

Wirth Single Gear Drawworks

Hoisting system for land drilling applications

Our single gear drawworks combine a compact and maintenance-friendly design with high flexibility and performance to excel in the land drilling industry

Product description

HMH's field-proven drawworks are the hoisting system which raises and lowers the travelling block and the equipment underneath. Our compact single gear drawworks for land applications set new standards for a well-balanced ratio between load and speed performance. Single gear technology eliminates the need to change gears resulting in smooth round tripping and stand building operations. This provides a comfortable handling environment for the operator.

Our light-weight drawworks have a small footprint and they are designed to meet the requirements of land applications, i. e. easy transportation and quick rig moves, as well as flexible and cost-efficient rig setups.

The low-maintenance design with a reduced number of moving parts and a simple hydraulic system results in low service costs.

HMH's drawworks are leading in HSSE standards with our fail-safe hydraulic braking system and the wireline protection system (WPS). It prevents the "bird's-nest" effect during a sudden stop in hoisting operations. Our unique rope-clamping device with a detachable wire line anchor

Benefits

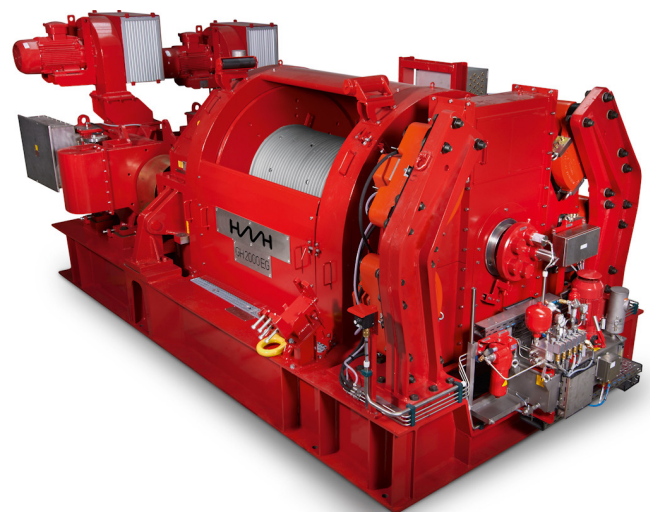
- Up to 40% less footprint and weight compared to traditional drawworks for flexible and cost-efficient rig setups, easy transportation and quick rig moves
- Auto driller system (ADS) for highest availability and efficiency
- Fast and safe cut and slip operations
- Well-balanced ratio between load and speed performance
- Low-maintenance design and CBM capabilities maximize availability and uptime, resulting in lowest operational costs
- Extended in-house testing facilities

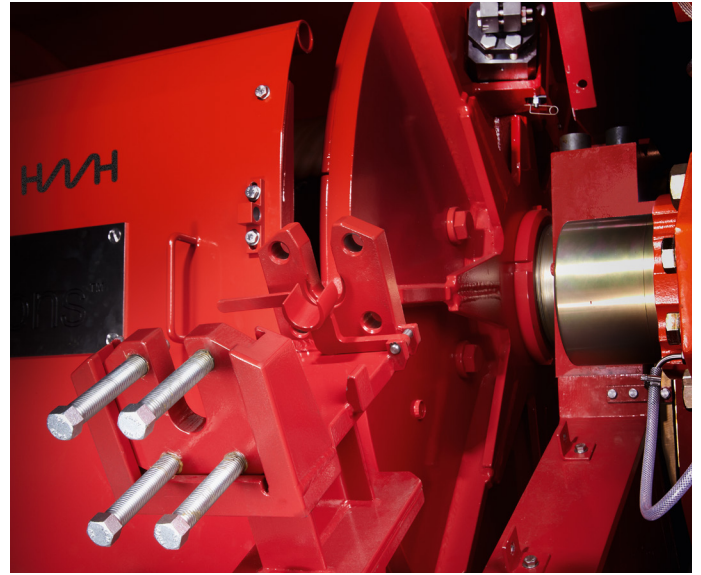
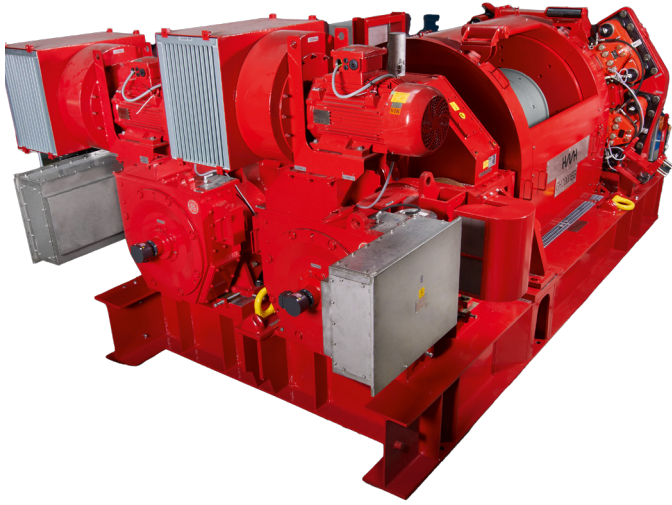
eases cut-and-slip operations, and scales back non-productive time and risks.

The intuitive and flexible-to-configure human machine interface (HMI) of our drawworks' control system allows the driller to focus on the most critical information. This results in higher drilling efficiency and safer working conditions. Our single gear drawworks are accredited in accordance with API-7K.

Key features

- Different drum sizes for various configurations of wire and mast arrangements
- Double filter system to reduce unproductive time during filter changes
- Reduced motor mode to operate the drawworks with one motor out of service
- Secondary crown safer for additional crown protection
- Online system allows our 24/7 technical service to diagnose and assist remotely
- Extended verification of drawworks and its control system on our unique in-house test facilities
- Condition based maintenance (CBM) system





Technical specifications

		GH 1000 EG-AC-1G	GH 1500 EG-AC-1G	GH 2000 EG-AC-1G	GH 3000 EG-AC-1G
Rig performance rating, max.		1 000 hp (746 kW)	1 500 hp (1 190 kW)	2 000 hp (1 491 kW)	3 000 hp (2 237 kW)
Rig capacity, max.		250 short tons (227 mT)	375 short tons (340 mT)	500 short tons (454 mT)	650 short tons (590 mT)
Standard main motors		One AC, forced ventilated		Two AC, forced ventilated	
Lifting capacity first layer, max.		311 short tons (622 lbs x 1 000) with 10 lines	453 short tons (906 lbs x 1 000) with 10 lines	611 short tons (1 222 lbs x 1 000) with 12 lines	831 short tons (1 662 lbs x 1 000) with 12 lines
Lifting capacity fourth layer		251 short tons (502 lbs x 1 000) with 10 lines	365 short tons (730 lbs x 1 000) with 10 lines	502 short tons (1 004 lbs x 1 000) with 12 lines	685 short tons (1 370 lbs x 1 000) with 12 lines
Block speed, max.		157 ft/min (0.8 m/sec) with 10 lines	179 ft/min (0.9 m/sec) with 10 lines	157 ft/min (0.8 m/sec) with 12 lines	224 ft/min (1.1 m/sec) with 12 lines
Dry weight		61 729 lb (28 000 kg)	63 934 lb (29 000 kg)	66 139 lb (30 000 kg)	74 957 lb (34 000 kg)
Dimensions	Length	177 in (4 500 mm)		227 in (5 764 mm)	
	Width	110 in (2 800 mm)		106 in (2 700 mm)	
	Height	98 in (2 500 mm)		98 in (2 492 mm)	

Data is subject to confirmation by the manufacturer.