



# LF-19 EB

## Main Features

- **Efficient drive system (EDS)** for highest productivity and reduced maintenance cost
- **Battery power onboard** to cover peak loads and for relocating to the next working section
- 250m cable length for great operating radius
- **Load sensing hydraulics** for lower oil temperatures and higher energy efficiency
- **Extremely robust frame and system design** resulting in lowest operating cost
- Intuitive three pedal control for accurate driving and loading
- **Advanced controls and condition monitoring systems**
- **Ergonomic ROPS/FOPS safety cabin** with large legroom, excellent visibility and intuitive control
- **All daily maintenance points** from ground level
- **Optional ride control, payload weighing system, bucket shaker and automatic support of loading**

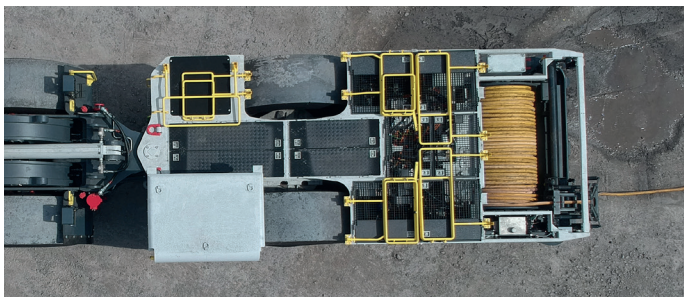
# Technical Specification

## MAIN DIMENSIONS

Length (tramming position)	13 653 mm
Length (loading position)	13 957 mm
Width (at cabin)	3 458 mm
Width (at drive unit)	3 352 mm
Width (at bucket)	4 000 mm
Height, laden (above drive unit)	2 130 mm
Height, laden (above driver's canopy)	2 620 mm
Max. tipping height	2 038 mm
Bucket capacity (SAE, heaped)	7 to 12,9 m <sup>3</sup>

## AUXILIARY MOTORS

Manufacturer	Aradex
Type	VM600M-18W0134
Continuous Torque	680 Nm @1950rpm
Continuous Power	146 kW
Peak Power	300 kW/1340Nm for 1 minute



## CABLE

Cable length	250 m
Cable diameter	51.8 mm
Cable reel with spooling device	

## BATTERY

Battery	27.9 kWh
Type	LTO 280
Capacity	46 Ah
Nominal Voltage	607.2 VDC
Charge/discharge current	276 A (6C)
Max. Charge/discharge current	400 A (10 s.)
Weight	480 kg
Dimensions	1547 x 975 x 315 mm
Cooling	Liquid
Communication Protocol	CAN
Operating Supply Voltage (BMS)	18 - 32 VDC
Power consumption on LV- Active	< 470 mW
Power Consumption on LV - Sleep	< 400 uA
Protection	IP 67

## WEIGHTS

Operating weight	62 400 kg
Payload capacity	19 000 kg
Front axle, empty	29 730 kg
Rear axle, empty	32 670 kg
Front axle, loaded	59 980 kg
Rear axle, loaded	21 420 kg

## TRACTION MOTORS

Manufacturer	Schwarz/Aradex
Type	2 x MAKOW 250
Continuous Torque	1840 Nm
Peak Torque	2700 Nm
Continuous Power	132 kW
Peak Power	2 x 180 kW

## ELECTRICAL SYSTEM

Voltage	24 V
High voltage	1000 V
Low voltage batteries	2 x 12 V/170 Ah
Lockable main switch	On ground level
3x emergency stop button	In the cabin Rear left side Rear right side

## LIGHTING SYSTEM

Main / reverse headlights	LED
Additional headlights and position lights	LED

## WHEELS AND TIRES

<b>Front wheels</b>	
Rim size	28.00 - 33 / 3.5
Tire size	875/65R33 RL-3S HI-STAB ** 224A2 6S TL
Tire pressure	7.5 bar
<b>Rear wheels</b>	
Rim size	28.00 - 33 / 3.5
Tire size	875/65R33 RL-3S HI-STAB ** 224A2 6S TL
Tire pressure	7.5 bar

