

DeltaBase 102

Technical Data Sheet



Release Date: Sept 16th 2008

Page 1 of 6

PRODUCT OVERVIEW

The DeltaBase 102 Anchor drill rig for double-head drilling systems, rotary / percussion operations is specially designed for the following key capabilities:

- Rock drills up to $We = 850$ (Nm)
- Rotary heads up to $M = 2,600$ (Nm)
- Double head drilling units: Rotary / Rotary, Rotary / Percussion
- Hydraulic clamping and breaking system up to max. 345 mm

The main advantages of the DeltaBase 102 are:

- Compact design
- Modern loadsensing hydraulic
- Highest coordination between equipment technology and drill technology



TECHNICAL SPECIFICATIONS

	METRIC SYSTEM	U.S. CUSTOMARY SYSTEM
PRIME MOVER		
Standard	DEUTZ TCD 2012 L06 2V, Tier III	
Fuel	Diesel	
Fuel Consumption	202 g/kWh	
Maximum Power	147 kW @ 2.300 rpm	197 hp @ 2,300 rpm
Electrical Circuit	24V	
Fuel Tank Capacity	260 l	68 gal
HYDRAULIC SYSTEM		
Pump	Variable load-sensing with torque control	
Maximum Flow, Q1	300 l/min	80 gpm
Maximum Flow, Q2	95 l/min	26 gpm
Maximum Pressure	250 bar	3,625 psi
Gear Pump		
Flow, Q3	40 l/min	10.56 gpm
Flow, Q4	25 l/min	6.6 gpm
Oil Tank Capacity	450 l	119 gal
Oil Cooler Capacity	25 kW	34 hp

DeltaBase 102

Technical Data Sheet



Release Date: Sept 16th 2008

Page 2 of 6

TECHNICAL SPECIFICATIONS

	METRIC SYSTEM	U.S. CUSTOMARY SYSTEM
ROTARY UNITS		
Maximum Torque	up to 26 kNm	up to 18,800 lb-ft
DRIFTERS		
Maximum Torque	up to 26 kNm	up to 18,800 lb-ft
DOUBLE HEAD DRILLING UNITS		
Maximum Torque	up to 26 kNm	up to 18,800 lb-ft
UNDERCARRIAGE		
Type	B2 Crawler mounted oscillating steel tracks	
Pad Width	450 mm	18 in
Oscillating	+18° / -15°	
Driving Speed Low Gear	2,5 km/h	1.55 mph
Max. Grade Ability Low Gear (without added winch)	37% (~20°)	
DRILL MAST AND FEED SYSTEM		
Drill Mast	With feed gear system	
Feed Stroke Length, Double Head	3,600 mm	12 ft
Feed Speed - down	15 m/min	49 ft/min
Fast Feed Speed - up	50 m/min	164 ft/min
Fast Feed Speed - down	50 m/min	164 ft/min
Pull Force - down	100 kN	22,470 lbf
Pull Force - back	100 kN	22,470 lbf
Optional Drill Mast Feed	Hydraulic Cylinder	
ROD CLAMPS		
Maximum Diameter	220 mm	8.6 in
Clamping Sizes	from ø50 to ø220 mm	from ø1.9 to ø8.6 in
Maximum Holding Force	120 kN	27,000 lbf
Break Out Torque, Maximum Torque	24 kNm - 14 kNm	17,700 lb-ft - 10,300 lb-ft
Clamp Jaw Style	Fixed	
Centralizer Insert Size (Standard)	76, 89, 102, 108, 114, 133, (152), 178, 220 mm 3, 3.5, 4, 4.25, 4.5, 5.25, (6), 7, 8.67 in	

DeltaBase 102

Technical Data Sheet



Release Date: Sept 16th 2008

Page 3 of 6

TECHNICAL SPECIFICATIONS

	METRIC SYSTEM	U.S. CUSTOMARY SYSTEM
SOUND LEVEL		
Sound Pressure Level	106 dB(A)	
OPTIONAL EQUIPMENT		
ROD CLAMPING / BREAKING SYSTEMS		
254 mm Pivoting Jaw System		
Max. Clamp Diameter	254 mm	10 in
Clamping Range	60 mm - 254 mm	2.4 in - 10 in
Max. Holding Force	196 kN	44,045 lbf
Max. Break Out Torque	28 kNm	20,600 lbf-ft
Clamp Jaw Style	Pivoting Jaws	
345 mm Pivoting Jaw System		
Max. Clamp Diameter	345 mm	13.6 in
Clamping Range	60 mm - 345 mm	2.4 in - 13.6 in
Max. Holding Force	196 kN	44,000 lbf
Max. Break Out Torque	36 kNm	26,500 lbf-ft
Clamp Jaw Style	Pivoting Jaws	
305 mm Fixed Jaw System		
Max. Clamp Diameter	305 mm	12 in
Clamping Range	50 mm - 305 mm	1.9 in - 12 in
Max. Holding Force	235 kN	52,800 lbf
Max. Break Out Torque	40 kNm - 26 kNm	29,500 lbf-ft - 19,000 lbf-ft
Clamp Jaw Style	Fixed	
Centralizer Insert Size (Standard)	76, 89, 102, 108, 114, 133, (152), 178, 220, 254, 305 mm 3, 3.5, 4, 4.25, 4.5, 5.25, (6), 7, 8.67, 10.4, 12, 13.6 in	

