

# Horizontalbohranlagen

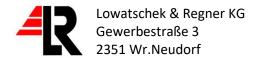
# **DD-110 Horizontalbohranlage**



# **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

- EngineCummins QS5B6.7 Tier 4 final (or Tier 3 depending on country of purchase)
- Rating260 HP @ 2200 RPM (164 kW)
- Fuel Capacity81 U.S. Gallons (306 L)
- Hydraulic Capacity107 U.S. Gallons (405 L)
- Battery(2) Deka 908DMF 12 V, 1450 CCA 24 V System

#### Carriage System

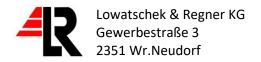
- Carriage System(4) Pinion drive with adjustable force limiter
- Maximum Thrust/Pullback110,000 lbs. (50 Tonnes)
- Maximum Carriage Speed170 ft. (52 m)/minute
- Carriage Motors(4) Radial piston / dual displacement
- Carriage Brakes(2) Spring applied / hydraulic release
- Gearbox(4) Planetary gearboxes

#### Rotary Drive

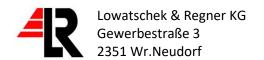
- Rotary System(1) Pinion and Gear Drive with Infinitely Variable Torque
- Maximum Rotary Torque15,000 ft-lbs. (20,337 Nm)
- Maximum Rotary Speed 150 RPM
- Rotary Motor(1) Radial piston Variable Displacement
- Rotary Brakes(1) Spring Applied/Hydraulic Release
- Rotary Gearbox(1) Planetary Drive
- Fluid Course2 in. (50 mm)
- Maximum Flow250 U.S. Gallons (945 L)/minute flow
- Maximum Pressure1,500 psi (103 bar)
- Side-Entry Sub2 7/8 in. (73 mm) IF
- Slip Spindle2 7/8 in. (73 mm) IF
- **Misc.**Wireline Commutator, Slip Ring, Wiggle Steer®, adjustable torque limiter, digital tachometer

#### Wrench

- Wrench DesignOpen-Top Style
- Clamp/Grip Range2 7/8 in. 4 1/8 in. (73 105 mm)
- Maximum Breakout Torque32,000 ft-lbs. (43,390 Nm)



•	Maximum Makeup Torque26,000 ft-lbs. (35,250 Nm)
Drill Rig	
•	Drill Pipe Length20 ft. (6.10 m)
•	Drill Angle10-18°
•	Cabinon-board, articulated
•	Max. Pipe Basket Capacity(9) Pieces of drill pipe
•	Max. On-Board BasketsWORKING: 2
•	Max. On-Board BasketsTRANSPORT: 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 Type2.875 in. (73 mm) IF pin x box
•	Fluid Course1.5 in. (44.5 mm)
•	PumpTriplex piston pump
•	Max. Flow200 U.S. gallons (757 L) / minute
•	Max. Pressure1,100 psi (75.8 bar)
•	Self-propelled, Wireless control
•	Travel Speed2.25 mph (3.62 kph) forward & reverse
•	Ground Bearing Pressure12 psi (.83 bar)
Weights	
•	<b>Transport</b> 47,074 lbs. (19,051 kg)
•	Accessory Crate1,300 lb. (590 kg)
•	<b>Working</b> 51,074 lbs. (23,167 kg)
•	Drill Pipe Weight358 lbs. (162.4 kg) each
Dimensions	
•	<b>Length</b> 35 ft. 7 in. (10.84 m)
•	<b>Width</b> 8 ft. 2 in. (2.49 m)
•	<b>Height</b> 9 ft. 5 in. (2.87 m)
•	Track Width2 in. (2.5 m)



# **DD-240T Horizontalbohranlage**



# **FEATURES**

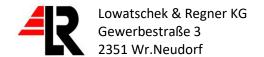
A truly customer-driven design in a rugged package for tough environments

- 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

- EngineMTU 6R1300 Tier 4
- Rating523 HP (390 kW)
- Fuel Capacity178 U.S. Gallons (674 L)



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

#### Carriage System

- Maximum Thrust/Pullback240,000 lbs. (108 Tonnes)
- Carriage SystemRack & Pinion, (4) Pinion Drive with Adjustable Force Limiter
- Maximum Carriage Speed150 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 Torque43,900 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 Course3 in. (76 mm)
- Mud SwivelRear Mounted, 4 N.P.T.L.H x 3
- Slip Spindle5.5 in. (13.97 mm) API-IF Pin
- Other Features Digital Tachometer, Adjustable Torque Limiter, Wiggle Steer®

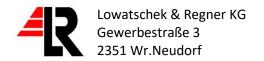
#### Wrench

- Wrench StyleTriple Jaw with 10 in. (245 mm) Separation
- Maximum Breakout Torque80,000 ft-lbs. (108,465 Nm)
- Clamp/Grip Range4-1/2 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)

