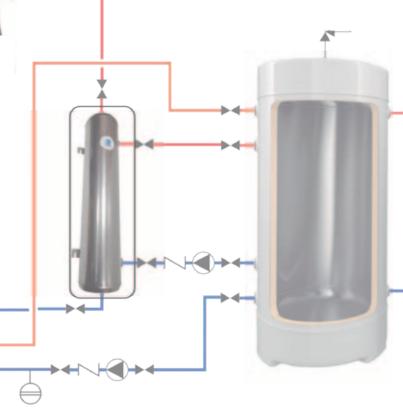
## **DUPLEX 2205 Stainless Steel**

"Make the the best tanks for SHW in the world" With this goal was born Depósitos Coballes in 1981, after detecting a need in the market for the manufacture of high quality tanks for domestic hot water (DHW).

While the material used for this type of product was usually vitrified steel and just a few producers used stainless steel AISI 304 or 316, since 2001 this company began to

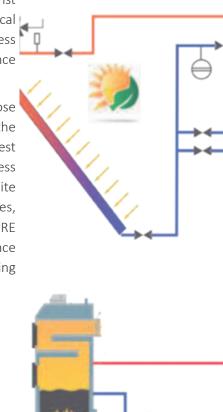
manufacture all tanks with duplex stainless steel 2205, which was mainly used in chemical, petrochemical, paper industries, etc. until then.

Duplex 2205 stainless tanks make them suitable for use in areas with acid PH water, high chlorine level, well water, limestone water, osmosis purified water ,as well as for outdoor and wet environments.

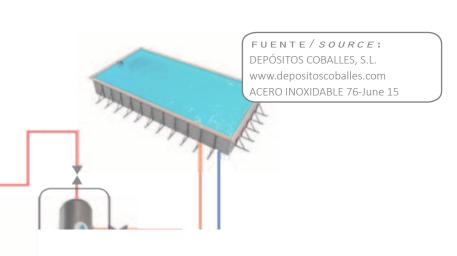


The tanks offer a 10 years guarantee against corrosion, high mechanical strength, high toughness and excellent performance in marine environment.

Depósitos Coballes chose duplex 2205 because the combination of the best properties of two stainless families: 40% austenite and 60% ferrite. Besides, it has an excellent PRE value (Pitting Resistance Equivalent), even regarding other duplex types.







## Selection of Duplex 2205 in other new products

- IT40: tubular heat exchanger that among its applications is pool heating. This material provides total resistance to corrosion in the most aggressive environments, and its stainless steel case allows installation in humid environments, even outdoors.
- BOOST40: tanks for the production of instant DHW through a coil heater that does not need maintenance against legionella, and without corrosion problems. These features make them ideal for multiple facilities with water quality and environmental conditions that may be favorable or not. The use of this material ensures durability and resistance. material permite garantizar su durabilidad y resistencia.



## ACS

## **Fabrication process**

Duplex stainless steels require changes in the manufacturing process of these tanks, compared to other stainless steel types.

- Tube manufacture: the inner tube of a single length, without joints, thus preventing intermediate welds, obtaining high quality tube for exchanger as well as for coil heater.
- Welding by TIG (GTAW) provides high quality clean welds.
- Pickled and passivated finish: to ensure that the passive layer of chromium oxides in stainless steel surface is generated correctly and therefore the corrosion resistance is perfect. Pickling of stainless steel surfaces is performed both on the inner and outer surfaces, ensuring quality.
- Isolation together with its manufacture with such a high quality material, allows:
- a) Adapt manufacturing to new Directive 2009/125 / EC on eco-design for energy-related products and 2010/30 / EC on energy labeling.
- b) Avoid replacing every few years, thermos, batteries, etc.