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Belgium Denmark Germany Italy Portugal The Netherlands Spain Sweden Switzerland United-Kingdom



ISSUES

WEEE and RoHS European Directives



The WEEE and RoHS directives regulate the end of life of an extensive range of electrical and electronic equipment in order to preserve existing resources, avoid pollution caused by the use of certain materials, both in the manufacture of products and in their composition and limit waste of the products concerned. Leaving a viable planet for future generations is one of the obligations to which we are committed.

What are the draft EEE and EER directives about?

The two initial EEE and EER drafts were abandoned in favour of a new working paper, still in its embryonic stages, for an "ecodesign" framework directive (recently renamed EUP). This would also take into account the efficient use of energy throughout a product's life. Every aspect of environmental concern will be looked at in product design, manufacture, utilisation and end of life (i.e. the entire life cycle of the equipment). Electric motors used in manufacturing the product would also be affected by the new EUP "Ecodesign" directive. The results of this working paper, in the form of laws in the Member States, would take effect within ten years or so.

The WEEE and RoHS European Directives

On the other hand, the European Commission adopted two proposals concerning electric motors in December 2002. They were published in the OJEC on 13 February 2003. The first, the WEEE Directive, concerns waste from electrical and electronic equipment and anticipates that the recycling of components from this equipment will increase. It will be implemented in August 2004. The second, the RoHS Directive, limits the use of certain substances that the European Commission considers hazardous in electrical and electronic equipment. It will be implemented in all the Member States of the European Union as from 1st July 2006.

Why these directives?

Technological innovation is getting faster and faster and there is no choice but to note that electrical and electronic equip-

ment constitutes a flow of waste that is increasing very rapidly in the EU. In order to reduce the quantities of waste disposed of by dumping or burning in incinerators, the WEEE provisions set up separate systems of collecting and recycling waste. They apply the principle of producer responsibility to encourage the latter to take the use of hazardous substances and the recyclability of these products into account as from the product design stage. The European Commission thinks that waste from electrical and electronic equipment is the cause of the sizeable presence of heavy metals and organic pollutants in municipal waste. The RoHS provisions recommend that heavy metals, for example lead, mercury, hexavalent chromium and cadmium used in equipment, be replaced. The RoHS Directive also affects two types of brominated flame-retardants, PBE and PBDE. These must be replaced by 1st January 2008, without in any way reducing the scope of the fireresistance standards.

What products are affected?

The following are some of the products affected by the WEEE and RoHS Directives: low-voltage electric motors (0 to 1000 volts AC or 1500 volts DC) used in industry or by individuals, and also major household appliances such as refrigerators, washing machines, etc., small household goods (toasters, hairdryers...), electronic toys, television sets, video recorders... Electric motors used specifically in the automotive sector (windscreen wipers, electric windows...) come under another sector governed by other regulations. In practical terms, by increasing the recycling of electrical and electronic equipment, the WEEE Directive limits the total quantity of the waste that is finally disposed of. From now on, producers of electrical or electronic equipment also using electric motors will have to take back and recycle their equipment at the end of its life. This is one way of encouraging them to design less polluting equipment by taking waste management into account at the manufacturing stage.

Nomenclature:

- EEE: Electrical and electronic equipment EER: Energy Efficiency Requirements EUE: End Use Equipment EUP: Energy Using Products OJEC: Official Journal of the European Communities PBB: PolyBrominated Biphenyls PBDE: PolyBrominated Diphenyl Ethers RoHS: Reduction of Hazardous Substances EU: European Union
- WEEE: Waste from electrical and electronic equipment



How is a European Directive created?

Consultations are organised with the various parties involved in the field to try to bring about a consensus for composing the "draft" future Directive. On adoption by the European Commission, the "draft" that has now become a "proposal" is officially submitted to the Council of Ministers and the European Parliament. Amendments are generally made, often under the influence of pressure groups, including industrial, environmental and consumer lobbies, etc... Several years have already been spent working on it prior to approval by the European Commission.

At this point in time, the provisions have to be transposed into national law by all the Members States. This process must be carried out within the deadlines set by the Directive (around 30 months).



