## MATERIAL HANDLER | F-SERIES













## TOUGH JOB, ROUGH TERRAIN? BRING IT ON!

Our New MHL370 F is designed for heavy duty applications that require extra power, stability and toughness.

Feeding mega shredders or dumper, loading and unloading barges. You name it, the MHL370 F has it covered.

C C RUC

#### Boom Cylinder

- Extra lifting capacityMore productivity

#### Single Solid Tires

- 59" for increased offroad capability HD design for superb durability

### Massive HD Undercarriage Outstanding durabilityMore stability

St. M.

## MHL370 F. 370 REASONS FOR A FUCHS.

Here are just a few.

#### Cabin

- Modular cab riser systems
- Catwalk on demand

#### **Fuchs Service Platform**

Unique in its business
Safe and comfortable access to engine, filters, etc.

#### **High Performance Cooling System**

- Physically separated
- Huge coolers and direct airflow for outstanding cooling capacity

#### **Big Counterweight**

- Extra stability
- Still a small swingtail radius

#### Engine

- 230 kW for more agility One of the best fuel efficiency
- One of the best fuel enicient

## **EQUIPMENT AND OPTIONS.**

**Bespoke Technology, Tailored For You.** 



#### **Joystick Steering**

- Improved visibility
- More legroom and comfort



#### **Multifunction Button**

- Power on demand
- Additional fuel savings



#### 7" Multi-Function Touch Display

- Easy and intuitive operation
- Full monitoring of the machine data



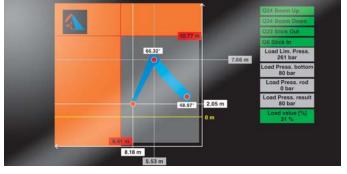
#### **Float Switch\***

- · Lifts the boom automatically if too much pressure is applied
- · Protects sensitive surfaces like the floor of barges



**Rear and Side View Cameras** 

- · Nightvision as an extra safety feature
- · 360° surround view system on demand



#### **Overload Warning with Height and Reach Limiter\***

- Easy set-up via the touch display
- · Enhanced control for heavy loads



#### **Attachment Filter\***

- High pressure filter with monitoring
- · Effective protection against hydraulic oil contamination



#### **CAN BUS and Rapid Fuse Tester**

- · State of the art technology
- Clever fuse tester as a little helper just in case



#### **Built-in Fuchs Quality**

- Massive distribution block prevents hoses from extreme bending
- Quality in detail



#### **Electric Drive\***

- Maximum efficiency
- Reduced service costs



#### **Active Cyclone Prefilter\***

- · Less dust in your air filter, no loss of airflow and engine power
- Longer uptime of your air filter



#### **Tracked Undercarriage\***

- · Even more stability
- Less ground pressure
- · Flat shoes or triple grousers



## **TECHNICAL DATA**

#### SERVICE WEIGHT WITHOUT ATTACHMENT

MHL370 F

49.2–54.3 t

DIESEL ENGINE	
Manufacturer and model	Deutz TCD 7.8 L6 4V
Design	6-cylinder inline
Engine control	EMR IV
Туре	4-stroke diesel, common rail direct injection, turbo- charger, controlled exhaust gas recirculation, diesel particulate filter with automatic regeneration and SCR-cat
Engine output	230 kW
Nominal speed	2,000 min <sup>-1</sup>
Displacement	6,6 l
Cooling system	Combi-cooler (coolant/charge air) with fan speed control system; optional reversing function
Emission standard	Stage IV / EPA Tier 4 final
Air filter design	Two-stage filter with safety cartridge and pre-separator with discharge valve
Usable tank capacity	Diesel tank: 580 I, AdBlue (DEF) tank: 50 I

#### **ELECTRICAL SYSTEM**

Generator	28 V / 100 A
Operating voltage	24 V
Battery	2 × 12 V / 110 Ah / 750 A
Lighting set	$2\times\text{H3}$ headlamps, turn indicators and tail lights
Option	20 kW or 30 kW DC generator with controls and insulation monitoring, driven by V-belt direct from diesel engine

#### **TRANSMISSION**

Hydrostatic travel drive via infinitely variable axial piston motor with directly mounted travel brake valve, two-speed manual gearshift, 4-wheel drive

Maximum speed 1st gear	max. 5 km/h
Maximum speed 2nd gear	max. 15 km/h
Gradeability	max. 30 %
Turning radius	8.0 m

#### **SLEWING GEAR**

Swing gear	Internally toothed double-row ball ring gear
Drive	3-stage planetary gear with integrated multi-disc brake
Upper carriage swing speed	0–6 min <sup>-1</sup> infinitely variable
Swing lock	Electrically operated
Max. pivot torque	91 kNm

