MECHANICAL CONNECTOR

The GMC Mechanical Connector sets a new industry standard for the mechanical connection of tubular products.

Utilised for multiple high-fatigue applications, GMC’s connector offers higher fatigue-resistance, faster connectivity, no torquing, and reusability, whilst employing a variety of multifunctional vessels.

Tested & Qualified by DNV to ISO:21329:2004, the GMC Connector is one of the first mechanical connectors to meet this high standard.

GMC Mechanical Connector Design

- Pin & Box Mechanical Connector
- Concentrically Grooved
- Multiple Metal-to-Metal Nib Seals
- ID & OD Pre-loaded Contact Shoulder
- Highly Fatigue Resistant
- Mechanical Lock Out of Torque Effects
- Fast Make-Break Cycles with Pressure Tool
- A current size range from 6” to 60” Ø.

GMC Mechanical Connector Benefits

- Stronger
- Longer Fatigue Life
- Rapid Connection
- Reusable Make/Break
- Consistent Quality
- Available in a Range of Sizes
- Dynamic Applications
- Patent Protection

GMC Connector Tooling

The connector is made up with GMC’s hydraulic make/break tooling in a quick and simple make-up procedure. In the event that the connector is to be broken out, the same process is used in reverse.
ISO:21329 Testing & Qualification

ISO:21329 – The international standard specifying requirements and providing guidance for the testing of mechanical connectors for use in pipeline transportation systems for the petroleum and natural gas industries.

**Fatigue Cycle Testing** - All tested connectors met or exceeded DNV “C1” curve. The fatigue life tested 10X better than field welded pipe (DNV E) in all series of tests.

The GMC Mechanical Connector successfully completed all DNV ISO:21329 required testing and was awarded certification in 2010.

As of September 2013, ISO:21329:2004 is also classified to meet the API Standard 2RD:2013, Dynamic Risers for Floating Production Systems.

**Intelligently Connected Pipe (ICP™)**

The GMC Mechanical Connector is the core technology behind our pipe connection technology, Intelligently Connected Pipe, or ICP™.

ICP™ delivers a more robust pipeline, whilst simplifying and reducing installation costs. ICP™ allows the time consuming joining operation to be performed onshore, off the critical path. During offshore operations, only the fast coupling of the male and female connector is performed by a single connector station.

As a result, the offshore installation contractor can effectively reduce the stand-by time and the actual operation time of the installation vessel and personnel with better planning and with more efficient technology.

**GMC Mechanical Connector Applications**

- 20K PSI Riser Systems
- Caisson Replacements
- CRA Clad Risers
- Completion/Work Over Risers (CWOR)
- Drilling / Marine Risers
- Free Standing Hybrid Riser (FSHR)
- HPHT Well Conductors
- Intelligently Connected Pipe (ICP™)
- NACE Specification Riser Systems
- Offloading Lines -OLL
- Pipeline Repair Systems
- Pipelines
- Riser Systems
- Steel Catenary Risers (SCR)
- Subsea Jewellery Connection System
- TLP Tendons
- Top tension Risers (TTR)
- Ultra Deepwater Riser Systems
- Water Intake Risers (WIR)
- Jumper in a Box (Metrology Jumpers)