Overall view of environmental legislation: the RoHS Directive is implemented at the product design stage and the WEEE Directive when it is recycled.

Environmental legislation Overview

APPLICATIONS

New Renault Mégane: commercial flexibility for customers' freedom of choice



Renault have taken advantage of the launch of the new Mégane to create a general production concept where the Renault Technocentre, which houses the design and engineering teams, is the keystone. The main aim of the "platform project" dedicated to the Renault Mégane is to improve synchronisation between product design and assessment of the manufacturing process. This project, from the beginning of vehicle design, has involved all the industrial teams at the works in Douai (France), Palencia (Spain) and Bursa (Turkey).

Renault have invested € 2100 million, half of which as commercial investment. The reorganisation of production has brought about an improvement in productivity and in the commercial services provided at each works (manufacturing time has been reduced by 24% compared with the previous generation). Production capacities have therefore risen to 7800 vehicles per week.

This modernisation of the production tool is particularly obvious in the bodywork sector, 85% of which has been refurbished in Palencia and Douai, the main aim of which is to improve flexibility. With € 364 million of investment, Renault have three bodywork

plants for producing the new Renault Mégane, which have the highest outputs in the world. These plants designed in collaboration with the biggest European specialists in motor vehicle handling, are equipped with Leroy-Somer drive systems where the fullest range and greatest reliability have helped to meet Renault's demands for

flexibility. Over 1500 Leroy-Somer geared motors, mainly of the Compabloc braked type, have therefore been assembled by various European integrators. These 95% automated plants are designed to assemble various types of bodies. The moving base and the bodywork are assembled on a flexible bodywork line with the aid of platforms adapted to each type of vehicle so that the robots are able to weld the bodies.

Indeed, the new Renault Mégane is actually breaking new ground by offering its customers great freedom of choice. Renault's ambition is to offer multiple options for personalising vehicles. This programme constitutes a very ambitious commercial challenge: seven different bodies and numerous options developed on the same platform, three works, major conversions and heavy investment. All this has been made necessary to reach the level of flexibility required by Renault.

Renault's commercial ambitions are also very grand: in Europe, Renault claims to have 14% of the M1 segment (low average), which represents one third of the European automobile market.



Spiromatic: guaranteeing the safety of the food chain



Traceability and safety along the entire length of the food chain have become vital elements in food processing. Meeting with a producer whose work lies at the heart of making the food chain secure.

Automation and

family firm that started work in

the era of cattle feed automation in a very active agricultural area. It then experienced strong growth in the foodstuffs sector with its innovative ideas about storage, transport and automatic blending of bakery flour.

Today, Spiromatic designs and manufactures systems for storing and transporting powders and liquids for the food industry. Its constant innovations have enabled it to establish a world-wide reputation in the manufacture of synthetic silos reinforced with fibre glass that have exceptional insulating properties.

The firm also manufactures mechanical transporters with spiral conveyors for transferring stored materials to the processing system reliably and economically in energy terms and, in particular, by ensuring that they can be tracked and traced.

Safety and expertise

The firm's position is as an essential link in the safe transport of raw foodstuffs materials as far as processing into finished products. Its expertise is not just in the bakeries, biscuit factories, mills and breweries, but also in the various areas of processing, notably potato-based products, cooked meats, pasta, ready-cooked meals, confectionery, ready-to-use powder preparations, pharmaceutical applications, etc.

An international enterprise in a niche market

Spiromatic today consists of 4 large production departments, grouped together over 8 ha of land at Nazareth in Belgium. The firm employs around 90 people and has a consolidated turnover of approximately _15 million. Around 70% of the work is for export, a little less than 50% of which is to countries bordering Belgium where Spiromatic has its own commercial organisation.

In addition, a considerable percentage of sales are for major exports. One of these customers, for example, is the world's largest producer of loempias located in Singapore as well as the top distributor of baguettes in the United States.

