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Horizontalbohranlagen

DD-110 Horizontalbohranlage



FEATURES

The newest design on the 100,000 drill block.

- Hydraulic system with today's workloads in mind
- Flexible operator controls for all operators on the market
- Simple systems for increased reliability
- Big power in a small weight conscience package
- Speed to improve productivity



SPECIFICATIONS

Power Train

- **Engine**Cummins QS5B6.7 Tier 4 final (or Tier 3 depending on country of purchase)
- **Rating**260 HP @ 2200 RPM (164 kW)
- **Fuel Capacity**81 U.S. Gallons (306 L)
- **Hydraulic Capacity**107 U.S. Gallons (405 L)
- **Battery**(2) Deka 908DMF 12 V, 1450 CCA - 24 V System

Carriage System

- **Carriage System**(4) Pinion drive with adjustable force limiter
- **Maximum Thrust/Pullback**110,000 lbs. (50 Tonnes)
- **Maximum Carriage Speed**170 ft. (52 m)/minute
- **Carriage Motors**(4) Radial piston / dual displacement
- **Carriage Brakes**(2) Spring applied / hydraulic release
- **Gearbox**(4) Planetary gearboxes

Rotary Drive

- **Rotary System**(1) Pinion and Gear Drive with Infinitely Variable Torque
- **Maximum Rotary Torque**15,000 ft-lbs. (20,337 Nm)
- **Maximum Rotary Speed**150 RPM
- **Rotary Motor**(1) Radial piston Variable Displacement
- **Rotary Brakes**(1) Spring Applied/Hydraulic Release
- **Rotary Gearbox**(1) Planetary Drive
- **Fluid Course**2 in. (50 mm)
- **Maximum Flow**250 U.S. Gallons (945 L)/minute flow
- **Maximum Pressure**1,500 psi (103 bar)
- **Side-Entry Sub**2 7/8 in. (73 mm) IF
- **Slip Spindle**2 7/8 in. (73 mm) IF
- **Misc.**Wireline Commutator, Slip Ring, Wiggle Steer®, adjustable torque limiter, digital tachometer

Wrench

- **Wrench Design**Open-Top Style
- **Clamp/Grip Range**2 7/8 in. – 4 1/8 in. (73 - 105 mm)
- **Maximum Breakout Torque**32,000 ft-lbs. (43,390 Nm)



- **Maximum Makeup Torque** 26,000 ft-lbs. (35,250 Nm)

Drill Rig

- **Drill Pipe Length** 20 ft. (6.10 m)
- **Drill Angle** 10-18°
- **Cabin** on-board, articulated
- **Max. Pipe Basket Capacity** (9) Pieces of drill pipe
- **Max. On-Board Baskets** WORKING: 2
- **Max. On-Board Baskets** TRANSPORT: 1
- (3) Pieces drill pipe in on-board staging area

Miscellaneous

- **Outside Tube Diam.** 3.5 in. (89 mm)
- **Tool Joint Outside Diam.** 4.125 in. (105 mm)
- **Thread Type** 2.875 in. (73 mm) IF pin x box
- **Fluid Course** 1.5 in. (44.5 mm)
- **Pump** Triplex piston pump
- **Max. Flow** 200 U.S. gallons (757 L) / minute
- **Max. Pressure** 1,100 psi (75.8 bar)
- **Self-propelled, Wireless control**
- **Travel Speed** 2.25 mph (3.62 kph) forward & reverse
- **Ground Bearing Pressure** 12 psi (.83 bar)

Weights

- **Transport** 47,074 lbs. (19,051 kg)
- **Accessory Crate** 1,300 lb. (590 kg)
- **Working** 51,074 lbs. (23,167 kg)
- **Drill Pipe Weight** 358 lbs. (162.4 kg) each

Dimensions

- **Length** 35 ft. 7 in. (10.84 m)
- **Width** 8 ft. 2 in. (2.49 m)
- **Height** 9 ft. 5 in. (2.87 m)
- **Track Width** 2 in. (2.5 m)



