

High Pressure & Extreme Conditions

Specialty Clamps Handbook · 2.0–20 MPa · -100°C to +200°C · DN50–DN600

Changzhou Baoshuo Pipe Fittings Co., Ltd.
www.baoshuopipe.com | sales@baoshuopipe.com

This handbook is for reference only. For actual application, please follow the technical advice provided during your consultation with us.

Version 1.0 · 2026

1. Handbook Overview

Specialty clamps are custom engineered for lines that fall outside standard service: high-pressure water and oil & gas systems, strong acids and alkalis, corrosive chemicals, hydrocarbons, steam and cryogenic media. A carbon steel body carries a condition-specific seal — NBR, FKM (bonded to the shell interior or coated with fluoroplastic), silicone or PTFE — selected against the actual media and temperature. Pressure ratings from 2.0 MPa up to 20 MPa, custom sizes DN50–DN600.

- Seven standard pressure tiers — or your exact spec in between.
- Five seal compounds matched to the media.
- Every clamp custom engineered and drawing-confirmed before production.
- Working range -100°C to +200°C with the right seal.

2. Pressure Rating — Up To 20 MPa

High-pressure clamps are custom engineered per project. Seven standard rating tiers are listed below — or your exact spec in between.

Rating	Typical Application
2.0 MPa	Municipal water · standard networks
2.5 MPa	Boosted supply · pump station outlets
4.0 MPa	Industrial water · chemical plants
6.0 MPa	High-pressure water · mine backfill
10 MPa	Oil & gas lines · pipeline repair
15 MPa	High-pressure injection · test lines
20 MPa	Special engineering · project-designed

3. Seal Compounds — The Right Seal For The Media

Seal choice decides the clamp's real-world envelope. Compare the five compounds we build with.

Seal	Temperature	Media Resistance	Best For
EPDM	-40°C ~ +130°C	Water · steam · mild acids/alkalis · ozone	Municipal water, wastewater (standard)
NBR (nitrile)	-30°C ~ +100°C	Mineral oil · fuel · lubricants	Petroleum, hydraulic, fuel lines
FKM (bonded / fluoroplastic-coated)	-20°C ~ +200°C	Strong acids · alkalis · solvents · chlorides	Chemical, plating, acid/alkali lines
Silicone (VMQ)	-60°C ~ +200°C	High-temp steam · hot oil · mild media	Steam and hot process lines
PTFE	-100°C ~ +200°C	Nearly all media · cryogenic	LNG, liquid nitrogen, ultra-low temp

4. Specialty Line — Six Condition-Specific Clamps



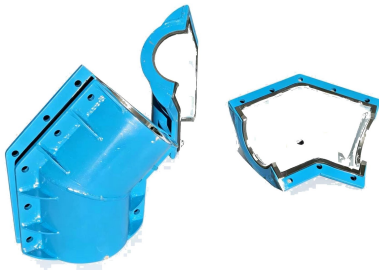
High Pressure Repair Clamp

DN50-DN600 · NBR · High Pressure; Oil Resistant



Acid & Alkali Resistant Repair Clamp

DN50-DN600 · FKM (Bonded to Shell Interior) · Acid & Alkali Resistant



Corrosion Resistant Repair Clamp

DN50-DN600 · FKM + Fluoroplastic Coating · Corrosion Resistant



Oil Resistant Repair Clamp

DN50-DN600 · NBR · Oil Resistant



High Temperature Repair Clamp

DN50-DN600 · Silicone (VMQ) · High Temperature



Ultra-Low Temperature Repair Clamp

DN50-DN600 · PTFE · Ultra-Low Temperature

All specialty clamps are manufactured to order — standard dimension and price tables are not published. Contact our sales team with your pipe type, size, pressure and quantity for a quotation.

5. Custom Engineering

Every specialty clamp is a custom build: body grade, bolt spec, seal compound and pressure rating are engineered against the actual line conditions.

- Step 01** **Tell Us The Line.** Pipe type, OD, pressure, media, temperature and quantity — one message is enough.
- Step 02** **We Engineer It.** Seal compound, body grade and bolt spec selected against the actual conditions.
- Step 03** **Quotation & Delivery.** Drawing confirmation, production and shipment.

Extreme Line? We Build The Clamp.

Send pipe type, OD, pressure, media and temperature — get a custom engineered quotation.

REQUEST A QUOTATION → SALES@BAOSHUOPIPE.COM

Contact Us

Talk to our sales & engineering team about your pipeline repair project.

Company	Changzhou Baoshuo Pipe Fittings Co., Ltd.
Address	No.15-2 Zhongyang Rd., Zhenxi Ind. Park, Henglin Town, Changzhou, Jiangsu, China
Website	www.baoshuopipe.com
Email	sales@baoshuopipe.com

Send Us Your Pipe Details

Pipe type, OD, pressure, media, temperature and quantity — a ready quotation within 24 hours.

Email: sales@baoshuopipe.com

Specifications subject to change without notice. The latest quotation is always subject to the actual sales quotation.

This handbook is for reference only. For actual application, please follow the technical advice provided during your consultation with us.