## BRAKES (SERVICE AND PARKING)

Design	Multi disk spring brake (SAHR)
Regenerative braking	

## AXLES

<b>Front axle</b>	Rigid planetary axle
Manufacturer	Kessler
Type	D111
Differential	Standard
<b>Rear axle</b>	Rigid planetary axle
Manufacturer	Kessler
Type	D111
Differential	Standard
Oscillating angle	±8°

## DUMP / HOIST HYDRAULIC SYSTEM

System pressure	250 bar
Number of hoist cylinders	2
Number of dump cylinders	1
Boom raising time	11 s
Boom lowering time	6 s
Tipping time	5 s

## STEERING HYDRAULIC SYSTEM

System pressure	210 bar
Number of steering cylinders	2



## STEERING

Design	Hydraulic articulated power steering
Steering angle	± 40°
Outer turn radius	9 153 ± 200 mm
Inner turn radius	4 336 ± 200 mm

## FILLING VOLUMES

Hydraulic tank	250 litre
Water cooling (power system)	125 litre

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

## TRAMMING CAPACITIES

Max. tramming speeds (laden fwd/rev, on level road)	
Single stage transmission	14 km/h
Maximum tractive effort	390 kN
Maximum admissible gradient	28 %
Breakout force (lift/tilt)	280 kN

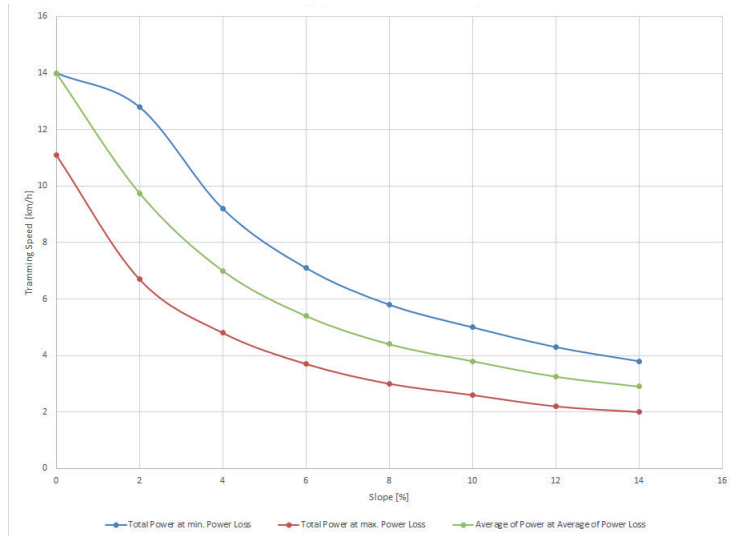
## OPERATORS COMPARTMENT

FOPs approved EN ISO 3471	
ROPs approved EN ISO 3449	
Emergency exit via side window	
Standard height cabin	2 820 mm
MP3 player, bottle holder, self-rescuer holder	
Closed cabin	
Air conditioner	
3 point seat belt	
Cabin height adjustable to lower position	2 620 mm
Rotary seat	

