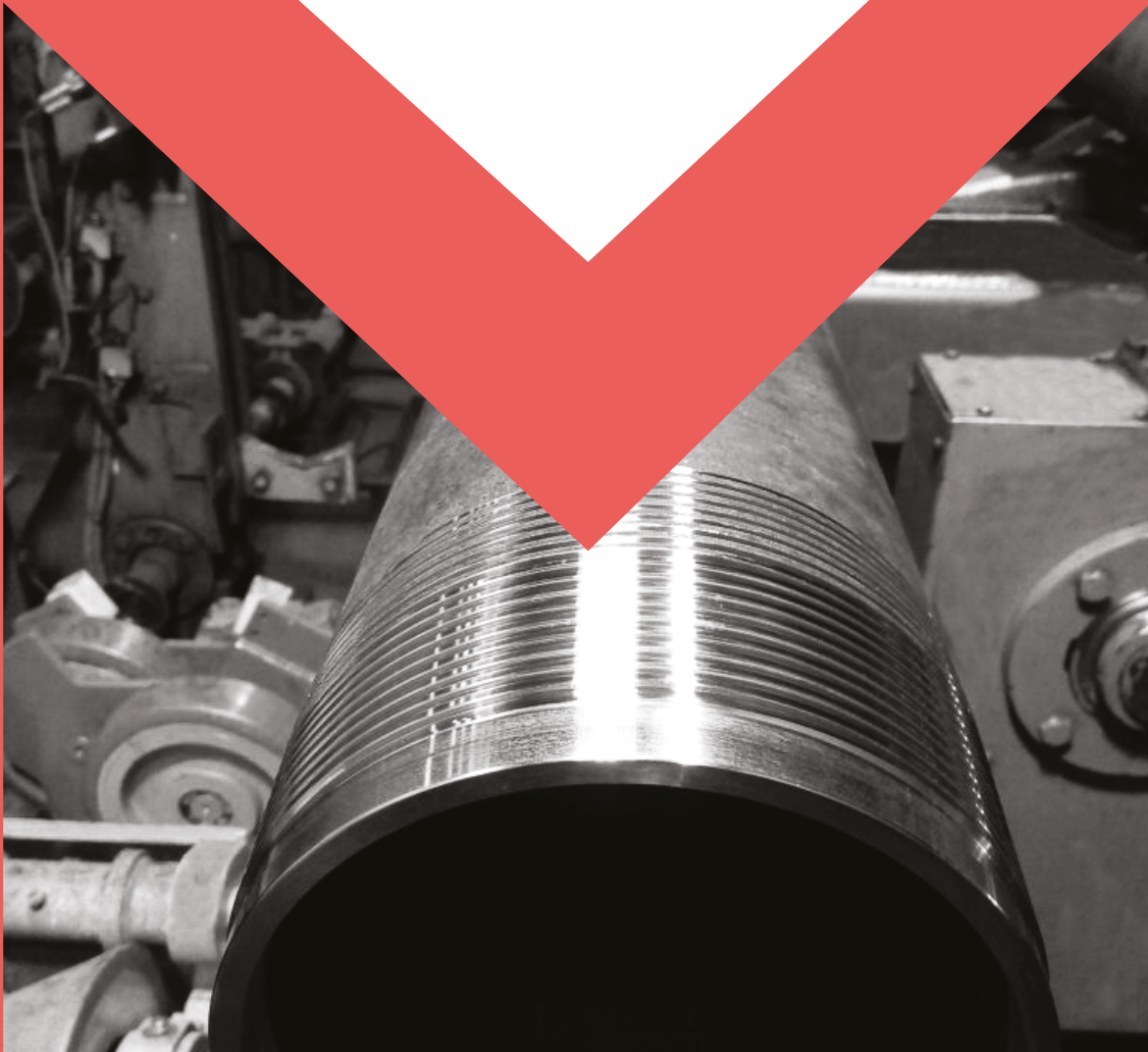


PREMIUM
CONNECTIONS ChT-2C



CHELPIPE
GROUP



CHT-2C PREMIUM CONNECTION

PURPOSE

Casing pipes with a nominal diameter of 114-178 mm with ChT-2C premium connections are designed for use in vertical, horizontal, and directional (inclination angle greater than 13°/10 m) oil, gas, and gas-condensate wells (including at offshore fields).

