



Best High Pressure & Drilling Technology

HIGH PRESSURE SYSTEMS





BHDT GMBH IS A QUALIFIED PRODUCER CERTIFIED ACCORDING TO ISO 9001 STANDARDS.

Design, calculation, production and testing of high pressure components all adhere to international standards and specifications. In accordance with ISO 9001, the company's quality management system is documented in a manual and certified by the British Standards Institute. This manual includes all operations and areas of responsibilities within the company. Special processes and audits are described in additional work guidelines. Decades of experience in the field of high pressure technology, the selection of appropriate materials, and accurate order management are the preconditions for a high degree of reliability and functioning of our products in compliance with the specifications given. Material certificates and test results of the finished components are documented in cooperation with TÜV, LLOYD'S, or other international inspection and testing agencies are available to our clients. BHDT took its place as a world leader in the late fifties. The company recognized the evergrowing demand for high pressure valves, fittings and other system components for the booming chemical industry, thus getting an edge over other competitors.

TOP TECHNOLOGY FOR FUNCTIONALITY SAFETY AND LONG SERVICE LIFE.

Today, BHDT is in a position to handle pressure ranges up to 1.000 MPa and is a leader in the field of high pressure systems for the chemical industry, including systems for highly corrosive media. Numerous innovative developments are covered by world-wide patents. State-of-the-art, 3-D CAD systems and high-precision computerized machining technologies are geared to further expand BHDT's leading position.

BHDT is not only producer of top-quality high pressure components but is also a supplier of complete customized high pressure systems for the Petrochemical Industry, and contractor for large industrial plants, particularly in the field of low density polyethylene (LDPE). BHDT also fabricates specialized equipment for the chemical and aerospace industry.

BHDT: A TOP PARTNER OF THE PETRO-CHEMICAL INDUSTRY. MAXIMUM RELIABILITY AND OPERATIONAL SAFETY – LONG LIFETIME – MINIMUM MAINTENANCE REQUIREMENTS

BHDT has an excellent expertise because of decades of experience on the world market, and also perform the detail engineering – according to the specific interface definitions – at the headquarter in Kapfenberg/Austria. Complex customer requirements are executed in the framework of an efficient, objective oriented project management.

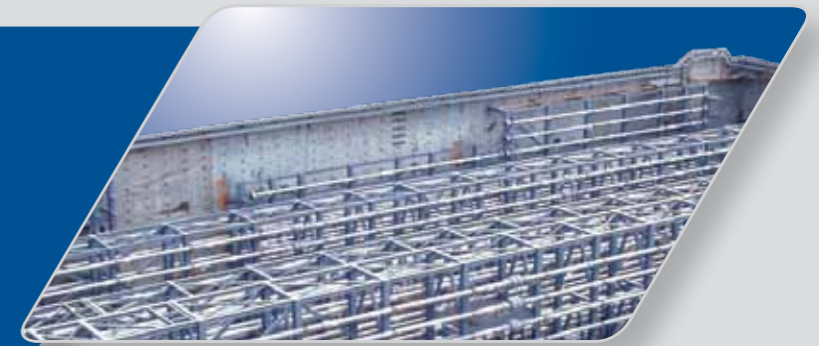
By using special autofrettage methods for high pressure components, optimized stress distribution over the loaded cross section is achieved under real operating conditions. The result is an essential increase in operation safety and lifetime.



HIGH PRESSURE SYSTEMS:

1.

LDPE APPLICATIONS



2.

HIGH PRESSURE TUBES



3.

HIGH PRESSURE VALVES



1. LDPE APPLICATIONS

HIGH PRESSURE SYSTEMS

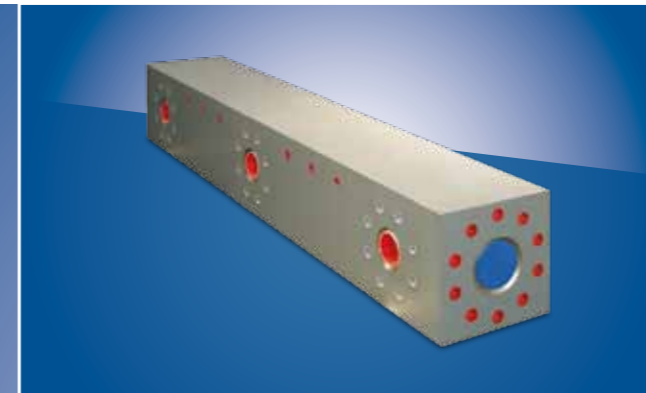
- Polyethylene applications 32,5 MPa - 360 MPa
- High pressure tubes
- Tubular reactors, inter stage coolers, product coolers
- Interconnecting piping
- High pressure pipe supports
- Hydraulic actuated angle on/off valves
- Hydraulic actuated control valves
- Manual actuated valves
- Safety relief valves
- Check valves
- Vessels, separators
- HP fittings
- Peroxide injection pumps, mobile and stationary pressure test stations
- Bolt tensioning devices
- Isometrics, distribution blocks
- Pre-fabricated catalyst injection lines plus fittings
- Hydraulic power units and field manifolds
- Autofrettage pumps



