



# LF-14

## Main Features

- **Compact and powerful design**
- **Best power to weight ratio of its class**
- **Proven technology**
- Extremely robust **GHH frame and system design** resulting in lowest operating cost
- **Z-link** optimized for loading of dump trucks
- **Customized buckets** with GET
- **Ergonomic ROPS/FOPS safety cabin** with large legroom, excellent visibility and intuitive controls
- All daily maintenance points from ground level
- Centralized service points
- Ride control, payload weighing system and bucket shaker

# Technical Specification

MAIN DIMENSIONS		WEIGHTS	
Length (trammimg position)	11079 mm	Operating weight	41680 kg
Length (loading position)	11520 mm	Payload capacity	14000 kg
Width (at cabin)	3095 mm	Front axle, empty	17205 kg
Width (at drive unit)	2600 mm	Rear axle, empty	21795 kg
Width (at bucket)	2990 mm	Front axle, loaded	39112 kg
Height, laden (above drive unit)	1978 mm	Rear axle, loaded	13888 kg
Height, laden (above driver's canopy)	2477 mm		
Max. tipping height	2427 mm		
Bucket capacity (SAE, heaped)	5.4 to 9 m <sup>3</sup>		
ENGINE		WHEELS AND TIRES	
Manufacturer	Volvo	Front wheels	
Type	Volvo TAD1351 (EPA Tier 3 / EU Stage IIIA)	Rim size	22.00 - 25 / 3.0
Design	Water cooled diesel engine	Tire size	26.5 - 25
Power	285 kW / 1900 rpm	Tire pressure	7.0 ± 0.1 bar
Air intake system	Dry air filter	Rear wheels	
Exhaust system	Catalyst, silencer	Rim size	22.00 - 25 / 3.0
Starter power / voltage	7.0 kW / 24 V	Tire size	26.5 - 25
Alternator current / voltage	110 A / 28 V	Tire pressure	5.0 ± 0.1 bar
Engine option 1		BRAKES (SERVICE AND PARKING)	
Power	285 kW / 1900 rpm	Design	Multi disk spring brake (SAHR)
Exhaust system	SCR		
Engine option 2		AXLES	
Power	285 kW / 1900 rpm	Front axle	
Exhaust system	SCR and DPF	Manufacturer	Kessler
DRIVE TRAIN		Type	D106 NLB-FS
Transmission		Differential	Lim. Slip
Manufacturer	Dana	Rear axle	
Type	TE 32	Manufacturer	Kessler
Design	Single stage converter with lock-up Four gears forward / reverse	Type	D106 NLB-FS
Upbox		Differential	Lim. Slip
Manufacturer	Rögelberg	Oscillating angle	±8°
ELECTRICAL EQUIPMENT			
		Operating voltage	24 V
		Battery	2 x 12 V / 180 Ah
LIGHTING SYSTEM			
		Main / reverse headlights	LED
		Additional headlights and position lights	LED





#### DUMP / HOIST HYDRAULIC SYSTEM

System pressure	280 bar
Number of hoist cylinders	2
Number of dump cylinders	1
Boom raising time	7.0 s
Boom lowering time	4.2 s
Tipping time	2.2 s

#### STEERING HYDRAULIC SYSTEM

System pressure	280 bar
Number of steering cylinders	2



#### FILLING VOLUMES

Fuel tank	410 l
Hydraulic tank	400 l

#### STEERING

Design	Hydraulic articulated power steering
Steering angle	± 44°
Outer turn radius	7348 mm
Inner turn radius	3571 mm

#### TRAMMING CAPACITIES

Max. tramming speeds (laden fwd/rev, on level road)	
1st gear	4.7 km/h
2nd gear	8.7 km/h
3rd gear	14.5 km/h
4th gear	26.3 km/h
Maximum tractive effort	356 kN
Maximum admissible gradient	25%
Breakout force (lift/tilt)	260 kN / 218 kN