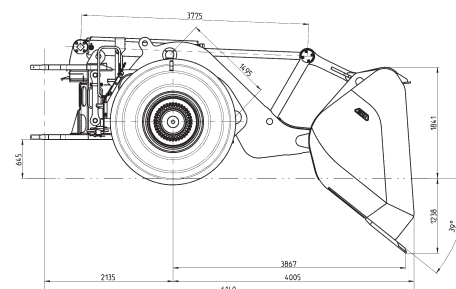
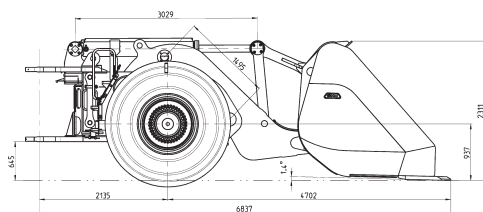
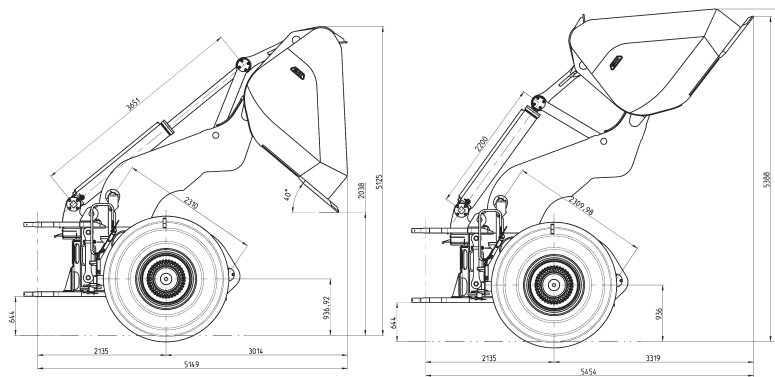
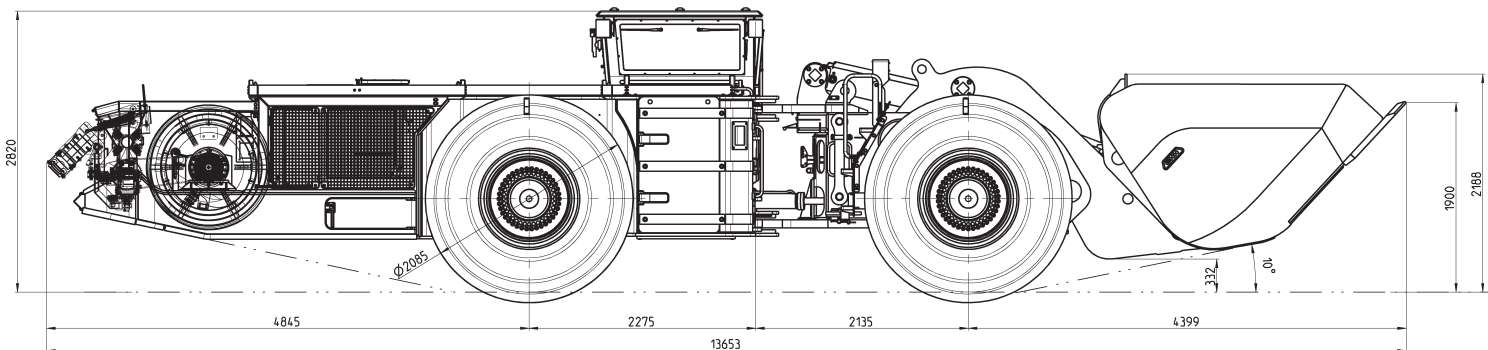


## MAIN OPTIONS

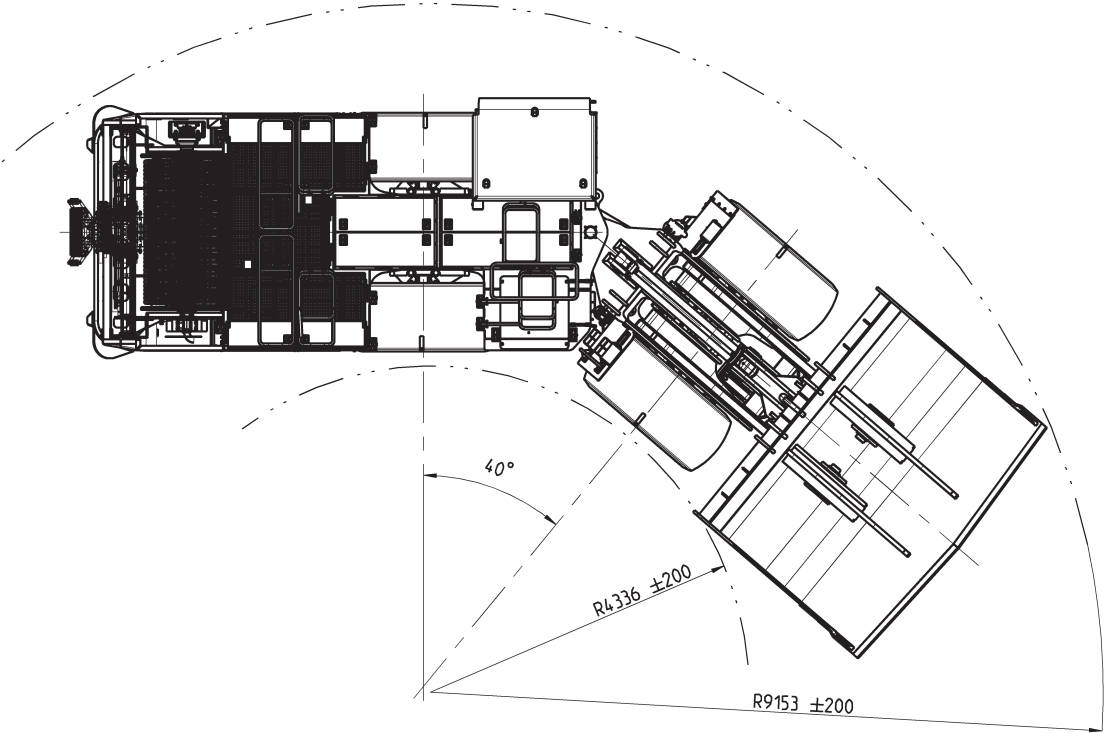
Central lubrication system	Electric brake release pump
Camera system	Tire pressure monitoring
Spare wheel	Remote Monitoring System (WiFi-link)
Different bucket sizes	GHH inSiTE digital Analytics
Automatic loading support (TIMO)	Collision avoidance system interface
Payload weighing system	Optional differential combinations available
Bucket shaker	Disassembly for shaft transport
Ride control system	Lower cabin (200 mm spacer removed)
Air conditioner / Heating	Open cabin