It goes without saying that Spiromatic would be one of the very first European manufacturers to implement the new ATEX European Directive on the use of electrical equipment used in potentially explosive dusty atmospheres. Since the end of 2002, i.e. over 6 months before the implementation date of the Directive, Spiromatic machines have been fitted with Leroy-Somer Compabloc 3000 series geared motors with LSPx safety motors for use in zone 21. SPIROMATIC SA IZ "DE PRIJKELS" KARREWEG 1 B – 9810 NAZARETH Tél. : +32/9 381 87 00 info@spiromatic.com www.spiromatic.com





APPLICATIONS The Glasshouse of the Future

At the last Floriade, which takes place every year in the Netherlands, the glasshouse horticultural sector introduced its new complex of highly stylised glasshouses and the

stand 'Glasshouse of the Future'. This contains the latest innovations in technology, construction, air conditioning and cultivation systems. The aim being to give some idea of the glasshouse horticultural industry in the year 2010. The concept is based on several central ideas: energy savings, ecology, ergonomics and harmonious integration into the landscape.

Ridder Aandrijfsystemen B.V. was one of the joint sponsors of Glasshouse of the Future. Under this glasshouse, ventilation and shade systems are partly operated by Ridder

geared motors with variable speed drive. These systems facilitate optimum control of the glasshouse and of production and are part and parcel of an efficient energy management policy.

Ridder variable-speed geared motors are all fitted with Leroy-Somer electric motors combined with Varmeca 20s. This combination has already proved effective and reliable in practice, not just in the Glasshouse of the Future, but also in many other projects.

These systems provide a response to demanding horticulturists in terms of control systems by reacting quickly to changes in climatic conditions (up to 4 times faster than traditional mechanisms) with ventilation and shading systems.

In addition to the advantages during use, the combination of geared motors and the Varmeca 20 has many assets during installation and connection. The Varmeca 20 is assembled on the drive system directly over the electric motor and thus avoids the need to lay protected and costly cables. For Ridder, the Varmeca 20 is completely suited to glasshouse horticultural applications. All the basic functions of a variable speed drive are present and can be controlled very simply, which reduces to a minimum the risks of malfunction, particularly as a result of alignment errors.

By using Ridder geared motors combined with the Varmeca, the Glasshouse of the Future is already a reality today.



Ridder Aandrijfsystemen BV

Ridder Aandrijfsystemen BV is developing, producing and marketing a full range of electromechanical drive systems for use with ventilation windows, screens, valves, heating systems and supply lines, particularly in the agricultural sector.

The company is a top player on the world stage and is distinguished by the innovative character of its products, their reliability and its service.

For Ridder Aandrijfsystemen BV, the long-term collaboration and added value it gives its customers and end users are vital.





INFORMATION

Leroy-Somer at Hazardex





LSPX - FLSPX 3-phase induction motor atmospheres containing explosive dust





Product brochures are available please indicate the reference number in an email to: leroysomer@leroysomer.co.uk

Leroy-Somer had the opportunity to present products for all areas of the ATEX environment, at the second Hazardex conference and exhibition held at Coventry.

The event was extremely well attended, however it remains to be the case that OEM's and End Users alike, showed a serious concern for their responsibility and readiness for the deadlines of July 2003 and July 2006.

The new Atex directive requires new levels of safety in Hazardous Areas for machinery manufacturers and a requirement for responsible managers in production and storage units to make new risk assessments and Zoning according to ATEX137. The deadline for which is July 2006.

For machinery manufacturers the burden is not concerned solely with electrical products, as it has often been assumed, but includes a requirement for Certification for mechanical products as well. It will be llegal to put on the market products, which are not certified to the new Atex directive, after 30th June 2003.

Leroy-Somer has a complete range of electric motors, geared motors and Inverter drive products available and are ready to advise on this important new directive.

APPLICATIONS

Ruling the waves

Leroy-Somer has long built a reputation for the supply of innovative, high quality and reliable drives designed to serve the worlds industrial markets. The importance in maintaining standards is central and compromise in any of these fundamentals would soon impact on the business they serve. When that business is that of Naval Defence then any such compromise can have calamitous consequences.