DD-240T Horizontalbohranlage



FEATURES

A truly customer-driven design in a rugged package for tough environments

- The patented Dual man onboard offboard cab for fitting a wide variety of job sites
- Full length traveling wrenches to assist those stubborn tool joints and allowing to pull tooling up on the drill frame
- American Auger's standard slip spindle that can be easily changed when needed
- Low spindle center allows the pipe to enter the ground closer to the drill when entering at low angles
- A new MTU Engine that was designed for Tier 4 Final applications. It does not require a regen cycle and loves it when you work it hard

SPECIFICATIONS

Power Train

- **Engine** MTU 6R1300 Tier 4
- **Rating** 523 HP (390 kW)
- **Fuel Capacity** 178 U.S. Gallons (674 L)



- **Hydraulic Capacity**120 U.S. Gallons (454 L)
- **Hydraulic Filter**High-Pressure Filtration Return to 6 Micron ABS

Carriage System

- **Maximum Thrust/Pullback**240,000 lbs. (108 Tonnes)
- **Carriage System**Rack & Pinion, (4) Pinion Drive with Adjustable Force Limiter
- **Maximum Carriage Speed**150 ft. (46 m)/minute
- **Carriage Motors**(4) Hydraulic 160cc, Radial Piston/Dual Displacement
- **Carriage Brakes**(2) Spring Applied/Hydraulic Release
- **Carriage Gearbox**(4) Planetary Drives

Rotary Drive

- **Rotary System**(2) Pinion & Gear Drive with Infinitely Variable Torque
- **Maximum Rotary Torque**43,900 ft-lbs. (59,520 Nm) @ 37 RPM
- **Maximum Rotary Speed**150 RPM
- **Rotary Motors**(2) Hydraulic, 486cc, Axial Piston, Variable Displacement
- **Rotary Brakes**(1) Spring Applied/Hydraulic Release
- **Fluid Course**3 in. (76 mm)
- **Mud Swivel**Rear Mounted, 4 N.P.T.L.H x 3
- **Slip Spindle**5.5 in. (13.97 mm) API-IF Pin
- **Other Features**Digital Tachometer, Adjustable Torque Limiter, Wiggle Steer®

Wrench

- **Wrench Style**Triple Jaw with 10 in. (245 mm) Separation
- **Maximum Breakout Torque**80,000 ft-lbs. (108,465 Nm)
- **Clamp/Grip Range**4-1/2 in. to 8-1/2 in. (114 – 216 mm) OD

Drill Rig

- **Drill Angle**10° - 18°, wireless tramming and setup
- **Drill Pipe**20 ft. or Range II 4-1/2 in. and 5-1/2 in. API pipe
- **Travel System**
- Self Propelled on Undercarriage Steel Track Crawler Assembly
- **Maximum Travel Speed:** 1.4 mph (2.25 kph)



Safety

- Es!Lok – Exit Side Lockout System with 5,280 ft. (1,609 m) Range
- ZAPALERT – Electrical Detection Device
- Engine Shutdown Switch at the Operators Console, Shutdown at Engine Controller, (8) hinged handrails for full-length thrust frame walkway

Dimensions (can vary)

- **Length** 52.5 ft. (16 m)
- **Width** 8.167 ft. (2.5 m) w/ pipe loader option 100.25 in. (2.54 m) w/ full walkway option
- **Height** 11.5 ft. (3.5 m)

Weights (can vary)

- **Range 2, walkway, 2 man cabin** 80,520 transport weight (no foot)
- **Range 2, Pipe loader, 2 man cabin** 81,510 transport weight (no foot)



DD-440T Horizontalbohranlage



FEATURES

The industry standard 200 tonne drill with a proven track record of reliable performance. It is the model that all others are compared to.

- Wireless ground drive control allows the operator to set the unit up without being constrained to one area.
- Standard Telematics for service information and office communication with daily work progress
- Full length traveling wrenches that can be removed for shipping and servicing
- Optional 80,000 ft*lbs of rotary torque
- New 3 ½ inch fluid course for up to 825 gpm of drill fluid flow



SPECIFICATIONS

Power Train

- **Engine**Cummins QSX15 Tier 4 final or Tier 3 (depending on country of purchase) Diesel
- **Rating**600 HP (447 kW)
- **Fuel Capacity**160 U.S. Gallons (605 L)
- **Hydraulic Capacity**200 U.S. Gallons (757 L)
- **Battery**(2) Deka 908DMF 12 V, 1450 CCA

Quiet-Pak®

- Noise reducing acoustical foam in the engine enclosure.

