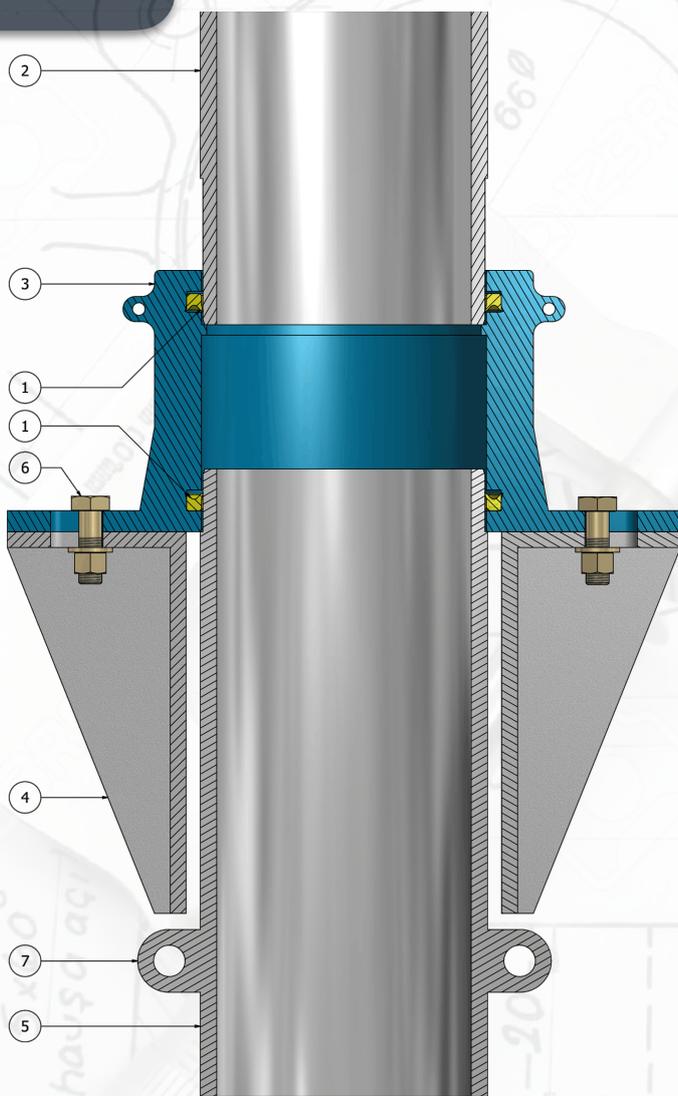




Hydrocore™ Thercom Coupling

HYDROCORE LIMITED

The smart solutions for your business



MATERIALS OF PARTS (50NB-100NB)

| PART | DESCRIPTION | 50NB - 100NB |
|------|--------------------|-------------------|
| 1 | Compression Seal | Polyurethane 90° |
| 2 | Pipe Top | Machined To Spec. |
| 3 | Thercom Coupling | Bs-3100 Grade A2 |
| 4 | Pipe Support | Steel |
| 5 | Pipe Top | Machined To Spec. |
| 6 | Bolt, Nut & Washer | Grade 8.8 |
| 7 | Lifting Lug | Steel |

GENERAL

The Thercom Coupling is a tailor-made coupling that enables the joining of pipes in a vertical shaft, which offers many advantages of which a few are listed below.

- Occupies small shaft space.
- Individual support of each pipe in the shaft.
- The coupling is a natural expansion joint.
- Low cost compared to flanges.
- Integrates the pipe support into the coupling structure.
- No bolting or welding is required for the pipe joining.
- Quick and easy handling of pipes in the shaft.
- Seals are not affected by water hammer occurrence.

DESIGN

Hydrocore Limited is the designer and the manufacturer of the Thercom Pipe Coupling. The mechanical design was verified by A.T.D, utilising the finite element analysis method. The testing procedure complies with:

- ASTM, bpv section viii and ASME/ASTM B31.3
- Anglo-American Technical Department (ATD)

PIPE MANUFACTURING

- Pipe ends are machined for thick wall pipes.
- Pipe ends are pre-machined and welded to the pipes for thin wall pipes.
- Pipes are coated after machining of the pipe ends.
- The pipe's wall thickness complies with manufacturing tolerances for pipes.
- The pipes lifting lugs are welded to the pipes and the mechanical strength is sufficient to lift the pipes.

PIPE HANDLING

- Plastic covers protect the pipe ends during transport and installation.
- The location of the pipe lifting lugs are designed to enable easy installation or removal of pipes in the shaft.
- Pipe ends will be checked by a n.g.d supervisor prior to the installation.

CORROSION PROTECTION

| | |
|------------------|-----------------------------|
| Pipe ends | : To be specified by client |
| Thercom coupling | : Hot-dip galvanized |
| Bolts | : Thermal diffusion zinc |

PIPING SPECIFICATION

| | |
|--------|----------------------------|
| Sizes | : 50Nb (2") - 1000Nb (40") |
| Rating | : Up To 250 Bar (3675 Psi) |

INSTALLATION TOLERANCES

| | |
|--------------------------------------|---------|
| Vertical misalignment | : ±20mm |
| Horizontal misalignment (9.0m pipes) | : ±50mm |
| Angular misalignment | : 0.5° |

- Pressure rating listed is for nominal working pressure.
- All Couplings are tested at 1.5 times the nominal working pressure.
- Test Pressure adheres to Von Misses Safety Factor.