For any aspiring supplier, exacting NATO and other National Naval Standards, evolved over many years, need to be wel I understood and rigorously maintained with product

If this were not challenge enough, the demand to meet strict cost parameters continues to intensify.

designed to ensure total compliance.

Recognising this, LS has been successful in applying its' "savoir faire" in integrating adaption within the economy of scale of a volume producer to provide exacting solutions without compromise to cost.



The Charles de Gaulle



Experience in serving the Defence Marine requirements for the Navies of the World has long established LS as a leader in the supply of motors into this specialist market.

No better example of this was the choice of Leroy-Somer as the principal motor supplier for the aircraft carrier "Charles de Gaulle". Nuclear powered, this warship with a complement of 1200 and over 40 aircraft, is the most sophisticated, high performance defence marine platform ever built in Europe. The flight deck can launch one aircraft every 30 seconds or handle a mass landing of 20 aircraft in just 12 minutes.

Over 1000 Leroy-Somer motors are employed controlling applications ranging from Air Conditioning and Ventilation to Aircraft Landing equipment.

Latest developments from Leroy-Somer include an adapted LS range of aluminium motors, suitable to withstand shock loads

Type 45 Destroyer



>30g. The weight reduction associated with aluminium complements the well-established and more



complex steel and high strength cast iron MN designs, capable of withstanding shock loads six times this level.

This greater choice can give vessels significant advantage for increased endurance, allowing longer periods at sea.

Through its breadth of experience, Leroy-Somer has become the reference motor supplier for over a dozen navies for both surface ships and submarines

This includes recent contracts to supply motor drives into a number of strategic applications for the Type 45 destroyers currently under construction for the Royal Navy.

The T45 is the largest and most powerful destroyer ever operated by the Royal Navy, This Daring Class warship is designed to transit 7000 nautical miles at a speed of 18knots and reach a top speed of 29knots. In addition the ships are designed for survivability with revolutionary signature reduction factors for stealth.

Equipped with the world beating Principal Anti-Air Missile System (PAAMS), the prime role of the Type 45 destroyer is Anti-Air warfare: protecting UK national and allied/coalition forces against enemy aircraft and missiles.

The Defence Marine carries a heavy responsibility to provide a strong safeguard to National Security. It can remain secure in the continuing presence of Leroy-Somer to meet its objectives, both now and into the future.

APPLICATIONS

Leroy-Somer in the UCLH (University College London Hospital)

Leroy-Somer are supplying three LSA 53 UL 85 alternators to Puma Power Plant who are manufacturing high voltage generator sets capable of 2500 kVA at 11000 Volts.



The University College Hospital, West London, is equipped with three standby generator sets capable of providing the power to the new extension of the Cardiac Unit, should there be a loss of supply from the national grid. Maintaining the electricity is essential to protect the lives of heart patients undergoing treatment. Leroy-Somer alternators were specified by Puma to be coupled to MAN B&W Ltd VP185 engines.

One significant constraint was that the gensets were to be installed on a mezzanine floor having limited space. Special attention was given to the generator weight and dimensions to limit the impact on the civil engineering. For that, Leroy-Somer provided the engineering support in the alternator design especially appreciated by Puma.

Leroy-Somer designed this special dynamic

alternator, with low reactance levels, resulting in a lower voltage dip during high load impact, for example during asynchronous motor starting, or lower voltage rise in case of load removal. Additionally, Leroy-Somer designed the alternators with a reduced harmonic ratio. In the case of load distortion supplied by the consumer (Thryristors load, etc), the waveform produced by the alternator is much cleaner. These two characteristics are extremely important when generators take the place of the grid when this fails.

This alternator model has become a Leroy-Somer best seller for 2500 kVA, 11 000 V applications.



LEISURE



The Berchtesgaden, Königssee and Watzmann region



Nature intact, a region providing a beneficial source of peace and relaxation.