#### **UNDERCARRIAGE**

Front axle	Planetary drive axle with integrated drum brake, rigidly mounted,max. steering angle 27°
Rear axle	Oscillating planetary drive rear axle with integrated drum brake and selectable oscillating axle lock
Stabilizers	4-point stabilizers
Tyres	Solid rubber 470 × 1499 mm (SETCO)

#### **BRAKE SYSTEM**

Service brake	Hydraulic single-circuit braking system, acting on all four wheel pairs
Parking brake	Electrically operated disc brake on transmission, acting on both front and rear axles

#### **HYDRAULIC SYSTEM**

BOSCH-REXROTH mobile hydraulic system with load limit control and fuel-saving power demand control; closed swing circuit; hose rupture valves with regeneration on the lift and stick cylinders for fuel-efficient work

Hydraulic oil filter	Integral return filter in oil tank for work hydraulics, with 3000 operating hrs service interval; oil filtration on closed swing circuit
Max. pump capacity	$2\times 280$ l/min & 1 $\times$ 140 l/min (for swing operation)
Max. operating pressure	320 / 360 bar
Hydraulic oil tank	535 I usable tank capacity

#### **OPERATOR CAB**

Cab raising system	Infinitely variable hydraulically elevatable with max. eye level of 6.29 m (option: independent forward movement of up to 2.20 m); Sound-deadened; heat-insulated windows; windshield with pull-down sunblind that slides under the cab roof; viewing window on cab roof; sliding window in cab door; height and tilt-adjustable steering column
Heating	Infinitely variable heating with 3-speed fan, 6 adjustable defroster nozzles (hot water system)
Operator's seat	Air-cushioned comfort-seat with integrated headrest, safety belt and lumbar support, seat heating with integrated A/C function optional. Comfortable operation with multi-purpose adjustment options for seat position, seat inclination, and seat cushion placement in relation to armrests and pilot control units
Monitoring	Ergonomic layout; anti-glare instrumentation. Multi- function display, automatic monitoring and recording of abnormal operating conditions (including all hydraulic oil filters, hydraulic oil temperature (cold/hot) – coolant tem- perature and charge air temperature – diesel particulate filter load), visual and audible warning indication with shutdown of pilot controls/engine power reduction. Diag- nosis of individual sensors possible via the multifunction display. Rear view camera.
Air conditioning	Automatic
Acoustic power level	LW(A) = 102 dB(A)

#### **OFFICIAL HOMOLOGATION**

Certified in accordance with CE regulations

## EQUIPMENT

ENGINE	Standard	Option
Exhaust gas turbocharger	•	
Charge air cooling	•	
Direct electronic fuel injection/common rail	•	
Automatic idle	•	
Engine preheating		٠
Engine diagnostics interface	•	
System-controlled fan drive with fan speed monitoring	•	
UNDERCARRIAGE		
All-wheel drive with differential	•	
Drum brakes	•	
Rear axle oscillating lock	•	
2-speed powershift transmission	•	
4-point stabilizers	٠	
Stabilizer cylinders with integrated safety check valves	•	
Piston rod protection on stabilizer cylinders	•	
Stabilizer plates 510 × 565 mm	•	
4-point stabilizers, individually controllable		•
Tool box	•	
Special paint (customer paint work)		•

### UPPERCARRIAGE

Separate cooling systems (combi-cooler for engine and hydraulic oil cooler)	•	
Cooling system fan speeds controlled by operating parameters	•	
Fan drive reversing function		•
Lockable maintenance hatches, with gas struts	•	
Automatic central lubrication system	•	
Rear view camera	•	
Travel alarm		٠
Electric refuelling pump		٠
Lighting protection		٠
Special paint (customer paint work)		•
Cyclone prefilter		•

САВ	Standard	Option
Hydraulically adjustable cab	•	
Cab system horizontally and vertically adjustable		•
3-layer glass with protection film	٠	
Hinged windscreen	•	
Sliding window in cab door	•	
Glazed roof panel	•	
Hinged roof opening	٠	
Reinforced glass (windscreen and roof panel)		•
Windscreen washer system	•	
Windshield washer system (lower portion of windshield)		•
Air-cushioned operator seat with headrest, seatbelt, and lumbar support	•	
Seat heating with integrated A/C function		•
Steering column, height and tilt adjustable	٠	
Automatic air conditioning system	•	
Independent heating system		•
Multi-function display	•	
Document clip	٠	
Protective grilles to front and roof		•
12V transformer		•
Radio CD & USB		•
12V power outlet		•
Fire extinguisher, dry powder		•
Rotating beacon		•

