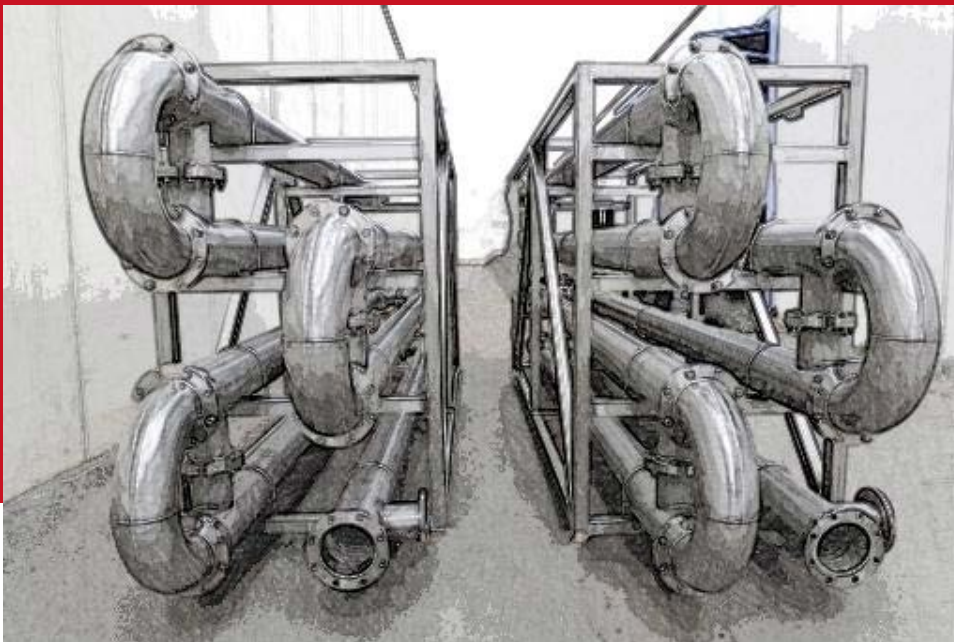




XLG® Heat Exchangers for Sanitary Applications



Efficient & clean

High performance corrugated tubes and a safe sanitary/hygienic design make XLG corrugated tube heat exchangers the perfect choice



3-A Approval

XLG range of Corrugated Tube Heat Exchangers are approved by the 3A Organization. And comply with the design recommendations of EHEDG

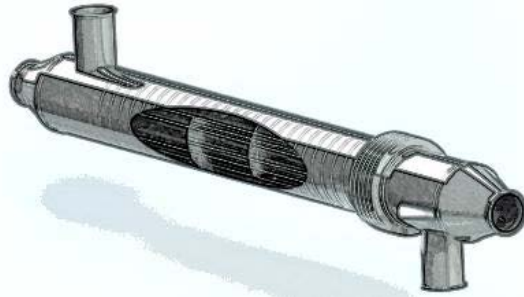
XLG corrugated tube heat exchangers, the state-of-the-art in tubular heat exchange



HEAT EXCHANGERS

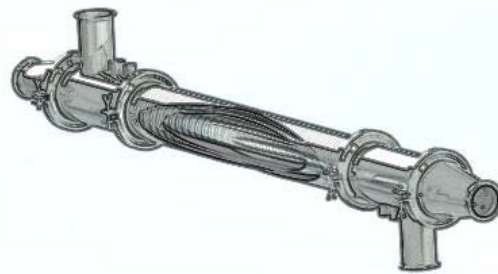
XLG® MULTITUBE

Corrugated multitubes are the best heat exchanger to process low and average viscosity fluids, like juices and beverages even with little particles.



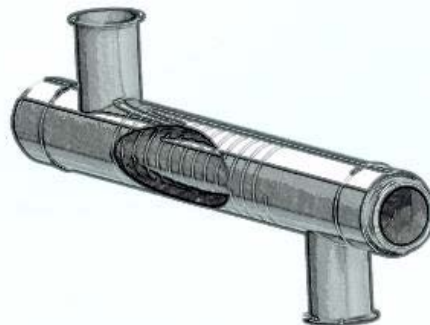
XLG® TRIPLETUBE

Corrugated tripletubes are the most appropriate to handle viscous products (high and low acid) like tomato concentrate, banana paste, cheese sauce, etc.



