

Original Chiksan® Swivel Joints

TripleStep Swivel Joints

Advanced material selection

The TripleStep swivel joint is manufactured from forged alloy steel with a closely controlled, proprietary chemical composition and heat treatment to ensure superior toughness, ductility, case depth, case hardness, and core strength.

Exclusive design delivers longer life, lower cost

TripleStep swivel joints deliver the highest bending and axial load capacities in the industry. They also eliminate rejections from excessive wear in the ball race area as well as swivel seizures due to corrosion and brinelling of the ball races.

Unmatched erosion allowance

An exclusive three step design coupled with patented bearing race geometry adds significant wall thickness under the male races without increasing swivel joint size or weight.

Competitive Hype VS. Proof Positive

Designed especially for abrasive, high-pressure well servicing applications, TripleStep swivel joints have been proven against competitive swivels in customer-witnessed flow loop tests and field applications. The unique three step ball race design provides significantly greater erosion allowance without increasing swivel joint size or weight. The result: TripleStep swivel joints deliver increased life, superior performance, and reduced maintenance...lasting 2-1/2 to 5 times longer than competitive swivels.

Thicker Where it Counts

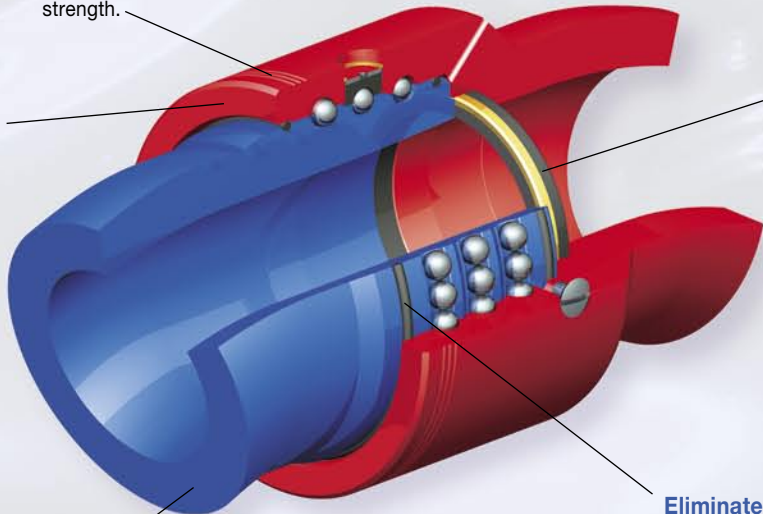
Competitive swivels wear out first in the ball races, meaning they must be disassembled for inspection. TripleStep swivels wear in the elbows, meaning they can be inspected and returned to service without disassembly. The TripleStep design places more material under the male ball race – a location that computational flow dynamics analysis and field testing shows to be a high erosion area.

Instream packing for long seal life

World proven instream packing technology provides unsurpassed sealability and reliability in the harshest oilfield conditions. An integral anti-extrusion ring serves as a retainer and bearing to reduce friction between the resilient packing material and the packing chamber as the joint is rotated.

Eliminates routine maintenance

An improved environmental seal reduces the potential for corrosion in the ball race area. The integrity of the seal and the use of a high-performance grease during initial assembly virtually eliminates the need for periodic greasing.



Accelerated Wear Test (40ft/sec. with 6 ppa 20/40 northern sand)

