

# Welding Tractor

# SR 714

Engine output: 86 kW / 117 HP  
Operating weight: 17,900 – 20,230 kg  
39,463 – 44,600 lb



# LIEBHERR

# Basic machine



## Engine

Diesel engine	John Deere PowerTech 6068H, Emission regulations according to 2004/26/EG stage IIIA and EPA/CARB Tier 3
Rating (ISO 9249)	86 kW / 117 HP
Rating (SAE J1349)	86 kW / 115 HP
Rated speed	2,100 rpm
Displacement	6.8 l / 414 cu. In.
Design	6-cylinder in-line engine, water cooled, turbo-charged, air-to-air intercooler
Injection system	Common Rail system with direct injection, electronic engine management
Engine lubrication	Pressurised lube system, engine lubrication guaranteed for inclinations up to 45 degrees
Operating voltage	24 V
Alternator	80 A
Starter	7.5 kW
Batteries	2 x 117 Ah / 12V
Air cleaner	Dual stage dry type with safety element, pre-cleaner, service gauge in the cab
Cooling system	Combi radiator, comprising radiators for water, hydraulic fluid, and charge air



## Travel drive, control

Transmission system	Infinitely variable hydrostatic travel drive, independent drive for each track
Travel speed	– Infinitely variable from 0 to 8.9 km/h / 5.5 mph – Setting of travel speed ranges on the travel joystick – Reverse speed can be set at 80, 100, 115, or 130% of forward speed (max. 8.9 km/h / 5.5 mph)
Drawbar pull	161 kN at 1.0 km/h / 0.6 mph
Electronic control	Electronic engine speed control and automatic adjustment of travel speed and drawbar pull to match changing load conditions
Steering	Hydrostatic
Service brake	Hydrostatic (dynamic braking), wear free
Automatic park brake	Wet multiple-disc brake, wear free, automatically applied
Cooling system	Transmission oil cooler integrated in combi radiator
Filter system	Micro cartridge filter
Final drive	Triple reduction final drives, spur gears
Control	Single joystick for all travel and steering functions; decelerator pedal
Adjustments	Operator can individually adjust travel drive parameters via the monitor, e.g. joystick response, decelerator pedal response, etc.
Decelerator pedal	Decelerator pedal allows reduction of ground speed with or without reduction of engine rpm's



## Refill capacities

Fuel tank	227 l
Cooling system	23 l
Engine oil with filters	24 l
Transmission oil tank	65 l
Hydraulic oil tank	70 l
Final drives, each	13 l



## Operator's cab / canopy

Cab	Resiliently mounted cab with positive pressure ventilation. Integrated ROPS Rollover Protective Structure (ISO 3471) and FOPS Falling Objects Protective Structure (ISO 3449)
Canopy	Resiliently mounted canopy. Integrated ROPS Rollover Protective Structure (ISO 3471)
Operator's seat (cab)	Fully adjustable air-suspended comfort seat; automatically adjusts to operator's weight
Operator's seat (canopy)	Fully adjustable mechanical suspension comfort seat
Monitoring	Combined analogue / LC display. Automatic monitoring, display, and warning of deviating operating parameters



## Undercarriage LGP

Mount	Via separate pivot shafts and an fixed equaliser bar
Chains	Lubricated, single grouser shoes; track chain tensioning via steel spring and grease tensioner
Track links	42
Track rollers / carrier rollers	7/1
Sprocket segments	5
Track shoes standard	762 mm
Track shoes option	610 mm or 711 mm

