SUBSEA HARDWARE
Deepwater Production Manifolds

Experience where it counts. Innovation where it matters.

Since 1990

1400m WD in Mississippi Canyon, USGoM, 2014
**GMC Design & Build - Production Manifolds**

**Phase 1:**
Design to select an appropriate foundation for the given manifold size, field layout and soil conditions. Preliminary sizing was done for mud mat and suction pile foundation designs with the suction pile being chosen as the most economical option.

The suction pile design included structural integrity, ROV interface, flood and vent valves, coating and markings, cathodic protection, manifold interface and installation aids.

**Phase 2:**
The 8-hub manifold was designed in accordance with client supplied Basis of Design. The design met requirements for structural integrity, foundation interface, initial and future jumper loading, coating, piping interface, cathodic protection, ROV interface, control routing and support, dropped object protection and installation loads.

**Scope of Work**

**Manifold Design**
- Review Client Data, Including Soils & Foundation Requirements
- Develop Manifold Arrangement
- Develop Framing Plan
- Foundation Interface Design
- ROV Interface Design
- Design Pipe Supports
- Design Protection - Dropped Object, Snag, etc.
- Design Cable Trays/Supports/Routing
- Design Installation Aids
- Mto And Weight Report
- Perform Stress Analysis
- Cathodic Protection
- Engineering Support
- Documentation
- Preliminary Installation Engineering
- Installation Support
- As-Built Drawings

**Foundation Design**
- Mudmat/Pile Concept Comparison
- Pile Structural Design
- Pile-Soil Interaction Design
- Manifold Interface
- ROV Interface
- Cathodic Protection
- Coating And Markings
- Installation/ Setting Aids
- As-Built Drawings

**ABOUT GMC**

GMC is an industry leader in innovative engineering, project management, and installation solutions and products, from the seabed to the surface, for offshore oil and gas SURF, drilling, and production projects. Established in 1990, GMC has offices in the UK and USA.