

homogenous
conciliatory
tempering

Tankwalls

manufactured of Heat Exchange Panels



Application fields Industrial chilling of food

- softdrink production
- milk, milk products
- breweries



Chilling in the production and storing of

- chemicals
- pharmaceuticals





Basis of a tank wall: single embossed heat exchange panels

Efficiency

There is no better way of homogenous tempering for a product, than a complete jacket with heat exchange surface, meaning to manufacture the complete tank from heat exchange panels. The big heat exchange areas ensure a safe process operation with homogeneously guided temperature control. The u-values will only be influenced marginally, when pollution or dirt covers the panels. Favourable temperature differences direct at the process media result in a much better efficiency, compared to compact external heat exchanges.

At the same time products, especially foods, are treated very gentle. The flexible design of the heat exchange jackets allows tempering of products during other process steps. That saves another separate thermal process step and often increases the product quality. Compared to halfpipes, welded to tanks, that cover half of the surface only, panels are more effective and more homogenous, as they cover the whole surface. Panels have less volume, allow smaller wall thicknesses and lighter tanks. Our experienced engineers would like to support you to integrate the heat exchange jackets into your process tank.

Specifications

Material according to application specification:

- Carbon steel or stainless steel as: AISI 304, AISI 316L, AISI 316Ti up to titanium.
- Surface pickled, ground or polished.
- As heat exchanger for water, glycol, thermal oil or steam inside the panels.
- As evaporators for all refrigerants used as pump- or gravity- or dry expansion system.
- Channel design according to individual calculation by experienced engineers.
- Certification: TÜV, PED, TR CU (GOST).
- Design according to ASME

Application and Benefit

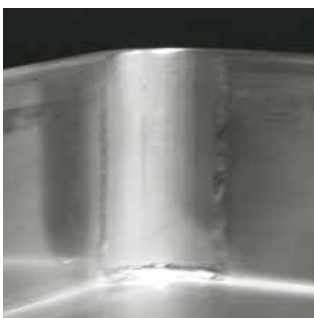
- Homogenous tempering of liquids in tanks.
- Conciliatory cooling of foods.
- Conciliatory tempering of foods.
- Heat transfer for media with particles.

Examples of application

Individual design in measurement, shape and material allow flexible use in many industries and extend the normal standard. Single embossed panels may be rolled to a cylindrical half-jacket and be clamped on to existing tanks retroactively or being welded to rings to build a tank:



Complete cylinder tanks are made from laser welded panels, of those the profile have not been blown up then. The flow profile of the heat exchange panels will be blown up after the tank has been build. Any shape of cut-outs for pipes etc. can be foreseen :



Melting through for wax, with round corners at edges and collars

Advantages

- Homogenous and conciliatory tempering of products
- Better and lighter than half pipes
- Easy access
- Easy cleaning
- Reliability
- Long lifetime due to individually chosen materials
- Any design possible according to application criteria or demand
- Integration into vessels for mechanical and thermal doublefunction

Design and Dimensions

- Sizes from hanky up to 12.000 x 2.000 mm.
- Cylinders made of one piece: diameter from 600 – 3.800 mm.
- For conical, as well as for elliptical vessel heads.
- Up to 12 mm groudplate with single embossed profile.
- Operating pressure up to 20 bar, in special cases up to 50 bar.

“BUCO Dimple Plates for more than 50 years.”
“More than 10.000 tanks made of BUCO dimple plates in operation“

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