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Marine Refrigeration Supplies

Shell and Tube Heat Exchangers

MAREFSUP BV is the agent for INTEGASA SA from Spain.

Integasa is one of the leading heat Exchanger Manufacturers and has designed and produced equipment for: Marine applications, Process and Off shore industry.

90% of the equipment that is made by Integasa is tailor made for Refrigeration purposes and delivered to customers all over the world

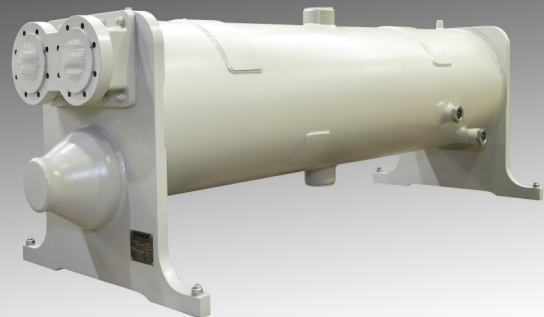


Good quality for a competitive price

TITANIUM HEAT EXCHANGERS

INTEGASA has great reputation and experience with the production of Titanium Heat exchangers. This material has a very good corrosion resistance and is in many cases applied aboard of seagoing vessels or in the process industry when a corrosive media is to be cooled or heated.

Welding of Titanium is a critical job as the welding process is sensitive to draft. Therefore Integasa has made a separate clean room in which the Titanium pipes are welded. Welding of the pipes is performed by orbital welding.



CU Ni HEAT EXCHANGERS

Integasa has produced more than thousand Cupro Nickel Heat Exchangers such as condensers, seawater coolers or other applications for which CuNi Heat exchangers were required. Besides the heat exchangers they also produce CuNi Marine boxes for Cruise

STEEL HEAT EXCHANGERS

Many heat exchangers can be made of steel when the media that are running through the heat exchanger are not Corrosive.



Technical information

<u>General:</u>		Remarks
Application	Marine, Offshore and shore	
Dimensions & Capacities	To customers requirements	Tailore made solutions
<u>Design:</u>		Remarks
Thermal design	ASPEN - HTFS HTRI	As well as established from practical tests and experience
Mechanical design	Integasa	
<u>Product data :</u>		
Coolants, gasses, (Sea) water.	To customers requirements	
<u>Refrigeration data:</u>		
Refrigerants	Ammonia, HFC's, CO ₂ , Propyl-ene,	Others on request
Coolants	Brine, Glycol, etc.	Others on request
Design temperatures	From -50 °C and higher	
Design Pressure	Up to 100 Bar	
<u>Execution:</u>		
Pipes (o.d)	19,05 & 25 mm (Standard)	Others on request
Fined tubes	For Copper and Copper alloys	Others on request
Processed materials	Cu, Fe CuNi 90/10 CuNi 70/30 Admiralty Brass; Stainless; AISI 304, 316L, 316Ti Super duplex; SAF2205, SAF2507 Hastelloy Titanium	Others on request
Covered standards, design codes and Classification societies.	Standards and design codes CE-PED ASME (U-Stamp) PD5500 AD Merkblatter Stoomwezen CODAP TEMA	Classification societies American Bureau of Shipping Bureau Veritas Det Noske Veritas Germanischer Lloyd Lloyds Register of Shipping Russian register of Shipping Registro Italiano Navale Nippon Kaiji Kyokai Korean Register of Shipping Indian register of Shipping
<u>Quality assurance :</u>		Certified by Classification societies
As pressure vessel and Heat Exchanger Manufacturer	UNE-EN-ISO 9001:2000	Det Noske veritas ; Class I& II Certification
	According the requirements of Annex III, Module H&H1 of the Pressure Equipment Directive 97/23/EC. Certified by Lloyds Register	Lloyds Register of Shipping; Certification according to class 1, 2.1 and 2.2.
		Germanischer Lloyd; Pressure vessels welding Certification
		Bureau Veritas; Mode II Surveyor certification