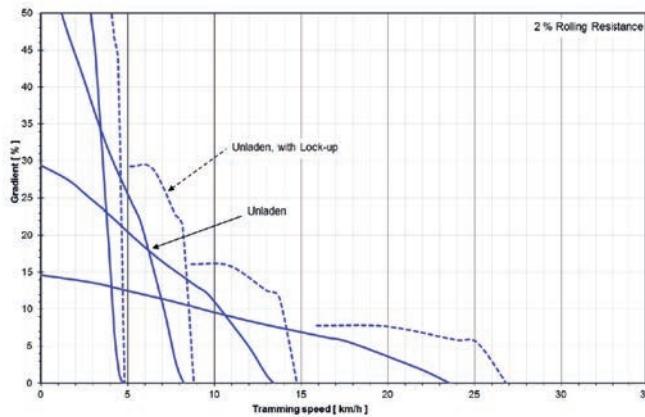
#### MAIN OPTIONS

Central lubrication system	Emergency steering pump
Fire suppression systems (manual / auto) Ansul / Protecfire with automatic engine shut down	Electric brake release pump
Spare wheel	Wiggins fuel fill system
Different bucket sizes	Wiggins fill set
Ejector bucket	Manual / electric filling pump for hydraulic oil
Camera system	Tire pressure monitoring
Ground engagement tools (G.E.T.)	Remote Monitoring System (WiFi-link)
Payload weighing system	Corrosion protection kit
Bucket shaker	Low temperature kit
Ride control system	Radio remote control
Air condition / Heating	Brake release tow hook
Collision avoidance system	Optional differential combinations available
Disassembly for shaft transport	Narrow cabin

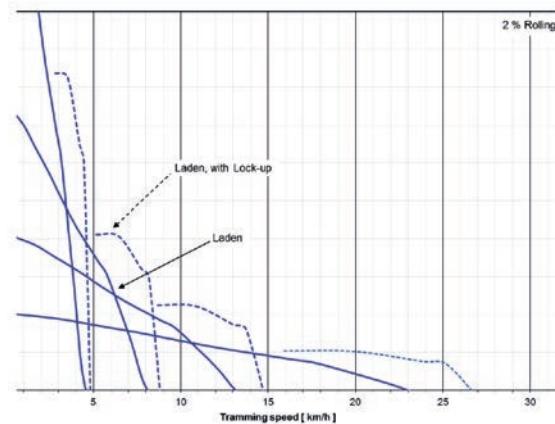
\* Please note that machine dimensions may change slightly based on specific options selected.