The heart of the Berchtesgaden mountain mass is synonymous with a sweet-smelling landscape of tall mountains, mountain pasture and pure air,

as well as with ancestral farms, hospitable inns and comfortable hotels that harmoniously fit in with a gently undulating landscape. It is not without reason that Ludwig Ganghofer, a famous native author of the region, wrote about this Berchtesgaden blessed by the gods:

"Wen Gott lieb hat, den lässt er fallen in dieses Land". (He whom God loves, He sets down in this country).

The unique German alpine nature park is located in the far southeast of the country along the Austrian border, 150 km east of Munich and barely 20 km from Salzburg. In the Berchtesgaden national park, which this year celebrates its 25th anniversary; nature has been preserved in all its original beauty. Left to their own devices over several generations, the flora and fauna offer a little bit of paradise on earth. Rare and endangered animals are able to reproduce there in peace; eagles are able to spread their broad wings, chamois, roe and stag to frisk about in the vast spaces that belong to them.

Berchtesgaden, Königssee The and Watzmann region have some of the finest alpine landscapes in Germany. The name Königssee, famous throughout the world, refers to an expanse of emerald green water in the midst of a spectacular landscape. Electric boats glide silently over the water where the impressive echo of the Königssee can be heard. The purest lake in Germany is 8km long and 1.2km wide. Emerging before the ice age, it was deepened by mighty glaciers. The little peninsula of Saint-Bartholomew on the lake, houses a hunting lodge belonging to the Kings of Bavaria.

Saint Bartholomew's chapel of pilgrimage, dating from the 12th century, is built on a rocky promontory, jutting out on to Watzmann's eastern side. From time immemorial, this gigantic rocky mountain mass has given the impression of dignity, which has a profound effect on the visitor. The second

> highest peak in Germany (2713 m) continues to exert a magical attraction on local and other mountaineers. Even today, the dreaded eastern slope that juts out over Saint Bartholomew. represents a particular challenge for climbing enthusiasts, even experienced ones.

At the Königssee theatre, Ludwig Ganghofer



still celebrates the Berchtesgaden region. Between April and October, a musical entitled Die Salzsaga is performed there. This is a work freely adapted from the novel of the same name, portraying a dramatic love story against a background of 17th century mysticism in the same location the author wrote about.

For further information, please contact the Berchtesgaden Tourist Office at Berchtesgaden Tourismus GmbH, Königsseer Straße 2, 83471 Berchtesgaden, Hotline +49 (0) 1805-588 775 (12 cents/min.) Fax +49 (0) 8652 / 94 84 67,

E-mail:

info@berchtesgadener-land.com and WWW.BERCHTESGADENER-LAND.COM



SERVICE

Guaranteed Availability: very reassuring service for orders!



Under current market developments, where competition is formidable, manufacturers are increasingly aware that in order to distance themselves from each other, all the services they offer customers become decisive. In this sphere of influence, Leroy-Somer has developed an original, exclusive concept, the Guaranteed Availability.

What is the Guaranteed Availability?

The customer is no longer obliged to consult Leroy-Somer to find out about delivery dates. He has the guarantee that all motors and options referred to in the specific supplies catalogue "Guaranteed Availability" will be delivered on the date of his choosing. within the shortest possible deadlines. What reassurance this gives to those placing orders in being able to plan freely the supplies of their drive systems as and when they need them and to be absolutely sure that they will arrive in time without having to worry about whether they are available. This system is ideal for "service" orders and for low quantities of items. The reliability of the organisation gains valuable time for the customer. All he has to do is confirm the order for the entire chain, from manufacture to logistics, to get going and to finish with delivery at the customer's.

A capacity for total response

To get to a point where they can guarantee this service, Leroy-Somer have set up a commercial organisation based on a Lean Manufacturing approach, the keystone of which is increasingly shorter transit times.

Through this organisation, motors are delivered to very fast deadlines. In every instance these are recently manufactured motors that meet the specific needs sent by the customer, and not a "static" stock of standard motors.

Leroy-Somer's commitment is based on the following principles:

- Full awareness of customers' needs based on statistical data that has been regularly updated for over 10 years;
- Less administration and very fast processing of orders;
- Preliminary launches of basic components;

- Use, at the works, of assembly lines specifically dedicated to rapid assembly independent of traditional assembly lines.

