

PRESS RELEASE

ATAM

The company confirms to be a benchmark for process valves' heavy-duty applications, thanks to its production capacity and technical expertise in thermosetting epoxy resin coils

Hannover, 1 April 2019. ATAM — the leading manufacturer of encapsulated coils and industrial connections — will be announcing an additional increase in their production of custom thermosetting epoxy resin moulded coils at **Hannover Messe (1-5 April 2019)**. The update of the presses inserted in the IoT system has made this innovation possible.

The addition of presses for epoxy resin to the company's lean system allows ATAM to manufacture over one million thermosetting overmoulded coils per year for even the most demanding application, thereby meeting the needs of all clients, who can also benefit from a 20-year experience in this field. Moreover, ATAM is the only company in Italy and one of the very few in Europe to rely on in-house expertise and production capacity, which make the company a real benchmark for the industry.

ATAM's thermosetting epoxy resin coils are used in niche applications, such as in supersonic avionics and aerospace systems. They are also widely used in the heavy-duty automotive industry, in particular in vehicle underbodies, where they are essential due to the presence of high temperatures, temperature fluctuations, and vibrations. The servo brakes of modern trucks, in which this type of coils is used to activate the motor brake valve, are an example.

Thermosetting epoxy resin overmoulded coils belong to the range of custom coils for solenoid valves that ATAM designs, manufactures, and distributes for the pneumatic, hydraulic, and process valves industries. Today, custom coils – whether designed from scratch or adapted to specific requirements based on standard products – represent 70% of ATAM's production, thus confirming the company's inclination towards customisation.

Product and production process

ATAM uses epoxy resin, which is a top-quality thermosetting material, i.e. a substance that hardens due to the action of heat. A melting and liquefaction phase precedes the hardening one inside the mould. During the initial phase, the material, which is still fluid, penetrates each coil cavity, thereby covering any imperfection inside the mould. Any possible junction line burr is removed using a high-speed Teflon shot blasting machine. Once hardened, the material features dimensional stability in a wide range of temperatures (from -50 °C to +200 °C), in addition to high mechanical strength and hardness. This material also stands out for its low hygroscopicity compared to similar products, especially the thermoplastic materials commonly used. This characteristic prevents water from contaminating the winding and thus the risk of short circuits over time. The entire production process is quite long and costly and requires great skills and experience. The speed with which the product is transformed is extremely low, as the material remains in the mould for a long time to complete the solidification process.

ATAM: Hall 23 - Stand B12









ATAM_Presses for thermosetting epoxy resin overmoulding, inserted in the IoT system of the company.



ATAM logo

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