Wiggle Steer®

- The *Wiggle Steer® System* provides the operator of a directional drill the means to rotate the drill pipe and subsequently the cutting head on the drill string back and forth over a predetermined range. This back and forth motion would cause the hole made by the cutting head to be more open in a particular direction and therefore facilitate steering of the drilling pipe in that direction underground.

Carriage System

- **Maximum Thrust/Pullback**440,000 lbs. (200 Tonnes)
- **Carriage System**440,000 lbs. (200 Tonnes)
- **Maximum Carriage Speed**95 ft. (29 m)/minute
- **Carriage Motors**(2) Hydraulic 1017 cc, Variable Displacement
- **Carriage Gearbox**(2) Planetary Drives

Rotary Drive

- **Rotary System**(3) Pinion & Gear Drive with Infinitely Variable Torque
- **Maximum Rotary Torque**60,000 ft.-lbs. (80,000 Nm) @ 0 – 25 RPM
- **Maximum Rotary Speed**97 RPM
- **Rotary Motors**(3) 160cc Hydraulic Axial Piston/Variable Displacement
- **Rotary Brakes**(2) Spring Applied/Hydraulic Release



- **Fluid Course** 3.5 in. (88.9 mm)
- **Mud Flow Rate** Permits up to 825 U.S. Gallons /minute
- **Maximum Mud Pressure** 1,500 psi (103.4 bar)
- **Mud Swivel** Rear Mounted, 5 in. (127 mm) IFLH Pin

Wrench

- **Wrench Travel** Wrench has full-length thrust frame travel with hose carrier
- **Maximum Breakout Torque** 230,000 ft-lbs. (311,839 Nm)
- **Maximum Makeup Torque** 152,000 ft-lbs. (206,085 Nm)
- **Clamp/Grip Range** 3 in. – 11 3/4 in. (76 – 298 mm) OD
- **Wrench Assembly Motor** (2) Hydraulic LSHT, 18.3 CIR
- **Wrench Assembly Brake** (1) Spring Applied/Hydraulic Release
- **Wrench Gearbox** (2) SGL
- **Hydraulic Wrench Cylinder** (6) 8 in. Bore x 3 in. Stroke (203 - 76.2 mm) (6) 8 in. Bore x 3 in. Stroke (203 - 76.2 mm)

Drill Rig

- **Drill Angle** 10° - 18°
- **Drill Pipe** Range II – 34 ft. (10.4 m)

Safety

- Es!Lok – Exit Side Lockout System with 1 mile (1.6 km) Range
- Wiggle Steer®
- Free standing operator's console with pressure gauges with 17" Touch Screen Display
- Safety system package with ZapAlert
- operator's manual and other unit support materials

Transport Dimensions

- **Transport Dimensions** 50 ft. 9in. (15.47 m)
- **Width** 8 ft. 2 in. (2.51 m)
- **Height** 11 ft. 10 in. (3.61 m)

Transport Weights

- **Total Weight** 98,060 lbs. (44,479 kg)
- **Total Weight w/o Wrench** 90,260 lbs. (40,941 kg) – Wrench is Removable for Lighter Transport



DD-660RS Horizontalbohranlage



FEATURES

Our newest Maxi rig design that provides the latest in mobility and performance

- Rapid setup features to decrease the time and effort to get to work
- Hydraulically adjusted pipe support ensuring the pipe joints are always in the right position
- Optional pipe loader that transports on the drill unit
- Dual power units that feature ROOTS (Run On One Technology System) to reduce fuel cost during the pilot bore
- Standard Telematics for communicating with the rig during operation