XLG® TUBE-IN-TUBE

Corrugated tube-in-tubes is the ideal exchanger to process particulate laden products like diced tomatoes, pulps, grape mash, fruit preparation for yoghurt, etc.



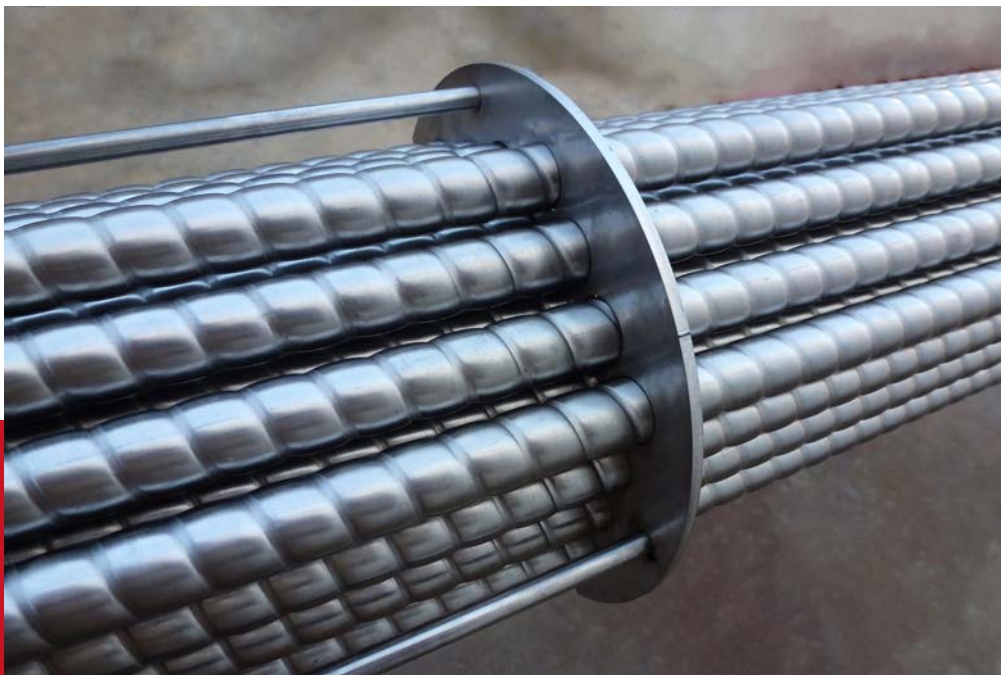
Food processing heat exchangers



WITH CORRUGATED TUBES

BUSINESS SEGMENTS & APPLICATIONS

- **Beverage** : freshly squeezed orange juice with pulp, smoothies, fruit juices aseptically treated, etc
- **Canned fruit & vegetable process**: tomato sauces with or without particles (BBQ, pasta, ketchup, pickle, etc), diced tomatoes, fruit & vegetable dices, purees, pulps and concentrates, yoghurt fruit preparation, jams and marmalades
- **Breweries** : beerworts, whiskyworts, malts, yeast
- **Wineries** : cooling wine must (grape mash)
- **Seasoning, sauce & condiment** : mayonnaise, dressings, cheese sauce, etc
- **Dairy** : UHT milk, yoghurt, tzasiki, cottage cheese, kefir
- **Baby food**
- **Edible oils & margarine**
- **Sugar & starches**
- **Pharmaceutical**
- **Cosmetics & body care**
- **Nutraceuticals**



