

Vertical turnkey installations

Imcar's vertical systems can be used in various food sector, such as breweries, wine, milk, fruit juice and chocolate

By Clara Biancardi

Imcar vertical installations, to be used in the workshop or directly on site, are complete turnkey lines that, starting from coil or sheet metal, allow to produce medium and large tanks with the various processes of bending, cutting and welding, surface cleaning, and coupling of the shells, as well as the production and application of refrigeration channels. The technology developed by the company allows considerable savings of time and skilled staff, without detriment to quality. Imcar's vertical technology is the result of over 60 years of experience; it has been studied, designed and manufactured for the production of tanks for the chemical, petrochemical and food sectors (beer, wine, milk, fruit juices, chocolate, etc.). This innovative technology allows the production of tanks directly on site or in workshops, according to customers' needs. The first workstation hosts the bending, cutting, welding and cleaning of the vertical welding surface, to obtain the finished shell with the intervention of only



First work station, where the bending, cutting, welding and cleaning of the welded surface are carried out vertically to obtain the finished shell.

one or two operators. The second station allows the alignment of steel shells one on top of the other without the use of rings. The manual spot welding is followed by the automatic circular welding, which is carried out with internal support of copper and gas, to simplify the setting of parameters and ensure better penetration. Other operations performed by this machine are the compression of the circular welding to reduce the thickness of the material and keep a flat surface, and the cleaning of the internal and external welds, which are carried out by one operator only.

Customised solutions...

Imcar's vertical technology offers a variety of advantages. Firstly, considerable savings of time and space for the production of the tanks, followed by constant quality

and high standardisation of the finished product. Next to being able to employ a small number of skilled personnel, production is free from contamination by external factors, which is indispensable for food production. Furthermore, material polishing operations are carried out at low costs. The installations can be erected directly on site, allowing the construction on site of large tanks characterized by high construction standards and certified quality. Other advantages are: plastic cover material and internal rings for shells coupling are no longer required; possibility to connect shells with different thicknesses; elimination of the so-called "barrel effect"; quick replacement of coils; ease of handling and possibility of installing the system directly on site.

... and without risks

Working vertically, the risks related to the safety of traditional horizontal production are avoided. Operators always work on the ground, as the shell forming and assembling process occurs from the top to down, lifting the finished shell and adding the other shells beneath it, until the tank is completed. Finally, several accessories are available to complete the construction of complete tanks such as the dishing press machines and manipulators for dished heads of small and medium thickness; shearing and flanging machines; manipulators for dished heads cleaning; forming leg machines; and half pipe cooling forming and welding. ▶

Imcar vertical systems can be erected on site, for on-site building of large capacity silos.