SPECIFICATIONS

Power Train

- **Engine**Cummins QSX15 Tier 4 Final (or Tier 3 depending on country of purchase)
- **Rating**600 HP (447 kW) each
- **Fuel Capacity**650 U.S. Gallons (2,460 L)
- **Hydraulic Filter**High Pressure Filtration and Return to 6 Micron ABS
- **Battery**(2) Deka 908DMF 24 V, 1450 CCA

Carriage System

- **Maximum Thrust/Pullback**660,000 lbs. (300 Tonnes)



- Carriage System Rack & Pinion, (4) Pinion with Adjustable Force Limiter
- Maximum Carriage Speed 107 ft. (33 m)/minute
- Carriage Motors (4) Radial Piston/Dual Displacement
- Carriage Brakes (2) Only on Carriage
- Carriage Gearbox (4) Planetary Gearboxes
- Hydraulic Pump (4) Piston Pump, Closed Loop

Rotary Drive

- Rotary System (4) Pinion & Gear Drive w/Infinitely Variable Torque
- Maximum Rotary Torque 80,000 ft.-lbs. (108,460 Nm) @ 0 – 34 RPM
- Minimum Rotary Torque 30,000 ft.-lbs. (40,675 Nm) @ 0 – 90 RPM
- Maximum Rotary Speed 90 RPM
- Fluid Course 3.5 in. (88.9 mm) for increased downhole hydraulic power
- Mud Flow Rate Permits up to 1000 U.S. Gallons (3,785 L)/minute flow
- Maximum Mud Pressure 1,500 psi (103 bar)
- Hydraulic Pump (4) Piston Pump, Closed Loop
- Auxiliary Pump (1) Piston Pump, pressure Compensated
- Fluid Course 3 3/4 in. (95.25 mm) for increased downhole hydraulic power
- Mud Flow Rate Permits up to 1000 U.S. Gallons (3,785 L)/minute flow
- Maximum Mud Pressure 1,500 psi (103 bar)

Wrench

- Wrench Travel Wrench can Travel the Full Length of the Thrust Frame
- Maximum Breakout Torque 210,000 ft. lbs. (285,000 Nm)
- Maximum Makeup Torque 100,183 ft.-lbs. (135,252 Nm)
- Clamp/Grip Range 3.5 in. – 10.5 in. (89 – 267 mm) OD
- Wrench System Triple Jaw Wrenches with 12 in. (305 mm) separation
- Carriage to Wrench Clearance 36 ft. (11 m) max.

Drill Rig

- Drill Angle 10° - 18°
- Drill Pipe Range II – 30 ft. (9.1 m)
- Cabin 8x12 ft. skid (8x20 ft. available)



Miscellaneous

- **Processor Controls** Processor Controls Sauer Danfoss micro-processor controls with touch screen, optional data acquisition
- **Auxiliary Power Unit** 9.9 HP Hatz 1840 diesel engine for rig setup
- **Pipe Capacity** 4
- **Optional Pipe Loader**

Drill Rig Weights & Dimensions

- **Maximum Length** 64 ft. 5 in. (19.5 m)
- **Maximum Width** 8 ft. 2 in. (2.5m)
- **Maximum Height (Transport)** 11 ft. 6 in. (3.68 m)
- **Travel Weight** 108,000 lbs. (48,988 kg)

Power Pack W & D

- **Maximum Length** 19 ft. 8 in. (6 m)
- **Maximum Width** 8 ft. (2.43 m)
- **Maximum Height** 9 ft. 5 in. (2.88 m)
- **Total Weight** 35,500 lbs. (16,103 kg)

Dual Power Pack

- Simultaneously run both power units
- Permits one power unit to run while powering through the unused power unit
- Allows one power unit to run, but keeps the unused power unit isolated
- Exercise the ability to have one power unit running, but have the unused power unit removed
- Unit maintains full power with a single engine, but the system runs with half rotational RPM and half carriage drive speed



DD-1100RS Horizontalbohranlage



FEATURES

For those contractors who want to play with the big toys

- The industry first in rapid setup technology
- Up to 1,500 horsepower for the bores with big pipe welded together just waiting to be installed
- Excellent speed without sacrificing power
- Over 200,000 ft*lbs of breakout torque for those tough pipe joints
- 4" drill fluid course accommodates up to 1,000 gpm of drill fluid for maximum fluid power



