

TECHNICAL SPECIFICATION

GEO 901A

Comacchio multipurpose hydraulic drilling rig · crawler-mounted

285 HP · Cummins 6.7 L	45,000 lbf · Pullback	50 Rods · 1,000 ft onboard	26.25 ft · Tower stroke
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The Comacchio GEO 901A is engineered for high-production geothermal drilling. Carrying 50 four-inch rods onboard, it delivers up to 1,000 ft of continuous, hands-free drilling — built for contractors who demand productivity, hole after hole, day after day. Configured, delivered, and supported by Republic Drill Co.

CONFIGURATION HIGHLIGHTS

Rotary head

Comacchio R2000, 4-speed · 10,325 ft·lbf max torque

Feed system

26.25 ft stroke · 45,000 lbf pullback · 26,980 lbf pulldown

Power unit

Cummins 6.7 L · 285 HP @ 2,100 rpm · sound-insulated canopy

Pipe handling

50-rod carousel · hands-free loader arm · 4 in × 20 ft rod

Mounting

Steel tracks with rubber pads · 2-speed tramming

Transport

43 ft L × 8 ft 2 in W × 10.6 ft H · 52,900 lb (dry)



GEO 901A shown in working configuration

Figures are nominal and subject to change without notice. · Republic Drill Co., Pflugerville, TX · EX Works.

Drilling frame	
Tower stroke	26.25 ft
Pullback (actual)	45,000 lbf
Pulldown	26,980 lbf
Head travel — down	2.19 ft/s (132 ft/min)
Head travel — up	1.19 ft/s (115 ft/min)
Mast slide / vertical travel	3.2 ft (39.37 in)
Rotary head	
Comacchio 4-speed	R2000
Speed 1	60 rpm · 10,325 ft-lbf
Speed 2	115 rpm · 5,163 ft-lbf
Speed 3	160 rpm · 3,761 ft-lbf
Speed 4	210 rpm · 2,950 ft-lbf
Configuration	Side-shifting · spring floating sub
Swivel ID	3 in
Drill table	
Double clamps	2.95–17.1 in · 76,430 lbf
Rotating hydraulic breakout	51,630 ft-lbf
Hydraulic pipe guide rollers	2.95–17.1 in
Pipe handling	
Carousel capacity	50 rods
Loader	Hands-free loader arm
Thread protection	Auto drift thread saver
Drill pipe	
Diameter	4 in heavy wall (287 lb)
Length	20 ft
Thread (high flow)	2 7/8 IF
Winch	
Main winch	7,496 lbf · 164 ft/min
Main winch cable	0.63 in dia. · 98.4 ft
Sand line (option)	1,780 lbf · 328 ft/min
Sand line cable	1/4 in · 1,300 ft
Hydraulic jib on main winch	180° rotation · 27.7 in extension
Power unit	
Engine	Cummins 6.7 L · 285 HP @ 2,100 rpm
Canopy	Sound-insulated
Fuel capacity	98 gal
DEF capacity	6.34 gal
Hydraulic tank	144 gal

Undercarriage	
Tracks	Steel with rubber pads
Travel — 2-speed	Low 0.62 mph · High 1.2 mph
Track shoe width	19.7 in
Controls	
Swing-out console	Rotation rpm gauge
Tramming	Radio remote
Water pump	
Piston triplex	22.5 gpm · 870 psi
Wash-down	Hose and gun on reel
Air compressor	
Hydraulic-driven	116 psi · 16 cfm
DTH lubricator	
Positive-displacement pump	1.3 gal
Max pressure	500 psi
Mud pump (option)	
Tiban centrifugal 3×4×13	400 gpm @ 150 psi · 2,700 rpm
Stand pipes	
Air / hydraulic valve	2 in
Mud / hydraulic valve	3 in
Auxiliary hydraulics	
Pit pump / aux connections	14.5 gpm · 2,900 psi
Lighting & safety	
LED system	3 lights (2 mast · 1 panel)
Emergency stops	2
Finish	
Panels	Comacchio light grey
Rotary head	Red
Frame & tower	Charcoal black
Dimensions & weight — transport	
Overall length	43 ft (517 in)
Drill frame length	24 ft (263.8 in)
Width	8 ft 2 in (98.42 in)
Height	10.6 ft (128 in)
Approach angle	17°
Weight — without rods	52,900 lb
Weight — with 50 rods	67,250 lb



Side elevation — working position



Side elevation — opposite hand



Three-quarter view — rod side



Three-quarter view — opposite side

Renders are representative of the GEO 901A configuration and may show optional equipment. Republic Drill Co. · EX Works Pflugerville, TX.