DeltaBase 102

Technical Data Sheet



Release Date: Sept 16th 2008

Page 4 of 6

TECHNICAL SPECIFICATIONS

	METRIC SYSTEM	U.S. CUSTOMARY SYSTEM
WATER PUMP		
Pump type	Gamma Pump 202 TS	
Flow	200 l/min	52 gpm
Pressure	55 bar	800 psi
Suction hose connection on rig	1½" G female	
Pump type	Gamma Pump 200 TS	
Flow	100 l/min	26 gpm
Pressure	50 bar	725 bar
Suction hose connection on rig	1½" G female	
Pump type	Gamma Pump 62 CC	
Flow	60 l/min	16 gpm
Pressure	50 bar	725 psi
Suction hose connection on rig	1½" G female	
WINCH AND CAT HEAD		
Winch type	PL2	
Maximum pull on inner layer	9 kN	2,000 lbf
Line speed	50 m/min	164 ft/min
Cable diameter	8 mm	0.31 in
Cable length	40 m	131 ft
Winch Cat Head Pully System	Fixed position	
Optional Winch Cat Head Pully System	Manually Rotation +/- 45°	
Winch type	BG6	
Maximum pull on inner layer	20 kN	4,400 lbf
Line speed	40 m/min	131 ft/min
Cable diameter	11 mm	0.4 in
Cable length	35 m	115 ft

DeltaBase 102

Technical Data Sheet



Release Date: Sept 16th 2008

Page 5 of 6

TECHNICAL SPECIFICATIONS

	METRIC SYSTEM	U.S. CUSTOMARY SYSTEM
WINCH AND CAT HEAD		
Winch type	BG8	
Maximum pull on inner layer	35 kN	7,800 lbf
Line speed	35 m/min	115 ft/min
Cable diameter	13 mm	0.5 in
Cable length	50 m	164 ft
Cat Head (BG6 and BG8)	Fixed	
Cat Head Hydraulically Adjustable	All winches: Telescopic and Rotation	
Rotation	+/- 45°	
Telescopic	400 mm	15.7 in
Rod Handling System	combination with hydraulic cathead by lifting magnet and key	
OIL LINE LUBRICATOR FOR DTH DRILLING		
Tank Capacity	20 l	5.3 gal
Max. Pressure	25 bar	363 psi
HIGH PRESSURE WASHER		
High Pressure Washer Type	Dynaset HPW 200 / 30	
Tank Capacity	30 l/min	7.9 gpm
Max. Pressure	200 bar	2,900 psi
LOADING CRANE		
Loading Force	2,7 mto	19,500 lb-ft
Loading Reach	5.700 mm	18.7 ft
COLD WATER PACKAGE		
Engine and Hydraulics Pre-Heating	For operating conditions below -15° C (5° F)	
OPTIONAL ACCESSORIES		
Night Lights	4 pcs x 55 Watts	
Rubber Crawler Pads	46 pieces	
Radio Remote Control	Driving functions / driving and drilling functions	
Environmental Oil in Hydraulic System		

DeltaBase 102



Technical Data Sheet

Release Date: Sept 16th 2008

Page 6 of 6

DIMENSIONS AND WEIGHTS*

WEIGHT	
Dry Weight = 15.400 kg (33,950 lb)	Consisting of: DEUTZ TCD 2012 L06 2V power unit group 6 cylinder Hydraulic module 24 V DC electrical system Variable piston pump with load sensing and torque control Clamping and breaking device for max. \varnothing 220 mm casing Rotary head / hydraulic drifter / double head drilling unit
Climbing capacity, without add. winch Grade ability 37%, approx. 20°	Crawler Electric operator controls Towing coupling on rig end

MEASUREMENTS	
Length = 7170 mm Height (transport pos.) Max.= 2710 mm Width = 2280 mm	

* Dimensions and weights may vary depending on options and should be checked before starting an operation.