SPECIFICATIONS

Power Train - One Power Pack

- **Engine**Caterpillar C-18 Tier 4 Final or Tier 3 Diesel (depending on country of purchase)
- **Rating**755 HP (570 kW)
- **Fuel Capacity**650 U.S. Gallons (2,460 L)
- **Hydraulic Capacity**220 U.S. Gallons (833 L)
- **Hydraulic Filter**High Pressure Filtration to 6 Micron ABS

Carriage System

- **Maximum Thrust/Pullback**1,100,000 lbs. (500 Tonnes)
- **Carriage System**Rack & Pinion, (6) Pinion and Gear with Adjustable Force Limiter
- **Maximum Carriage Speed**105 ft. (32 m)/minute
- **Carriage Motors**(6) 1017 cc Variable Displacement
- **Carriage Gearbox**(6) Planetary Drives
- **Hydraulic Pump**(2) Closed Loop-Piston

Rotary Drive

- **Rotary System**(4) Pinion and Gear Drive with Infinitely Variable Torque
- **Maximum Rotary Torque**100,000 ft-lbs. (135,600 Nm) @ 0 – 31 RPM
- **Minimum Rotary Torque**40,000 ft-lbs. (54,000 Nm) @ 0 – 75 RPM
- **Maximum Rotary Speed**75 RPM
- **Rotary Motors**(4) 160cc, Axial Piston, Variable Displacement
- **Rotary Brakes**(4) Spring Applied, Hydraulic Release
- **Fluid Course**4 in. (102 mm)
- **Mud Flow Rate**Permits up to 1,000 U.S. Gallons (3,785 L)/per minute
- **Maximum Mud Pressure**1,500 psi (103 bar)
- **Mud Shutoff Cylinder**2 in. Bore x 12 in. Stroke (51 - 305 mm)
- **Mud Blow Down Cylinder**1 1/16 in. Bore x 4 in. Stroke (27 - 102 mm)
- **Hydraulic Pump**(2) Closed Loop-Piston
- **Auxiliary Pump**(1) Pressure Compensated-Piston
- **Slip Spindle**8 5/8 in. (219 mm)

Wrench

- **Wrench Travel**Wrench can Travel the Full Length of the Thrust Frame



- **Maximum Breakout Torque** 220,000 ft-lbs. (298,000 Nm)
- **Maximum Makeup Torque** 150,000 ft-lbs. (203,000 Nm)
- **Clamp/Grip Range** 3.5 in. – 10.5 in. (89 – 267 mm) OD
- **Wrench Motor** (2) Hydraulic, LSHT, 12.5 CIR
- **Wrench Brake** (1) Spring Applied, Hydraulic Release

Drill Rig

- **Drill Angle** 10° - 18°
- **Drill Pipe** Range II – 34 ft. (10.4 m)

Safety

- Es!Lok – Exit Side Lockout System with 1 mile (1.6 m) Range
- ZAPALERT – Electrical Detection Device
- Run on One Technology system (ROOTS)
- Freestanding operator's console with pressure gauges
- Operator's manual and other unit support materials

Drill Rig Dimensions

- **Length** 64 ft. 10 in. (19.5 m)
- **Width** 8 ft. 2 in. (2.5 m)
- **Height** 11 ft. 10.25 in. (3.6 m)

Single Power Pack

- **Length** 19 ft. 8 in. (5.99 m)
- **Width** 8 ft. (2.43 m)
- **Height** 9 ft. 5 in. (2.88 m)

Single Power Pack Weight

- **Total Weight** 35,500 lbs. (16,103 kg)

Drill Rig Weight

- **Total Weight** With Wrenches: 112,580 lbs. (51,065 kg)

Dual Power Pack (ROOTS)

- Simultaneously run both power units
- Permits one power unit to run while powering through the unused power unit
- Allows one power unit to run, but keeps the unused power unit isolated
- Exercise the ability to have one power unit running, but have the unused power unit removed