



STORAGE AND PROCESS TANK PLATES

WWW.OMEGATHERMOPRODUCTS.NL

LEADING IN HEAT TRANSFER TECHNOLOGY



Pillow Plates jacketed tank components are a more efficient solution than half-pipe and double wall constructions.

At Omega Thermo Products jacketed tank components are welded using the latest technology of laser welding Pillow Plates. Because of the high efficiency and easy assembly, the pillow plate is a better and cheaper alternative than the traditional constructions. In addition, it is easier to make a recess (for example for a manhole) in the jacket of the tank at the desired location.

Pillow Plate advantages

- › Lower operating costs because less man hours are required.
- › Excellent heat transfer.
- › Improved control characteristics due to low volume in the jacket.
- › Even distribution of cooling and/or heating media.
- › Design not limited due to complex Geometries.
- › Less volume.

OMEGA TANK PLATES



Applications

Omega jacketed tank components are the best solution for all your heat transfer applications.

Beverage processing vessels.

Fermenters, beer vessels, cooking vessels.

Dairy processing vessels.

Pharmaceutical and

processing vessels.

Storage tanks.

Reactor vessels.

Omega Thermo Products supplies flat pressure bottoms, torispherical, ellipsoidal, hemispherical, flanged and reverse heads with Pillow Plates.

Is using laser welded jackets hard to do?

No, it's as easy as 1-2-3



Laser welding

The custom designed and engineered laser weld pattern will be welded to create the Pillow Plate. This includes the outside perimeter weld to create the pressure boundary.

STEP 1



Forming

After welding, the Omega Pillow Plate will be in a flat stage. Depending on the final product, the Pillow Plate can be formed by the customer or Omega Thermo Products. Pillow Plates can be either formed in shells, dished heads or conical shapes.

STEP 2



Nozzle installation and inflation

Prior to laser welding, Omega does laser cut the required shape of the product which includes the pre-determined connection locations for easy installation. The laser cut holes will have to be swaged open and lifted until the supplied pipe stools fit within the hole and the opening between the legs are covered by the Pillow Plate. The next step is to TIG weld the legs on the interior to the base material and do a circumferential weld of the Pillow Plate to the outside of the pipe stool. Additional fittings or flanges can be installed onto the pipe stool and used for inflation. Omega will supply detailed procedures on how to install connections and inflate the Pillow Plates. Our experienced engineering team is available to assist with your first Pillow Plate inflation!

STEP 3



Specifications

Materials

- › Austenitic materials (304, 304L, 316, 316L, 316Ti, 317, 321)
- › (Super) duplex materials (2205, 2507, 2304, LDX-2101)
- › High nickel alloys (Nickel, Hastelloy, Alloy, Inconel)
- › Titanium
- › 254-SMO
- › 904L

Pressure

Omega's Pillow Plates can handle pressures of more than 100 bar, this is depending on the required design temperature and pressure (given by the customer) we calculate the required plate thickness of the jacket. When required we also will calculate the heat transfer capacity of the jacket. So please don't hesitate contacting us if you have specific requirements.

Omega Thermo products B.V. qualifications



ASME U-stamp, PED, AD Merkblätter



THE NETHERLANDS

OMEGA THERMO PRODUCTS
CHROOMSTEDEN 2
7547 TL ENSCHEDE
PHONE: +31 (0)53 851 88 00
INFO@OMEGATP.COM

USA

OMEGA THERMO PRODUCTS
205 SUNSET AVENUE
STRATFORD, WI 54484
PHONE: 800 470 1126
INFO@OMEGATP.COM

INDIA

OMEGA ICEHILL PVT. LTD.
805, 8TH FL. WAVE SILVER TW.
SECTOR-18, NOIDA - 201301 UP
PHONE: +91 (0)12 06 88 85 80
INFO@OMEGATP.COM

OMEGA
THERMO PRODUCTS