DESIGN FEATURES

ChT-2C is a premium connection for casing pipes, featuring a patented profile of the contour-type sealing assembly. The innovative seal design along with a tapered trapezoid thread ensures a high sealability of the connection subjected to a combination of stresses. The special design of the pin end ensures high radial stiffness, which guarantees sealability under extreme tensile stress (even when torque shoulders separate) and ensures high compression (80-100% depending on size).

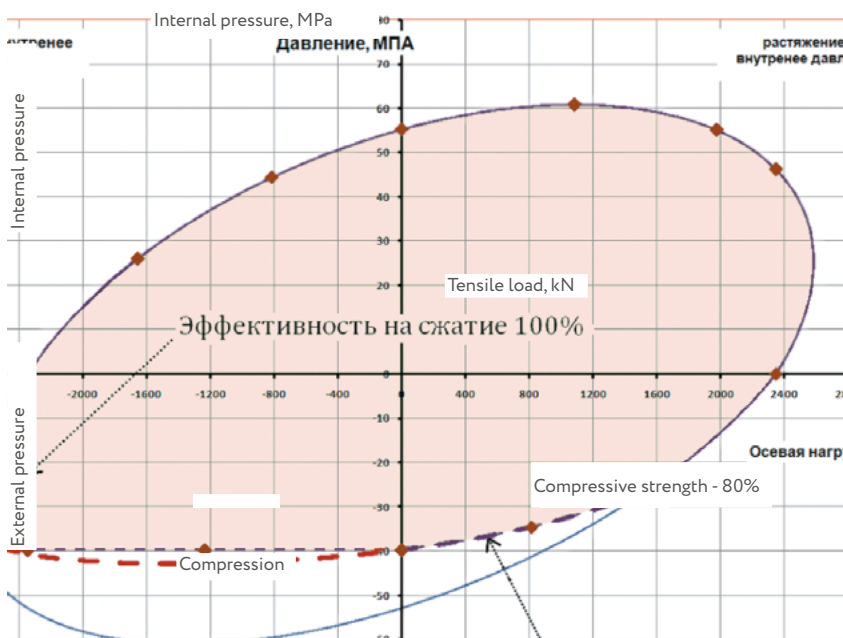
PERFORMANCE CHARACTERISTICS

The ChT-2C connection guarantees gas-tight performance in oil and gas wells under the following critical stresses:

- External pressure – 100% per API 5C3
- Internal pressure – 100% of pipe body
- Tension – 100% of pipe body
- Compression – 80-100% of pipe body (depending on size)
- Maximum wellbore deviation rate (dogleg severity) – 40°/100 ft (confirmed by results of gas-tightness bench tests performed by Gazprom VNIIGAZ).



CHT-2C VME PERFORMANCE ENVELOPE



DESIGN ADVANTAGES

THE PATENTED PROFILE of the contour-type sealing assembly maintains gas-tightness under combined and alternating stresses, outperforming the common types of metal-to-metal seals (Fig. 1).

THE SPECIAL DESIGN OF THE PIN END allows using the ChT-2C connection in casing drilling while maintaining gas-tight performance and ensuring a high maximum makeup torque (Fig. 2).

EASY AND QUICK PIPE MAKEUP owing to a steep taper and an improved thread profile.

NEGATIVE ANGLE OF THE LOADING FLANK in combination with the optimized design of the sealing assembly and torque shoulder keeps the connection gas-tight when the wellbore deviation rate (dogleg severity) exceeds $13^{\circ}/10$ m.

ADDITIONAL PROTECTION against damage during makeup, servicing, and transportation owing to a sealing portion that is far removed from the pipe end.

THREAD-DOPE POCKET

FLUSH-JOINT inside diameter.