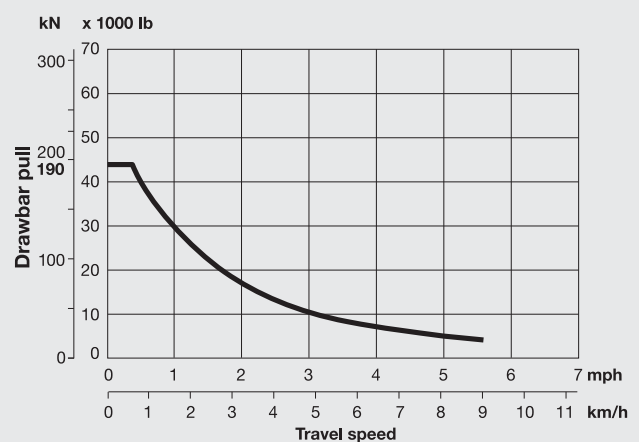


## Implement Hydraulics

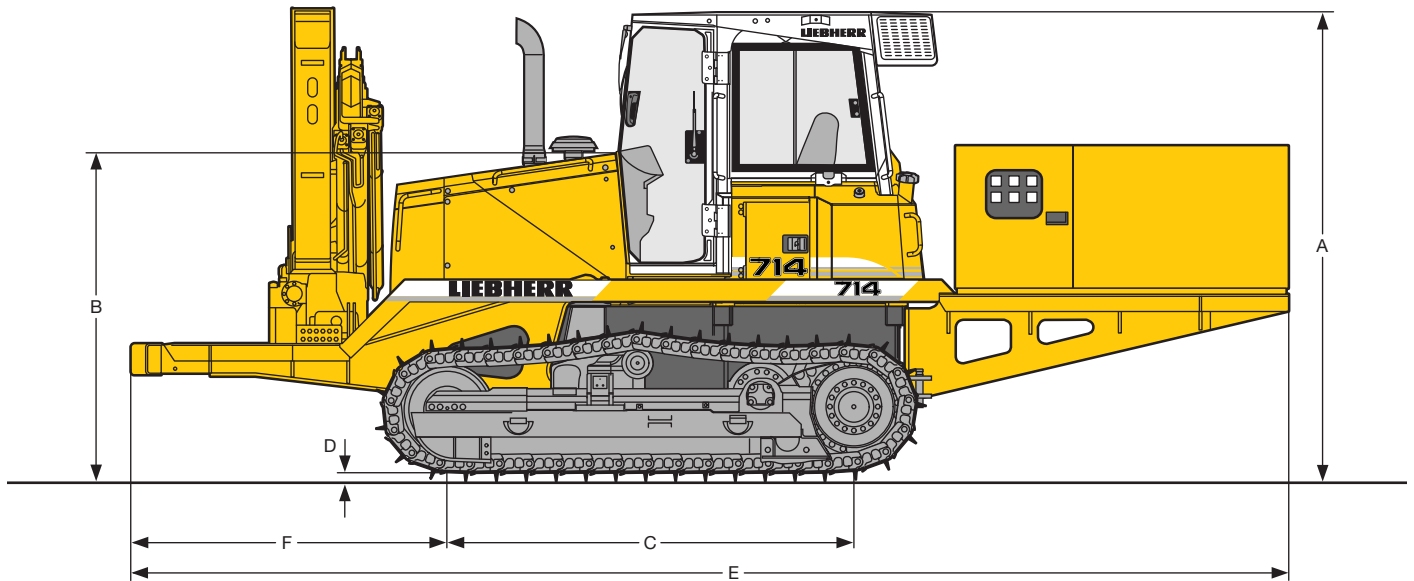
	Crane	Compressor	Generator
Hydraulic system	„Open center“	„Open center“	„closed center“
Pump type	gear pump	gear pump	piston pump
Pump flow max.	95 l/min	55 l/min	360 l/min
Pressure limitation	315 bar	230 bar	280 Bar
Control valve	4 segments	1 segment	N.A.
Filter system	return oil filter	return oil filter	pressure filter
	10µ	10µ	10µ



## Drawbar pull SR 714



# Dimensions and Equipment



Dimensions		SR 714-LGP	
A	Height over cab / canopy	mm	3,050 / 3,050
B	Height over engine hood	mm	2,088
C	Length of track on ground	mm	2,600
D	Grouser height	mm	56
E	Overall length	mm	7,450
F	Length of platform from idler centre	mm	2,100
	Ground clearance	mm	437
	Track gauge	mm	1,981
	Width over tracks / overall width	mm	
	610 mm track pads		2,692
	711 mm track pads		2,692
	762 mm track pads		2,743
	Operating weight	kg	17,900 <sup>1</sup> – 20,230 <sup>2</sup>
		lb	39,463 <sup>1</sup> – 44,600 <sup>2</sup>
	Ground pressure	kg/cm <sup>2</sup>	0.45 <sup>1</sup> – 0.51 <sup>2</sup>
		PSI	6.40 <sup>1</sup> – 7.25 <sup>2</sup>

<sup>1</sup> Minimum configuration including platforms, crane, generator, equipment housing, 762 mm track pads.

<sup>2</sup> Standard configuration including platforms, crane, generator, air compressor, 2 x air receiver, 4 x welding sources, cable harness, equipment housing, 762 mm track pads.

## Generator (standard)

Design	Hydraulically powered electric generator (IP45) in protection skid
Model	Stamford UCI 274E
Rating	125 kVA
Voltage	230/400 V – 50 Hz
Switch box	Integrated switch box with Ampere, Hertz, and Volt gauges and service hour indicator; insulation monitoring device
Plug sockets	4 x shuko 230 V 6 x CEE 400 V
Controls	On/off switch inside the cabin. Generator frequency electronically regulated

## Compressor (standard)

Design	hydraulically powered heavy duty air compressor, skid mounted
Model	Quincy QR-25 basic two-stage compressor model 370 LVD
Rating	1,300 l/min @ 15 bar
Air receiver	300 l; max. 15 bar
Controls	On/off switch in cabin