HYPER COMPRESSOR INTERSTAGE COOLER (under construction)
PN 160 MPa

HP MANIFOLD BLOCK

For hyper compressor piping of a large capacity LDPE plant



INTERMEDIATE PRESSURE COMPRESSOR PIPING

PN 50 MPa

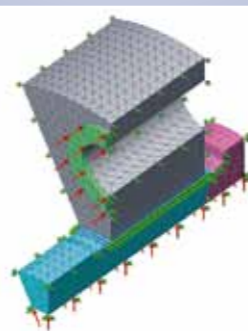


HPTUBES FOR STATE OF THE ART LDPE LINE

Tubes Nominal Size 82 mm, PN 320 MPa



MEDIUM PRESSURE VESSEL
with heating coil
PN 37,5 MPa



DESIGN VERIFICATION
of a high pressure flange connection
PN 300 MPa



INTERSTAGE COOLER
High pressure jacketed tubes with copper-cladding, PN 160 MPa



SEMI-AUTOMATIC WELDING
of CW jump pipes



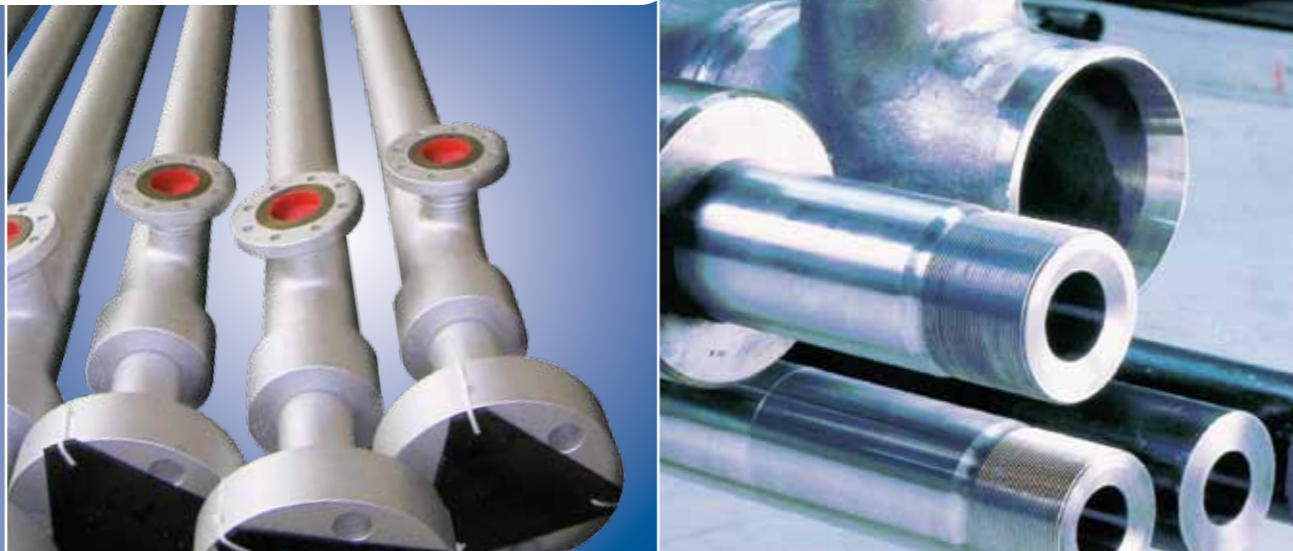
HIGH PRESSURE PRODUCT COOLER
Pre-assembled unit
PN 230 MPa



PEROXIDE DOSING PUMP
PN 350 MPa
Flow rate 18 – 150 l/h

2. HIGH PRESSURE TUBES

HIGH PRESSURE JACKETED TUBES PN 300 MPa



DEEP HOLE DRILLING

- High precision drilling operation
- Maximal length 21.000 mm
- Solid drilling diameter from 20 to 200 mm inside diameter
- Counter drilling or trepanning up to 300 mm inside diameter