Range 2, Pipe loader, 2 man cabin81,510 transport weight (no foot)



# 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 Length52.5 ft. (16 m) Width8.167 ft. (2.5 m) w/ pipe loader option 100.25 in. (2.54 m) w/ full walkway option Height11.5 ft. (3.5 m) Weights (can vary) Range 2, walkway, 2 man cabin80,520 transport weight (no foot)

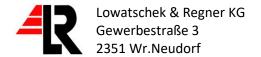
# **DD-440T Horizontalbohranlage**



# **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

- EngineCummins QSX15 Tier 4 final or Tier 3 (depending on country of purchase) Diesel
- Rating600 HP (447 kW)
- Fuel Capacity160 U.S. Gallons (605 L)
- Hydraulic Capacity200 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.

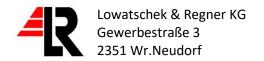
#### Carriage System

- Maximum Thrust/Pullback440,000 lbs. (200 Tonnes)
- Carriage System440,000 lbs. (200 Tonnes)
- Maximum Carriage Speed95 ft. (29 m)/minute
- Carriage Motors(2) Hydraulic 1017 cc, Variable Displacement
- Carriage Gearbox(2) Planetary Drives

#### Rotary Drive

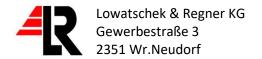
- Rotary System(3) Pinion & Gear Drive with Infinitely Variable Torque
- Maximum Rotary Torque60,000 ft-lbs. (80,000 Nm) @ 0 25 RPM
- Maximum Rotary Speed97 RPM
- Rotary Motors(3) 160cc Hydraulic Axial Piston/Variable Displacement
- Rotary Brakes(2) Spring Applied/Hydraulic Release





•	Mud Flow RatePermits up to 825 U.S. Gallons /minute
•	Maximum Mud Pressure1,500 psi (103.4 bar)
•	Mud SwivelRear Mounted, 5 in. (127 mm) IFLH Pin
Wrench	
•	<b>Wrench Travel</b> Wrench has full-length thrust frame travel with hose carrier
•	Maximum Breakout Torque230,000 ft-lbs. (311,839 Nm)
•	Maximum Makeup Torque152,000 ft-lbs. (206,085 Nm)
•	<b>Clamp/Grip Range</b> 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 Angle10° - 18°
•	<b>Drill Pipe</b> 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	
•	<b>Transport Dimensions</b> 50 ft. 9in. (15.47 m)
•	<b>Width</b> 8 ft. 2 in. (2.51 m)
•	Height11 ft. 10 in. (3.61 m)
Transport Weights	
•	<b>Total Weight</b> 98,060 lbs. (44,479 kg)
•	<b>Total Weight w/o Wrench</b> 90,260 lbs. (40,941 kg) – Wrench is Removable for Lighter Transport

Fluid Course3.5 in. (88.9 mm)



# **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

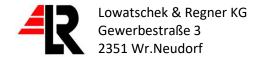
# **SPECIFICATIONS**

Power Train

- **Engine**Cummins QSX15 Tier 4 Final (or Tier 3 depending on country of purchase)
- **Rating**600 HP (447 kW) each
- Fuel Capacity650 U.S. Gallons (2,460 L)
- Hydraulic FilterHigh Pressure Filtration and Return to 6 Micron ABS
- Battery(2) Deka 908DMF 24 V, 1450 CCA

Carriage System

Maximum Thrust/Pullback660,000 lbs. (300 Tonnes)



- Carriage SystemRack & 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

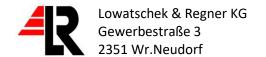
- Rotary System(4) Pinion & Gear Drive w/Infinitely Variable Torque
- Maximum Rotary Torque80,000 ft-lbs. (108,460 Nm) @ 0 34 RPM
- Minimum Rotary Torque30,000 ft-lbs. (40,675 Nm) @ 0 90 RPM
- Maximum Rotary Speed90 RPM
- Fluid Course3.5 in. (88.9 mm) for increased downhole hydraulic power
- Mud Flow RatePermits up to 1000 U.S. Gallons (3,785 L)/minute flow
- Maximum Mud Pressure1,500 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 RatePermits up to 1000 U.S. Gallons (3,785 L)/minute flow
- Maximum Mud Pressure1,500 psi (103 bar)

#### Wrench

- Wrench TravelWrench can Travel the Full Length of the Thrust Frame
- Maximum Breakout Torque210,000 ft. lbs. (285,000 Nm)
- Maximum Makeup Torque100,183 ft-lbs. (135,252 Nm)
- Clamp/Grip Range3.5 in. 10.5 in. (89 267 mm) OD
- Wrench SystemTriple Jaw Wrenches with 12 in. (305 mm) separation
- Carriage to Wrench Clearance 36 ft. (11 m) max.

