

GVA

A KBR Company

Master of the Oceans

GVA 7600



GVA | Semi-submersible drilling rig



GVA 7600: THE NEXT GENERATION SEMI-SUBMERSIBLE DRILLING RIG

Experience and knowledge-based engineering

- Blending new and proven design technologies
- Incorporating experience from the six units of the GVA 7500 series now in service
- Fabrication-friendly – taking account of experience from leading yards
- Applying four decades of design experience, based on over 40 semi-submersibles designs

Operability

- Excellent global performance
- Improved operability of up to 15% from our previous designs
- Optimised Moonpool, allowing operations in harsher conditions
- Enhanced handling of heavy equipment (such as X-tree and BOP)

Increased efficiency

- Optimised materials handling
- Efficient, safe lifting operations – “Line-of-sight” and parallel handling
- Multi-deck skidding system – minimised lifting of heavy equipment
- Optimised internal logistics

Safety performance

- Designed to comply with the most stringent future safety requirements
- Supported by a full spectrum of safety studies

Working environment

- Highly automated, remote controlled handling of heavy equipment
- Improved onboard logistics
- Applying the results of extensive studies of the work environment

Environmental performance

- Low emissions – for future Tier III compliance
- Zero discharge – three separate drain systems: non-contaminated areas, non-polluted hazardous drain, hazardous drain

Two principal configurations

- Deep water configurations – 1.500 m to 3.400 m
- Mid water configurations – 100 m to 1.500 m

Flexible rig design

- Large deck areas
- Accepts all leading drilling equipment options
- VDL capacity up to 9,500 mt

| Configured for flexibility | Ultra deep water | | | Mid water | | | |
|----------------------------|------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | Harsh | Moderate | | Harsh | | | Moderate |
| Operating Area | Worldwide | GoM | Brazil | Barents | NCS | Canada | China |
| VDL (Variable Deck Load) | 7,600 mt | 9,500 mt | 9,500 mt | 6,500 mt | 7,000 mt | 7,500 mt | 9,500 mt |
| POB (People On Board) | 160 persons | 160 persons | 160 persons | 130 persons | 130 persons | 160 persons | 160 persons |
| 8 point mooring | – | – | – | • | • | • | • |
| 12 point mooring | – | ◦ | – | ◦ | ◦ | – | ◦ |
| Emergency mooring | • | • | • | • | • | • | • |
| DP 2 | • | • | • | ◦ | ◦ | • | • |
| DP 3 | ◦ | ◦ | ◦ | • | • | ◦ | ◦ |
| Single derrick | • | • | • | • | • | • | • |
| Double derrick | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ |
| N-line tensioners | • | • | • | ◦ | ◦ | ◦ | ◦ |
| Wireline tensioners | ◦ | ◦ | ◦ | • | • | • | • |
| Winterisation | ◦ | ◦ | ◦ | • | • | ◦ | ◦ |
| Norsok regulations | ◦ | ◦ | ◦ | • | • | ◦ | ◦ |

• = Standard, ◦ = Optional

GVA 7600 – SEMI-SUBMERSIBLE

| | |
|-------------------------|----------------------------------------------------------------------------------------|
| Operational area | For worldwide deployment, including North Sea (mild to harsh environmental conditions) |
| Operational water depth | 100–3,400 m (10,000 ft) |
| Drilling depth | Up to 12,000 m (40,000 ft) |
| Regulations | Norwegian NMD & PSA, UK HSE, US Coast Guard, IMO MODU Code 2009, IMO DP Class 3 |
| Classification | DNV, ABS, Lloyd's |
| Accommodation | 160 persons |

MAIN PARTICULARS

| | | |
|-------------------------------------|----------------|----------------|
| Length overall | abt 116.0 m | abt 380.6 ft |
| Width overall | abt 100.0 m | abt 328.1 ft |
| Width outside pontoons | 78.0 m | 255.9 ft |
| Length of pontoons | 109.2 m | 358.3 ft |
| Height of pontoons | 10.4 m | 34.1 ft |
| Height to main deck | 44.9 m | 147.3 ft |
| Height of deck box | 8.5 m | 27.9 ft |
| Four columns | 17.55 x 16.9 m | 57.6 x 55.4 ft |
| Transit draught | 10.1 m | 33.1 ft |
| Transit displacement | 42,700 mt | 47,069 st |
| Transit deck and column payload | 5,500 mt | 6,063 st |
| Operational draught | 23.15 m | 76.0 ft |
| Operational displacement | 59,300 mt | 65,367 st |
| Operational deck and column payload | 7,600 mt | 8,378 st |
| Survival draught | 19.15 m | 62.8 ft |
| Air gap, survival | 17.25 m | 56.6 ft |

MAIN MARINE SYSTEMS / EQUIPMENT

| | | |
|------------------|----------------------------|-----------|
| Power generation | 8 x 5,500 kW | – x – hp |
| Thrusters | 8 x 4,000 kW | – x – hp |
| Thruster control | | DP 3 |
| Mooring system | 8 point mooring, all chain | |
| Main deck cranes | 2 x 85 mt | 2 x 93 st |

MAIN DRILLING SYSTEMS / EQUIPMENT

| | | |
|--------------------------------|-----------------------------|---------------|
| Derrick for up to 95 ft stands | 1,135 mt | 1,250 st |
| Top drive | 1,135 mt | 1,250 st |
| Drawworks | 1,135 mt | 1,250 st |
| Riser tensioners | 1,360 mt | 3,000,000 lbs |
| Drilling riser | | 75 ft joints |
| Mud pumps | 4 x 1,700 kW | 4 x 2,200 hp |
| BOP Stack | Possible 20,000 psi, 7 rams | |

TANK / STORAGE CAPACITIES

| | | |
|---------------------------|----------------------|-------------|
| Fuel oil | 3,000 m ³ | 18,870 bbls |
| Drill water | 2,600 m ³ | 16,350 bbls |
| Potable water | 600 m ³ | 3,770 bbls |
| Mud storage, column tanks | 700 m ³ | 24,720 cbft |
| Mud pits | 900 m ³ | 31,780 cbft |
| Completion fluid | 900 m ³ | 5,660 bbls |
| Base oil | 6700 m ³ | 4,210 bbls |
| Bulk cement | 280 m ³ | 9,880 cbft |
| Sack storage | 280 m ² | 3,010 sqft |
| Barite/Bentonite | 620 m ³ | 21,800 cbft |