## Crane (standard)

Design	Front mounted, fully hydraulically powered crane with 400° slewing angle. Complete with service lead supports and hook for lifting of welding tent	
Model	HIAB 099XLS (9 tm, 2 extensions, 7.8 meter)	
Capacity	87 kNm (8.9 tm)	
Max. reach	7,8 mtr	
Controls	Single joystick for all crane movements	
Load parameters	Crane reach	Load capacity
	2.2 m	3,700 kg
	3.8 m	2,180 kg
	5.4 m	1,520 kg
	7.3 m	1,120 kg

## Welding Equipment (standard)

Design	4x electrically powered welding sources; mounted in anti-vibration frame	
Model	4x Lincoln DC400 (K130920)	
Controls	Remote control on welding spot; service lead exceeds max. reach of crane by 2 meters	

Other configurations regarding Compressor and Welding Equipment are possible. For further information please send your project requirements to:

[info@maats.com](mailto:info@maats.com)

# Equipment



## Basic machine

Air filter, dry-type, dual stage	•
Battery compartment, lockable	•
Engine doors, hinged, lockable	•
Ether start aid	•
Fan guard	•
Fuel water separator	•
Lugs for crane lifting	•
Rear view mirrors, platform mounted	•
Toolkit	•
Tow switch	•
Towing hitch rear	•
Towing lug front	•
Engine air pre-cleaner	+



## Travel drive

Electronic transmission control	•
Function monitoring, automatic	•
Hydrostatic travel drive	•
Inching-brake pedal	•
Load limit control, electronic	•
Multiple speed settings	•
Oil cooler	•
Parking brake, automatic	•
Reverse travel speed programmable	•
Safety lever	•
Single joystick control	•
Triple-reduction final drives	•



## Undercarriage

LGP undercarriage	•
Master link, two-piece	•
Pivot shafts, separate	•
Sprocket segments, bolted	•
Track frame, closed	•
Tracks oil lubricated	•
Full length track guard	+
Rubber inlay pads for crossing streets	+



## Electrical system

Alternator 80 A	•
Back-up alarm	•
Batteries, heavy duty cold start, 2 units	•
Battery main switch, mechanical	•
Horn	•
On-board system 24 V	•
Starter motor 7.5 kW	•
Working lights, front	•
Working light, rear	•
Beacon	+



## Operator's cab

Air conditioning	•
AM/FM Radio	•
Armrests 3D adjustable	•
Back rest extension	•
Dome light	•
Knee cushion pads	•
Lumbar support, adjustable	•
Operator's seat, air suspended, tiltable	•
Operator's seat, 6-way adjustable	•
Pressurised cab with air filter	•
Rear view mirror, inside cab	•
ROPS/FOPS	•
Safety glass, tinted	•
Sliding widow left	•
Sliding window, right	•
Socket 12 V	•
Storage tray	•
Warm water heating	•
Windshield washer system	•
Windshield wipers front, rear, and doors with intermittent function	•
Additional lights, roof mounted front/rear	+



## Canopy (Standard)

Armrests 3D adjustable	•
Operator's seat, mechanical suspended, tiltable	•
Operator's seat, 6-way adjustable	•
ROPS	•
Additional lights, roof mounted front/rear	+
Warm water heating	+



## Control and warning lights

Display charging voltage (digital)	•
Display engine coolant temperature (analogue)	•
Display engine oil pressure (analogue)	•
Display fuel level (analogue)	•
Display servo-pressure implement hydraulics (digital)	•
Display travel speed range (digital)	•
Hour metre (digital)	•
Indicator light air filter restriction	•
Indicator light battery charging	•
Indicator light decelerator mode	•
Indicator light fuel water separator	•
Indicator light implement hydraulics oil filter	•
Indicator light implement hydraulics oil temperature	•
Indicator light joystick neutral position	•
Indicator light parking brake	•
Indicator light seat belt	•
Indicator light transmission oil filter	•
Indicator light transmission oil temperature	•



## Attachments

HIAB Crane 099XLS (87 kNm, 2 extensions, 7.8 meter)	•
Lockable toolbox on left fender	•
125 KvA Generator	•
Cold kit -40°C	+
Enclosure for compressor, generator, and welding equipment	+
Fixation on left fender to hold additional cables needed for automatic welding	+
4x Lincoln DC400 welding sources including cable and remote control	+
Gas cylinder rack (for 6 cylinders)	+
GOST certificate	+
HIAB Crane XS111B3 DUO-special (93 kNm; 3 extensions; 10,1 meter)	+
HIAB Crane XS111B2 DUO-special (97 kNm; 2 extension; 8.0 meter)	+
Quincy 370 compressor (1300 l/min @ 15 bar)	+
Quincy 390 compressor (1800 l/min @ 15 bar)	+

• = Standard, + = Option

Subject to change.

Options and/or special attachments, supplied by vendors other than Liebherr, are only to be installed with the knowledge and approval of Liebherr to retain warranty.