### EQUIPMENT

20 kW DC generator with controls and insulation monitoring		•
30 kW DC generator with controls and insulation monitoring		•
Close proximity range limiter for dipperstick	•	
Coolant and hydraulic oil level monitoring system	•	
Filter system for attachments		•
Hose rupture value for boom cylinder	•	
Hose rupture value for stick cylinder	•	
Overload warning device		•
Quick coupling on dipperstick	•	
Dipperstick impact protection		•
Active cyclone prefilter (TOP AIR)		•
Hydraulic oil preheating 230 V		•
Float switch		•
Joystick steering		•
Lubrication of the grab suspension by central lubrication system	•	
H3 front headlights	•	
Light packages H3 or LED		•
Fuchs Telematics System		•

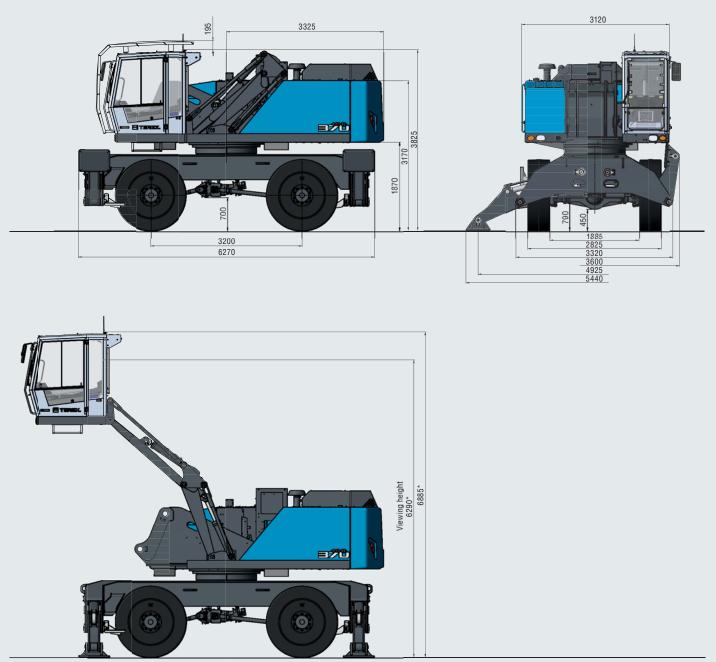
Further optional equipment available on request!





DIMENSIONS

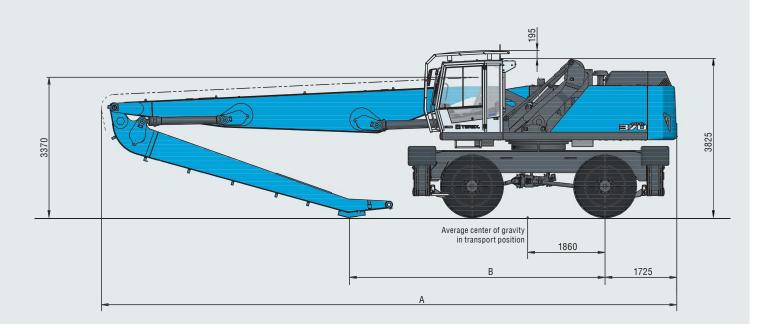
All dimensions in mm



\* Cab lift system optional

## **TRANSPORT DIMENSIONS**

All dimensions in mm



Dimensions	Reach 16.7 m	Reach 18.2 m
A	13835	14645
В	6145	6175

## **WORKING RANGE**

#### **REACH 16.7 M WITH DIPPER STICK**

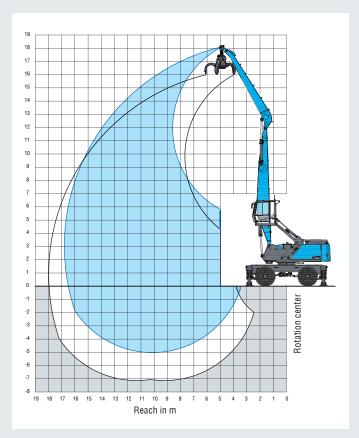
Loading equipment

Boom 8.9 m Dipper stick 7.0 Cactus grab

#### **RECOMMENDED ATTACHMENTS**

Fuchs cactus grab 0.6 m <sup>3</sup>	Open or half-closed
Fuchs cactus grab 0.8 m <sup>3</sup>	Open or half-closed
Fuchs magnetic plate MP 1350	dia = 1350 mm with 30 kW magnet system
Clamshell grab 1.4 m³	Density of materials handled up to 1,600 $kg/m^{\scriptscriptstyle 3}$
Clamshell grab 2.0 m³	Density of materials handled up to 800 $\mbox{kg}/\mbox{m}^3$
Lift hook	20 t