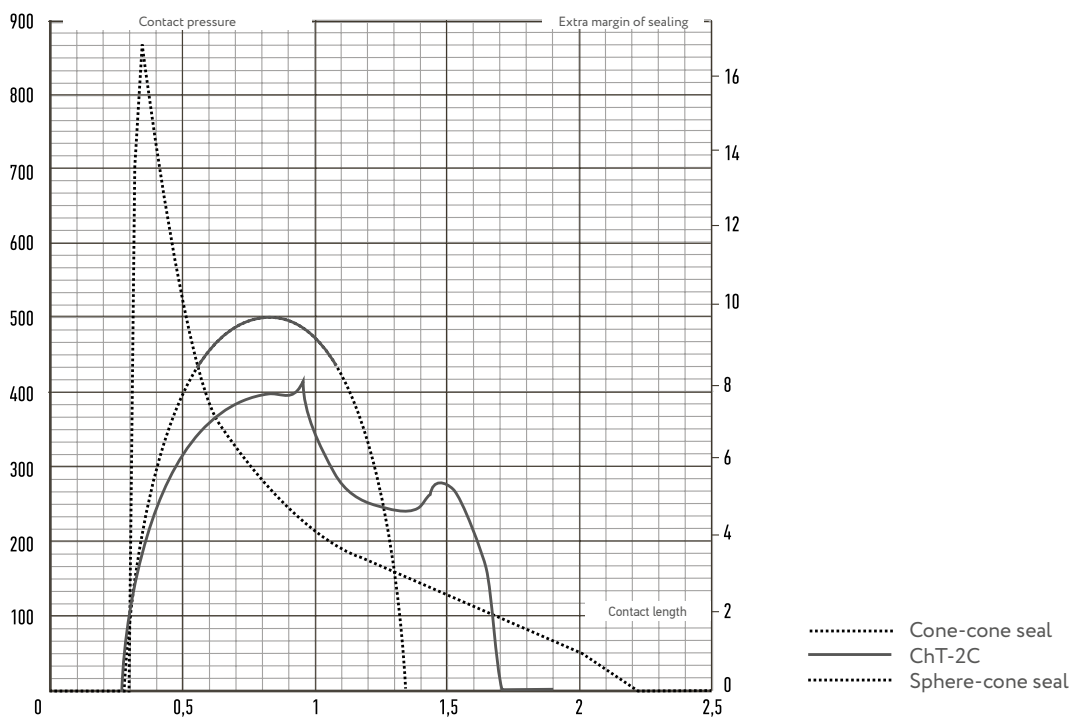


Fig. 1. Distribution of Contact Pressures in Different Seal Types

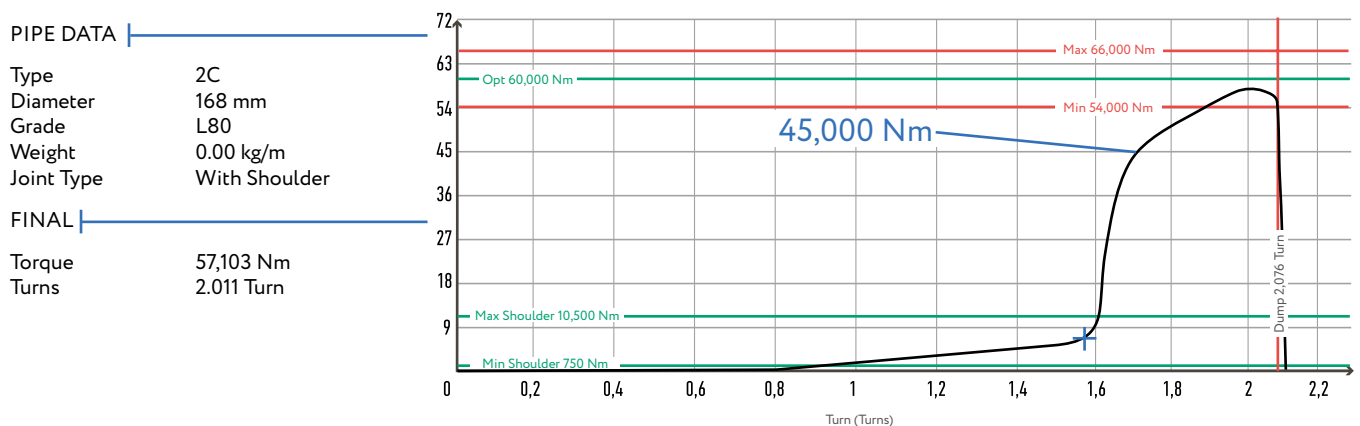


Fig. 2. Maximum makeup torque for the ChT-2C premium connection, $\varnothing 168.28 \times 8.94$, strength class L-80, Type 1



**CHELPIPE
GROUP**

SALES DEPARTMENT

5 Lesnaya St. bld B, Moscow, Russia, 125047; tel: +7 495 775 35 55

21 Mashinostroiteley St., Chelyabinsk, Russia, 454129; tel: +7 351 255 73 33

1 Torgovaya St., Pervouralsk, Sverdlovsk region, Russia, 623112; tel: +7 3439 27 77 77

www.chelpipe.ru