# Gradeability Diagram

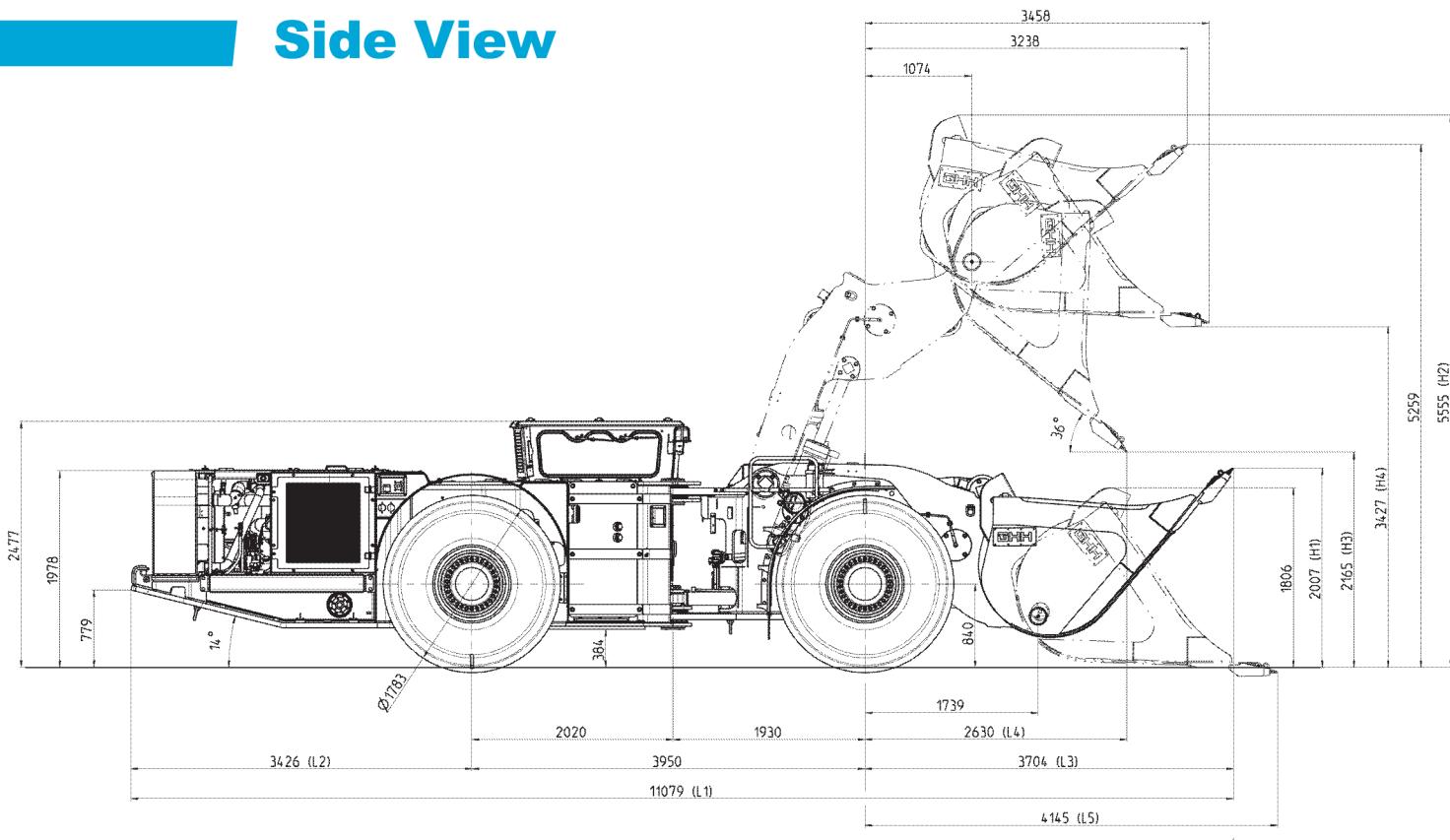
Unladen



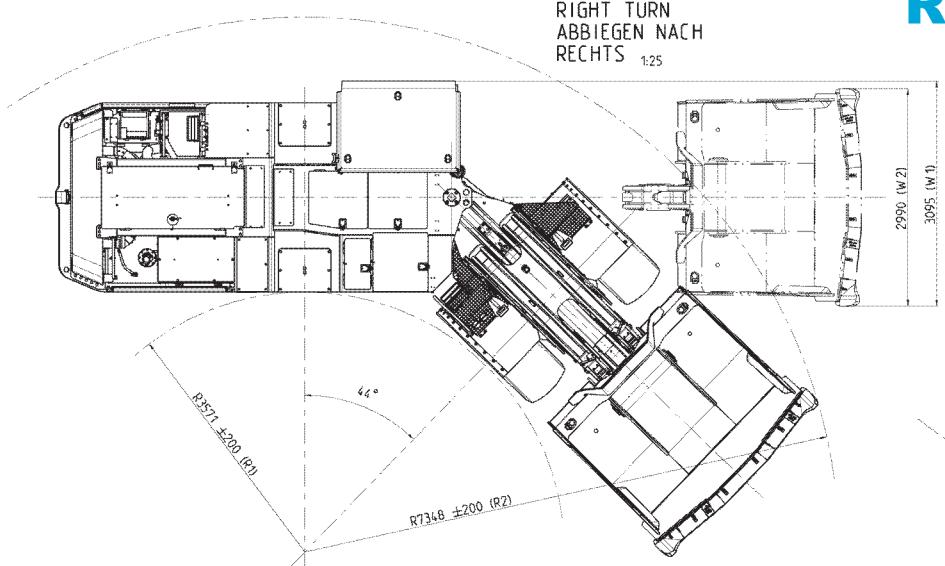
Laden



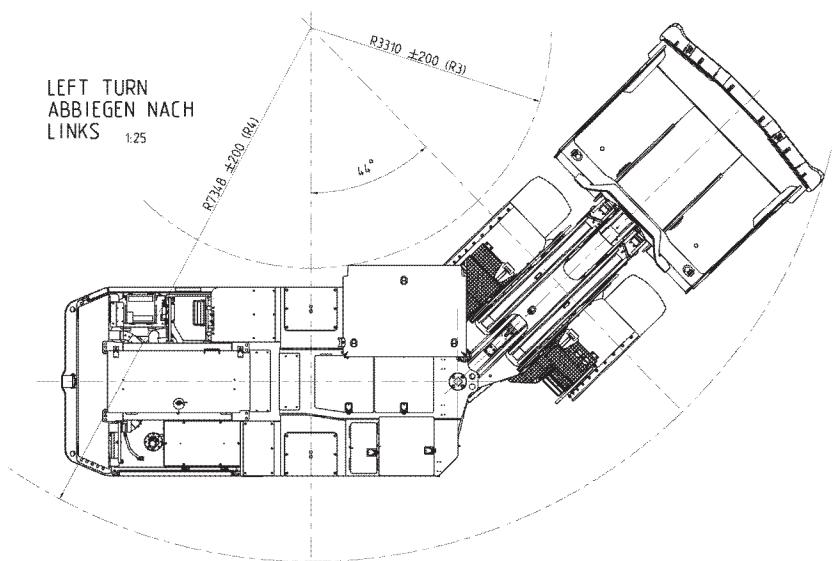
## Side View



## Right Turn



## Left Turn



			STD	
<b>Volume, nominal heaped (m<sup>3</sup>) (standard lip)</b>	9.0	7.0	<b>5.4</b>	4.5
<b>Maximum material density (t/m<sup>3</sup>)</b>	1.5	2.0	<b>2.6</b>	3.2
<b>Bucket overall width (mm)</b>	W2	3300	<b>2800</b>	2800
<b>Tramming position: axle centreline to bucket lip (mm)</b>	L3	3 713	<b>3 704</b>	2 423
<b>Tramming position: ground to bucket tip (mm)</b>	H1	2 059	<b>2 007</b>	1 748
<b>Tramming Position: Total machine length (mm)</b>	L1	11 211	<b>11 079</b>	10 798
<b>Tramming Position: Rear axle centreline to bumper (mm)</b>	L2	3 548	<b>3 426</b>	3 426
<b>Truck loading reach (mm)</b>	L4	2 683	<b>2 630</b>	2 361
<b>Raised position: back height max (mm)</b>	H2	5 883	<b>5 555</b>	5 555
<b>Raised position: bucket tip, height (mm)</b>	H3	2 157	<b>2 329</b>	2 437
<b>Flat loading position: axle centreline to bucket lip</b>	L5	4 185	<b>4 145</b>	3 767