The lift capacity values are stated in metric tons (t). The pump pressure is 360 bar. In accordance with ISO 10567 the lift capacity values represents 75% of the static tipping loads or 87% of the hydraulic lifting force (marked °). On solid and level ground the values apply to a swing range of 360°. The (...) values apply in the longitudinal direction of the undercarriage. The values for "not supported" only apply via the steering axle or the locked oscillating axle. The weights of the attached load hoisting equipment (grab, load hock, etc.) must be deducted from the lift capacity values. The working load of the lifting devise must be observed. In accordance with the EN 474-5 for object handling application hose rupture valves on the boom and stick cylinders, an overload warning device and the lift capacity table in the cab are required. For object handling application the machine has to be supported on a level ground.



## LIFTING CAPACITY

Height [m]	Undercarriage	Reach [m]							
	outrigger	6	7.5	9	10.5	12	13.5	15	16.5
16.5	4-point supported		8.7° (8.7°)	6.0° (6.0°)					
15	4-point supported			8.8° (8.8°)	6.7° (6.7°)				
13.5	4-point supported			9.9° (9.9°)	8.6° (8.6°)	6.5° (6.5°)			
12	4-point supported			10.4° (10.4°)	9.3° (9.3°)	8.3° (8.3°)	5.6° (5.6°)		
10.5	4-point supported			10.4° (10.4°)	9.3° (9.3°)	8.4° (8.4°)	7.6° (7.6°)		
9	4-point supported			10.7° (10.7°)	9.5° (9.5°)	8.5° (8.5°)	7.7° (7.7°)	6.0° (6.0°)	
7.5	4-point supported		13.1° (13.1°)	11.2° (11.2°)	9.8° (9.8°)	8.7° (8.7°)	7.6 (7.7°)	6.4 (6.9°)	
6	4-point supported	16.2° (16.2°)	14.1° (14.1°)	11.7° (11.7°)	10.1° (10.1°)	8.8° (8.8°)	7.5 (7.8°)	6.3 (6.9°)	3.9° (3.9°)
4.5	4-point supported	19.7° (19.7°)	15.1° (15.1°)	12.3° (12.3°)	10.4° (10.4°)	8.8 (8.9°)	7.3 (7.8°)	6.2 (6.8°)	4.9° (4.9°)
3	4-point supported	20.0 (20.0)	15.8° (15.8°)	12.7° (12.7°)	10.4 (10.5°)	8.5 (9.0°)	7.1 (7.7°)	6.1 (6.6°)	5.3 (5.4°)
1.5	4-point supported	10.8° (10.8°)	15.9° (15.9°)	12.5 (12.7°)	10.0 (10.5°)	8.3 (8.9°)	7.0 (7.5°)	6.0 (6.4°)	5.0° (5.0°)
0	4-point supported	8.9° (8.9°)	15.3° (15.3°)	12.1 (12.3°)	9.8 (10.2°)	8.1 (8.5°)	6.9 (7.2°)	5.9° (5.9°)	
-1.5	4-point supported	9.0° (9.0°)	13.9° (13.9°)	11.4° (11.4°)	9.5° (9.5°)	7.9° (7.9°)	6.5° (6.5°)	5.1° (5.1°)	
-3	4-point supported	9.8° (9.8°)	11.9° (11.9°)	10.0° (10.0°)	8.3° (8.3°)	6.9° (6.9°)	5.5° (5.5°)		
-4.5	4-point supported			8.0° (8.0°)	6.7° (6.7°)	5.4° (5.4°)			
								M	ax. reach 16.7 m
3.1	4-point supported								4.0° (4.0°)

## **WORKING RANGE**

#### **REACH 18.2 M WITH DIPPER STICK**

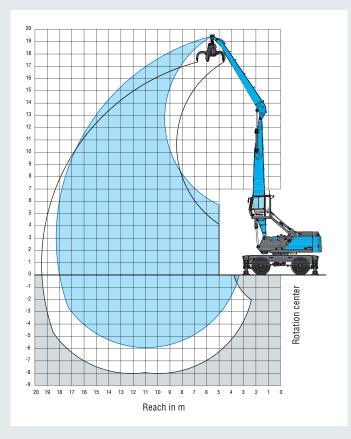
Loading equipment

Boom 9.7 m Dipper stick 7.8 m Cactus grab

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Clamshell grab 1.4 m <sup>3</sup>	Density of materials handled up to 1,600 $kg/m^{\scriptscriptstyle 3}$
Clamshell grab 2.0 m³	Density of materials handled up to 800 $kg/m^{\scriptscriptstyle 3}$
Lift hook	20 t

