXED AND VARIABLE SPEED HIGH EFFICIENCY SOLUTIONS

For each application, Leroy-Somer offers the optimum solution providing significant energy savings by choosing the technology most suitable for the motor, gearbox, transmission and speed control.

For fixed speed, Leroy-Somer offers ranges of high-efficiency induction motors able to be used in conjunction with very low loss gearboxes.

For variable speed, several series of motors specifically designed for operation on variable speed drives provide positive answers to process requirements: high efficiencies, operation at constant torque with no derating and no forced ventilation in order to reduce maintenance and risks of breakdown, etc. Leroy-Somer also offers innovative drive systems at the cutting edge of commercially available technologies: Dyneo® variable speed drive units are the highest-performance solutions currently available commercially.





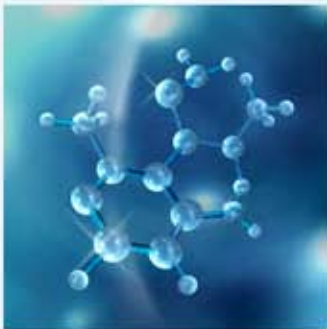
The LSRPM permanent magnet synchronous motor, a component of Dyneo®, has the benefit of the tried and tested mechanical construction of the IP55 induction motor, particularly suitable in harsh environments. By eliminating rotor losses, the patented technology of the radial permanent magnet rotor allows a very significant increase in the efficiency of machines, in particular those that operate with a very variable load. For instance, additional energy savings of over 10% compared with traditional variable speed solutions (high-efficiency induction motors controlled by variable speed drive) have been measured. The return on investment of these new technologies is therefore very often less than 12 months.

SOLUTIONS FOR EXPLOSIVE ATMOSPHERES



Of course, the chemical industry also requires the use of safety motors and geared motors capable of operating in hazardous environments where explosive gas or dust is regularly present. The ranges of ATEX motors and geared motors, designed and approved by the European certification bodies, form part of the solutions offered by Leroy-Somer in both V.I.K. finish for operation in harsh environments and standard implementation for less harsh environments.

GUARANTEED AND SHORT DELIVERY TIMES



Associated with these motors and geared motors, whether designed for explosive atmospheres or ordinary environments, Leroy-Somer offers an availability charter guaranteeing short lead times to delivery to the customer's premises, without enquiries having to be made beforehand.

Leroy-Somer therefore offers a complete solution for the most demanding users and the most innovative machine manufacturers.

