



## Ageotec dives deep with Diab Syntactic Foam

With its focus on modern and sustainable marine exploration, Ageotec S.r.l. aims to be a leading producer of subsea research equipment. Founded in 2004, the Italian company develops advanced underwater systems, including ROVs built with Diab core material.

Ageotec S.r.l. offers a wide range of underwater and oceanographic technologies to its customers, who include not only public authorities and international organizations, but also corporations and private companies. Ageotec was built by a tight-knit team of geophysicists, geologists and technicians, whose specialization in marine survey and data acquisition rests on two decades of worldwide experience.

Together, the experts at Ageotec have proven adept at developing new technologies and applying them in challenging environments. With a growing range of subsea robotics and probes, they have continuously improved their support to their customers. Today Ageotec is organized into Geophysics, Oceanographic and ROV divisions, with in-house development concentrated in the latter two.

Ageotec's ROV division targets professionals who work routinely with underwater vehicles, making a flexible product range available for their needs. In addition to the SIRIO "Observer Class" and the PEGASO "Light Work Class", Ageotec offers a series of multipurpose PERSEO models for both visual and instrumental inspections. All are based on a highly modular vehicle design, which means a large degree of customization is possible.

Diab has had a key role in Ageotec's ROV production since 2010, supplying core material in the form of *Syntactic Foam* SF 110. This material has unique mechanical properties that are

well suited to subsea applications at depths of 700 meters or more. Besides absorbing very little water, the foam has a high compressive strength and high buoyancy per kilogram, which makes it a good basis for durable, high-performance underwater products.

Syntactic foam is also suited to Ageotec's modular thinking, since it can be formulated for precise buoyancy requirements down to 10 000 meters. *Syntactic Foam* was specifically chosen by Ageotec, since Diab could guarantee an exact density and buoyancy for a deep working area. Diab supplies standard foam blocks to an Ageotec subsupplier, who prepares them with CNC machining to Ageotec's specifications.

The finished ROVs have uniquely small dimensions, and they are fitted with compact thrusters for easy handling through carefully designed control software. Wide-band optical-fiber cables allow simultaneous communication in two directions, providing a quick flow of data both to and from the surface. With this basic design and a flexible layout of subsystems, Ageotec can meet the diverse ROV needs of a wide range of customers.

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