HONING

- High efficiency and high precision honing operation
- Special process for small diameters and long tubes
- Maximal length 21.000 mm
- Diameter range: from 20 to 200 mm (500 mm)
- Ra < 0,1 µm already realised for several contracts

NON DESTRUCTIVE TESTING

- Semiautomatic device for UT and ET examination of the tubes
- One perpendicular UT-probe and two angular UT-probes on a special designed holder
- ET-testing of the outside surface at the same time with UT
- ET-testing of the inside surface with a rotating probe
- Direct link to the documentation system

3. HIGH PRESSURE VALVES

HIGH PRESSURE VALVES

- Hydraulic actuated on/off valves
- Hydraulic actuated control valves
- Gear actuated valves
- Manual actuated valves
- Safety relief valves (spring loaded)
- Blow off valves (hydraul. operated)
- Check valves
- Angle valves
- Evaluation of flow characteristic



SPRINGLOADED HIGH PRESSURE SAFETY RELIEF VALVE
PN 160 MPa



HIGH PRESSURE RELIEF VALVE

Hydraulic operated fast-acting high pressure relief valve with manual blocking device
PN 320 MPa



HYDRAULIC OIL UNIT

For the hydraulic oil supply in LDPE applications



HIGH PRESSURE VALVE TEST STATION

PN 550 MPa

ADDITIONAL PRODUCTS:



HIGH PRESSURE EQUIPMENT FOR FERTILIZER PLANTS

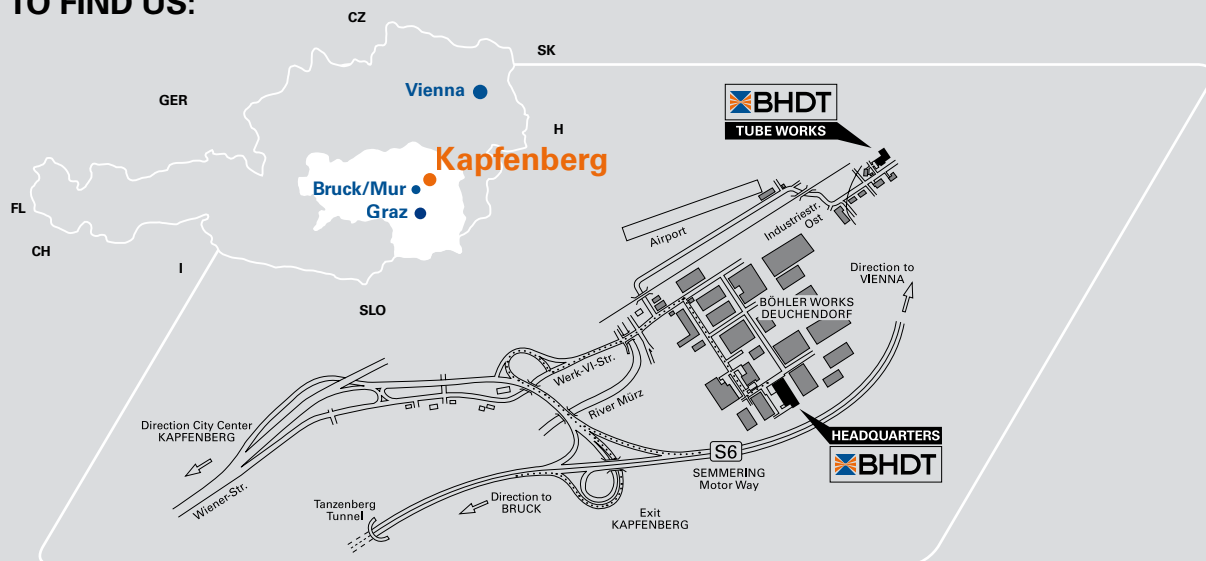
- Angle valves
- Globe valves
- Safety relief valves
- Check valves
- Control valves
- Sampling valves
- Isometrics
- Vessels
- Fittings



HIGH PRESSURE PUMPS

- Waterjet cutting applications
- Peroxide Dosing for LDPE plants
- Pressure test units and systems
- Autofrettage purposes

HOW TO FIND US:



BHDT GmbH
Werk-VI-Strasse 52
8605 Kapfenberg, Austria
Phone: +43-3862-303-0 (Operator)
Fax: +43-3862-303-4 (Main Fax)
E-mail: office@bhd.at
Internet: www.bhd.at