- The company's commitment: all the works in the group are committed to the Guaranteed Availability. This is organised today as an actual European platform where each party involved undertakes to keep to the deadlines needed to manufacture intermediate parts so that the end product is delivered within the time requested by the customer.

Over 500,000 separate references affected

Not just the ranges of standard motors with more options, but also ranges of adapted products can be delivered under the Guaranteed Availability (over 500,000 separate references are affected!). It is interesting to note that the ranges as specific as the ATEX ranges, or again, the variable-speed ranges, are part of the catalogue.

The Guaranteed Availability has also been adapted to the wide variety of available technologies and therefore applies to major product groups (alternating current, direct current, variable speed, etc.).

In addition, this service is gradually being applied across Europe, with multilingual

catalogues customised for each country for simple, efficient use.

Numerous assets

Time saved and reliability are obviously strong points in this exclusive service that Leroy-Somer offers.

In addition, the Guaranteed Availability is an influential asset for customers:

- Service orders means that they can optimise their stocks since they are guaranteed the equipment at the precise moment when they need it on their production belts. It is therefore Leroy-Somer that is adapting to the customer's manufacturing process and not the other way round.

- There is also the opportunity for the sales teams to respond immediately to the demands of end customers and therefore to increase their commercial responsiveness.

Finally, the Guaranteed Availability is a commitment from Leroy-Somer in its customer service and is part of a European logistical cohesion, as a supplement to the partners whether they be Distributors or Service Centres.



The Guaranteed Availability, stage by stage

1. You want to raise an order, the main characteristic of which is the allotted deadline.

2. You consult the LS catalogue (ref. 3641), referring first of all to the summary, in order to decide on the range, voltage and polarity.

3. You then access the selection tables.

4. Depending on the power, fixing method and position, you select the item code of the product required.

5. You send your order before the time limit given and you decide on:

- the date of your choice: the catalogue's set of colours gives the shortest delivery date to you;

- quantities.

6. You can also choose and add various additional options to your order.

7. No need for supervision: once your order has been sent out, the manufacturing and delivery process starts automatically.

8. Just a few minutes are all that is required to raise an order, without making preliminary contact to check feasibility, and with guaranteed delivery within the required deadlines.













SPECIAL REPORT

ATEX: How do we ensure that the end user is safe?

On 1st July 2003, the new equipment for use in potentially explosive gas and/or dusty atmospheres will have to conform to the ATEX European Directive 94/9/EC or ATEX 95 (see our article in the previous LS News or on the Leroy-Somer web site).

European Directive 1999/92/EC (ATEX 137) also comes into force on the same date for new installations. It sets the minimum periods of limitation for protecting workers in potentially explosive areas and introduces for the first time the notion of employer liability. One of the main obligations on the employer is that he must take every appropriate step to prevent explosive atmospheres forming, carry out an assessment of the risks of explosion and divide his operation up into different zones involving risks of explosion.

Existing installations involving a risk of explosion will have to conform by 1st July 2006 at the latest.

ATEX, a challenge for Leroy-Somer

Designing a new range of motorised products that conform to the ATEX Directive represented a formidable challenge for the Leroy-Somer design and engineering departments. How to guarantee the safety of the end user in potentially explosive atmospheres by responding to the greatest number of possible situations? Indeed, it should not be forgotten that Leroy-Somer's reputation is based on their ability to offer very broad ranges both in terms of technology (asynchronous, CC, variable speed, etc.), functions (motors, reduction gears, variable speed drives, etc.), markets (silos, petrochemical industry, etc.) and applications (transport, ventilation, grinding, etc.).

The first challenge is to remove any risk of the motor itself exploding by preventing dust from getting inside. To do this, the motor had to be completely sealed and the protection methods strengthened. In addition, Leroy-Somer took the decision to provide a spark-proof guarantee (not required by the Directive) and to limit the maximum surface temperature to 125°C. This involved offering a multiposition range for the reduction gears, the temperature of which did not exceed 125°C.