<b>Total machine width: narrow cabin</b>	W1	3 300	<b>2 800</b>	2 800
<b>Total machine width: wide cabin</b>	W1	3 300	<b>3 095</b>	3 095
<b>Inside turning radius: Right turn</b>	R1	3436 +/- 200	<b>3571 +/- 200</b>	3571 +/- 200
<b>Outside turning radius: Right turn</b>	R2	7475 +/- 200	<b>7273 +/- 200</b>	7348 +/- 200
<b>Inside turning radius: Left turn</b>	R3	3310 +/- 200	<b>3310 +/- 200</b>	3310 +/- 200
<b>Outside turning radius: Left turn</b>	R4	7473 +/- 200	<b>7272 +/- 200</b>	7348 +/- 200

\* all buckets available with GET as option



GHH Fahrzeuge GmbH

Emscherstr. 53

45891 Gelsenkirchen

Tel: +49 (0) 209 38907-0

Fax: +49 (0) 209 38907-109

E-Mail: [info@ghh-fahrzeuge.de](mailto:info@ghh-fahrzeuge.de)

Web: [www.ghh-fahrzeuge.de](http://www.ghh-fahrzeuge.de)

GHH Mining Machines Ltd

92 Kirschner Road

Beyers Park

Boksburg

1459

tel +27 11 896 0600

fax +27 11 896 0605

email: [sales@ghhmm.co.za](mailto:sales@ghhmm.co.za), [info@ghhmm.co.za](mailto:info@ghhmm.co.za)

web: [www.ghhmm.co.za](http://www.ghhmm.co.za)