#### Drill Rig

- Drill Angle10° 18°
- Drill PipeRange II 30 ft. (9.1 m)
- Cabin8x12 ft. skid (8x20 ft. available)



#### Miscellaneous

- Processor Controls Processor Controls Sauer Danfoss microprocessor controls with touch screen, optional data acquisition
- Auxiliary Power Unit 9.9 HP Hatz 1840 diesel engine for rig setup
- Pipe Capacity4
- Optional Pipe Loader

#### **Drill Rig Weights & Dimensions**

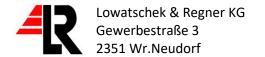
- **Maximum Length**64 ft. 5 in. (19.5 m)
- Maximum Width8 ft. 2 in. (2.5m)
- Maximum Height (Transport)11 ft. 6 in. (3.68 m)
- Travel Weight108,000 lbs. (48,988 kg)

### Power Pack W & D

- Maximum Length 19 ft. 8 in. (6 m)
- Maximum Width8 ft. (2.43 m)
- **Maximum Height**9 ft. 5 in. (2.88 m)
- Total Weight35,500 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
- Excercise 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



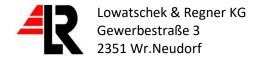
# DD-1100RS Horizontalbohranlage



# **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

- EngineCaterpillar C-18 Tier 4 Final or Tier 3 Diesel (depending on country of purchase)
- Rating755 HP (570 kW)
- Fuel Capacity650 U.S. Gallons (2,460 L)
- Hydraulic Capacity220 U.S. Gallons (833 L)
- Hydraulic FilterHigh Pressure Filtration to 6 Micron ABS

#### Carriage System

- Maximum Thrust/Pullback1,100,000 lbs. (500 Tonnes)
- Carriage SystemRack & 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

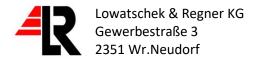
#### Rotary Drive

- Rotary System(4) Pinion and Gear Drive with Infinitely Variable Torque
- Maximum Rotary Torque100,000 ft-lbs. (135,600 Nm) @ 0 31 RPM
- Minimum Rotary Torque40,000 ft-lbs. (54,000 Nm) @ 0 75 RPM
- Maximum Rotary Speed75 RPM
- Rotary Motors(4) 160cc, Axial Piston, Variable Displacement
- Rotary Brakes(4) Spring Applied, Hydraulic Release
- Fluid Course4 in. (102 mm)
- Mud Flow RatePermits up to 1,000 U.S. Gallons (3,785 L)/per minute
- Maximum Mud Pressure1,500 psi (103 bar)
- Mud Shutoff Cylinder2 in. Bore x 12 in. Stroke (51 305 mm)
- Mud Blow Down Cylinder1 1/16 in. Bore x 4 in. Stroke (27 102 mm)
- Hydraulic Pump(2) Closed Loop-Piston
- Auxiliary Pump(1) Pressure Compensated-Piston
- Slip Spindle8 5/8 in. (219 mm)

#### Wrench

Wrench TravelWrench can Travel the Full Length of the Thrust Frame





•	Maximum Breakout Torque220,000 ft-lbs. (298,000 Nm)
•	Maximum Makeup Torque150,000 ft-lbs. (203,000 Nm)
	<b>Clamp/Grip Range</b> 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	
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•	Drill Angle10° - 18°
	<b>Drill Pipe</b> Range II – 34 ft. (10.4 m)
Safety	
	○ Es!Lok – Exit Side Lockout System with 1 mile (1.6 m) Range
	o ZAPALERT – Electrical Detection Device
	o Run on One Technology system (ROOTS)
	<ul> <li>Freestanding operator's console with pressure gauges</li> </ul>
	<ul> <li>Operator's manual and other unit support materials</li> </ul>
Drill Rig Dimensions	
•	<b>Length</b> 64 ft. 10 in. (19.5 m)
	<b>Width</b> 8 ft. 2 in. (2.5 m)
	Height11 ft. 10.25 in. (3.6 m)
Single Power Pack	
•	<b>Length</b> 19 ft. 8 in. (5.99 m)
	<b>Width</b> 8 ft. (2.43 m)
	Height 9 ft. 5 in. (2.88 m)
Cinala Dawar Dook Waight	11 <b>cig</b> 11c 9 iii. (2.00 iii)
Single Power Pack Weight	
	<b>Total Weight</b> 35,500 lbs. (16,103 kg)
Drill Rig Weight	
•	Total WeightWith Wrenches: 112,580 lbs. (51,065 kg)
Dual Power Pack (ROOTS)	
	o Simultaneously run both power units
	<ul> <li>Permits one power unit to run while powering through the unused power unit</li> </ul>
	<ul> <li>Allows one power unit to run, but keeps the unused power unit isolated</li> </ul>
	<ul> <li>Excercise the ability to have one power unit running, but have</li> </ul>

the unused power unit removed