Choosing general certification

As a reminder, the manufacturer is obliged to have his motors certified by an independent body in zone 21, whereas this is not compulsory in zone 22 where self-certification is sufficient. Any electric motor is prohibited in zone 20.

In the case of self-certification, the manufacturer writes an EC declaration of conformity based on a technical document and this means that the Directives, according to which it is issued, can be identified.

Certification in itself consists of calling in a notified body responsible for evaluating the product's conformity according to the different modules that relate to the product design and/or production stage. When the product fulfils the provisions of the Directive, the notified body issues an

EC type-examination certificate to the manufacturer. The sample copy of the product concerned issued by the manufacturer to the notified body is called "type". The EC marking is proof of this product conformity to Community requirements.

Leroy-Somer have taken the decision to have all products intended for potentially explosive gas or dusty atmospheres certified, even in cases where this certification was not compulsory. These different items of information are printed on the motor's rating plate (no. of the notified body, no. of the EC type-examination certificate, AATEX category of the equipment, etc.).

Choosing general, and not partial, certification is based on Leroy-Somer's desire to provide highly secure drive systems that incur no risk for their customers. The development of the ATEX range has therefore led Leroy-Somer to set up new working procedures in the works over several years in close cooperation with the managers of the notified body. Likewise, the staff manufacturing the ATEX range of parts receive specific training on the rules of construction, control, and registration and on the risks to the company, etc.

Maintenance of ATEX Products

Leroy-Somer, like all manufacturers, is responsible for the suitability for use of the drive system chosen with the zone defined by the customer before it is manufactured.

But they are also responsible for training users in the maintenance of these products. They therefore provide site maintenance by qualified staff in accordance with the legislation through their network of Service Centres (SC) currently being certified as Saqr-ATEX (Quality Assurance System of Repair Teams in potentially explosive atmospheres), firstly in France and then in the rest of Europe.

The LS-approved Service Centres offer the customer a stocklist of motorised products, followed by their conformity according to the zones in which they are used, together with a plan for redeveloping the site if necessary.

Any repair will then be identified by a new rating plate identifying the Service Centre according to the specific rules of intervention adopted in IEC standard 60034-23.

Providing optimum safety for the user

Having looked forward for many years to the implementation of the ATEX European Directives, Leroy-Somer is today able to offer a complete, unique supply providing optimum safety as well as guaranteeing that its products can be tracked and traced in dusty atmospheres, a condition sine qua non for obtaining certification.

Leroy Somer's ATEX dust range: a global supply



In order to respond to the safety concerns of those integrating and using the drive systems, Leroy-Somer have been developing a full range of motors, brake motors, geared motors and variable-speed drives. The entire ATEX dust range has been certified by a notified body and has the EC type-examination certificate. Leroy-Somer is in a position to offer all the variable speed solutions, both integrated with the Varmeca, combined with a motor or geared motor and placed directly into the zone of use, simplifying assembly, and with the definition of an operating cycle for enclosed variable drives.

Combined with this full range of products is a meticulous service

with short supply dates guaranteed as far as delivery to the customer with no prior consultation. This is the Guaranteed Availability.

The EC mark conforms to ATEX Directive 94/9/EC

Rating plate of a Leroy-Somer motor that can be used in zone 21

- Method of protection
- 2 Manufacturer's name and address
- 3 Description of the motor/type and serial number including the year of construction
- 4 Identification number of the notified body: Inéris
- Number of the EC type-examination certificate



ATEX marks:

- EX = Protection against explosions
- 2 II = Equipment group
- **3** 2 = Equipment category
- 4 D = Dust
- 5 T125°C = Maximum surface temperature

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Your ATEX Pass : FLSPX / LSPX



Work in complete security day after day at your production site!

To guarantee your security in dust atmospheres, LS has developed a complete range of products conforming to the ATEX directive ATEX94/9/CE.

Whether it's a motor, gearmotor, or with speed variation, or a combination of these, all the FLSPX / LSPX range is certified by a notified organisation.

In addition to this complete ATEX range we offer the Guaranteed Availability service.

To know more about our ATEX products and services request our technical catalogues.

www.leroy-somer.com

