



In BearingNews Magazine, Regal is mainly known for its bearing brands Rollway®, Sealmaster® and McGill®. The Regal® product portfolio is much broader though with also couplings, conveyor solutions and electric motors. Today we speak with Luca Chiesa, managing director of Cemp motors, a Regal brand and leading manufacturer of electric motors for the global industrial market and specialized in motors for hazardous atmospheres. Luca Chiesa is a graduate from University Politecnico di Milano, has a vast sales experience in electric motors and started at Cemp motors in 2006.

Luca: "Hazardous atmospheres can be understood as many applications. For instance, any application like ventilators, pumps or compressors in a hazardous location like a refinery or a chemical plant are powered by the Cemp® type of motors. A much larger, but also hazardous application is the hoist of an offshore crane. Imagine you are on the North Sea, it's raining and rough waves are beating against the platform, but you still have to unload that boat. Conditions are very hard, but you need to rely on all your equipment operating flawlessly. We take pride in manufacturing electric brake motors that help secure these people's safety and efficiency."

European manufacturing, global engineering

Established in Italy in 1954, Cemp motors was among the first companies in Europe to manufacture flameproof motors. Over the years, production was oriented to higher customized products such as flameproof motors with brake, flameproof electric pumps for printing machines, flameproof motors for Group IIC gases, motors for mining and the very last development which is a complete series of IE3 (and IE4 on demand) efficiency level

Atex and IEC-EX certified motors. Cemp motors operate in hostile environments throughout the world on offshore oil & gas rigs, production platforms, onshore terminals, refineries, chemical works and coal mines. One of their strengths is the minimal attention they need over long periods.

Quality, customization and lead time as strengths

"For more than 60 years we have been differentiate ourselves by providing highly customized and quality motors to our customers with incredibly short delivery time. Many motor manufacturers have a lead time of 5 to 7 weeks for a standard

"Rollway bearings have low friction losses and wide working temperature range from -60°C up to 80°C and even up to 120°C with special feature"

"Our motors are used in oil refineries in Qatar at +60°C ambient temperature, in water treatment facilities in Kazakhstan and also on offshore platforms in the North Sea or Siberia at -60°C," Luca explains. "We are operating in these remote places because of our excellent relationship with the main EPC (Engineering, Procurement, Construction) Contractors, which demonstrates our expertise and reputation for the products and services we provide."

motor. We can do the job in 2 weeks for a customized motor," Luca proudly tells us. "We have the right components in stock in Italy, a skilled and experienced staff in our workshop and an excellent synergy with the global Regal engineering teams."

Cemp motors has created one of the most comprehensive ranges of electric motors for hazardous areas available today, including flameproof – explosionproof motors, "non sparking" motors and

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motors for dusty environments.
Furthermore, Cemp motors supplies
customers with consulting services for
designing and manufacturing motors with
special features.

Rollway® bearings in flameproof motors

The Cemp motors team works on continuous product improvement and innovation every single day. Recently, this resulted in the introduction of a complete range of flameproof motors with premium efficiency IE3 and capability to reach IE4 super premium efficiency with a special version. The IE4 range offers an optimized sustainability through lower operating costs over the complete service life.

For the IE3 motors product range, Cemp motors team reduced all the losses in the motor, including for the bearings. Rollway bearings have low friction losses and wide working temperature range to satisfy all customer need in terms of site conditions (from -60°C up to 80°C and even up to 120°C with special feature).

"The 120°C ambient temperature project required a low friction Rollway bearing with special grease up to a working temperature of 200°C. Having bearing specialists in our Regal family is a true asset. The very high ambient temperature requires special care to seal the bearing in order to reduce the temperature rise."

Temperature rise in the bearing area is reduced up to 20 degrees Kelvin, starting from a rated value of 29 degrees Kelvin temperature, by using synthetic hydrocarbon oil as base for the grease and by derating electrical rotor losses with special winding (motor slip reduction). Bearings working temperature would be about 140°C and the product has 60K of thermal margin, increasing product reliability also at high temperature.

Luca Chiesa concludes: "Being part of a global organization like Regal offers a lot of advantages: we have a lot of expertise within the company and the natural synergies make us respond more quickly and more adequately our customer needs. The Rollway® bearing engineering team

is a great supporting factor."
If you want to learn more about Regal and its brands, please contact Steve Quintijn (steve.quintijn@regalbeloit.com) from the Regal Marketing Department. He will tell you more about Regal's increasing presence in various industries.

About Regal Beloit Corporation

Regal Beloit Corporation (NYSE: RBC) is a leading manufacturer of electric motors, electrical motion controls, power generation and power transmission products serving markets throughout the world. The company is comprised of three business segments: Commercial and Industrial Systems, Climate Solutions and Power Transmission Solutions. Regal is headquartered in Beloit, Wisconsin, and has manufacturing, sales and service facilities throughout the United States, Canada, Latin America, Europe and Asia. For more information, visit Regal Beloit.com