SANITARY DESIGN

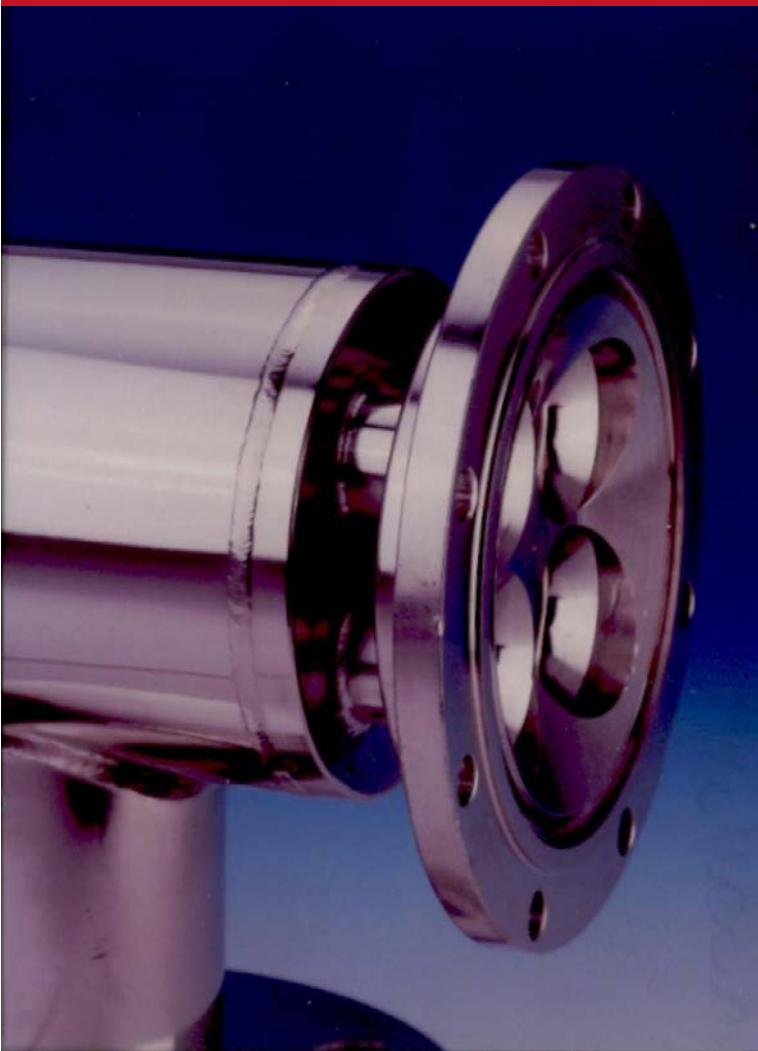
XLG® Tubular heat exchanger designs are more sanitary/hygienic than Plate exchangers because unlike Plates, Tubular units lack corners where product remains stagnant and contaminate. Moreover Tubulars don't need to be opened for being cleaned like Plates.

MORE NATURAL PRODUCTS

Corrugated tubes enhance turbulence so heat transfer coefficient is increased compared to ordinary smooth tube units, therefore any heating process is done quicker so products are less time subject to heat and thus are more natural and retain most of its properties.

LONGER RUNTIMES

XLG corrugated tubes reduce fouling as they keep fluids in deep agitation, so enable that the heat exchanger is clean more time between CIPs, thus enlarging runtimes vs smooth tube exchangers and PHE's.



MATERIALS & FITTINGS

High quality materials are utilized for the fabrication, basically stainless steels (AISI-316L, AISI-304L, etc), and Duplex.

Tubes are made according to ASME BPE and ASTM A269/A270.

Tubeside connections can be either clamps ASME BPE or aseptic flanges according to DIN 11864-2.



XLG® PHARMAGRADE

Designed to process liquids and emulsions in the pharmaceutical, biotech and personal care industries.

The heat exchanger is formed by a tube bundle of corrugated tubes inside a shell. Product flows inside the tube bundle and the service outside it.

Main features:

- Double tube-sheets avoid any risk of crossed contamination between sterile product and non sterile service.
- Inner tubes are welded and roller expanded into the tube-sheets.
- Inner tubes are seamless, with an inner surface roughness Ra minor than 0.5 µm.
- Eccentric reducers are connected to the external tube-sheet by means of a clamp or sterile flange.
- Self draining design.
- Exchanger free of maintenance.
- Wetted surfaces can be electropolished, and surface roughness Ra minor than 0.3 µm.

High safety multitube

Designed and manufactured following the FDA recommendations for High Purity Water Systems and ASME BPE

SMALLER FOOTPRINT

XLG® Heat Exchangers include corrugated tubes that reduce the heat transfer area and size of the units, thus reducing the footprint and volume of the heat exchanger.

LOW MAINTENANCE

Unlike Plate Heat Exchangers and other tubulars, the XLG® range of corrugated exchangers have very few spares, in fact only those gaskets in the fittings, as most of the range is fully welded.

RELIABLE CIP

XLG® corrugated tubes ensure a deep turbulence flow when CIP is being done, thus the cleaning is very intense and fast, so the plant is ready to run quickly.