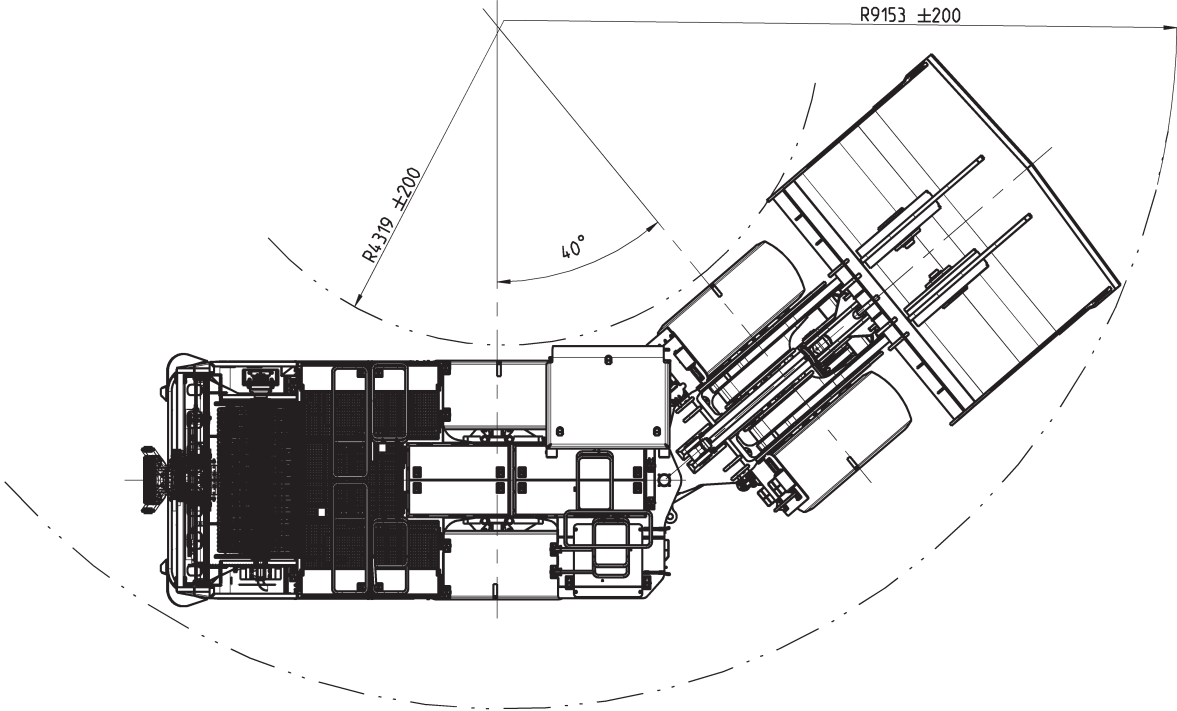
## Side View



# Right Turn



# Left Turn





# GHH

SOLID AS A ROCK

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