The lift capacity values are stated in metric tons (t). The pump pressure is 360 bar. In accordance with ISO 10567 the lift capacity values represents 75% of the static tipping loads or 87% of the hydraulic lifting force (marked °). On solid and level ground the values apply to a swing range of 360°. The (...) values apply in the longitudinal direction of the undercarriage. The values for "not supported" only apply via the steering axle or the locked oscillating axle. The weights of the attached load hoisting equipment (grab, load hock, etc.) must be deducted from the lift capacity values. The working load of the lifting devise must be observed. In accordance with the EN 474-5 for object handling application hose rupture valves on the boom and stick cylinders, an overload warning device and the lift capacity table in the cab are required. For object handling application the machine has to be supported on a level ground.



## LIFTING CAPACITY

Height [m]	Undercarriage					Reach [m]				
	outrigger	6	7.5	9	10.5	12	13.5	15	16.5	18
18	4-point supported		8.2° (8.2°)	6.3° (6.3°)						
16.5	4-point supported			8.2° (8.2°)	6.7° (6.7°)					
15	4-point supported				8.1° (8.1°)	6.6° (6.6°)				
13.5	4-point supported				8.8° (8.8°)	7.9° (7.9°)	6.3° (6.3°)			
12	4-point supported				8.8° (8.8°)	7.9° (7.9°)	7.2°(7.2°)	5.5° (5.5°)		
10.5	4-point supported				8.9° (8.9°)	8.0° (8.0°)	7.3° (7.3°)	6.6° (6.6°)	3.9° (3.9°)	
9	4-point supported			10.3° (10.3°)	9.1° (9.1°)	8.1° (8.1°)	7.3° (7.3°)	6.5 (6.6°)	5.5° (5.5°)	
7.5	4-point supported		12.1° (12.1°)	10.8° (10.8°)	9.4° (9.4°)	8.3° (8.3°)	7.4° (7.4°)	6.5 (6.6°)	5.5 (6.9°)	
6	4-point supported	14.1° (14.1°)	13.7° (13.7°)	11.4° (11.4°)	9.7° (9.7°)	8.5° (8.5°)	7.5° (7.5°)	6.3 (6.7°)	5.4 (5.9°)	3.7° (3.7°)
4.5	4-point supported	19.3° (19.3°)	14.7° (14.7°)	11.9° (11.9°)	10.0° (10.0°)	8.7° (8.7°)	7.3 (7.6°)	6.2 (6.7°)	5.3 (5.8°)	4.5° (4.5°)
3	4-point supported	19.9° (19.9°)	15.4° (15.4°)	12.3° (12.3°)	10.2° (10.2°)	8.5 (8.7°)	7.1 (7.6°)	6.1 (6.6°)	5.2 (5.7°)	4.6 (4.7°)
1.5	4-point supported	8.1° (8.1°)	15.6° (15.6°)	12.4° (12.4°)	9.9 (10.3°)	8.2 (8.7°)	6.9 (7.4°)	5.9 (6.4°)	5.2 (5.5°)	4.3° (4.3°)
0	4-point supported	6.8° (6.8°)	14.9° (14.9°)	11.9 (12.1°)	9.6 (10.0°)	8.0 (8.4°)	6.8 (7.2°)	5.8 (6.1°)	5.1° (5.1°)	
-1.5	4-point supported	7.0° (7.0°)	12.5° (12.5°)	11.3° (11.3°)	9.4° (9.4°)	7.8 (8.0°)	6.6 (6.7°)	5.6° (5.6°)	4.5° (4.5°)	
-3	4-point supported	7.6° (7.6°)	12.1° (12.1°)	10.1° (10.1°)	8.5° (8.5°)	7.2° (7.2°)	6.0° (6.0°)	4.9° (4.9°)	3.6° (3.6°)	
-4.5	4-point supported		9.8° (9.8°)	8.5° (8.5°)	7.2° (7.2°)	6.1° (6.1°)	5.0° (5.0°)	3.8° (3.8°)		
									Max	k. reach 18.2 m
3.1	4-point supported									3.8° (3.8°)

## **MODULAR SYSTEM**



#### MHL370 F: SELECT YOUR OPTIONS.

BASIC UNIT	Standard
Air Conditioner	٠
Hydraulically height adjustable cabin	٠
Cabin standard (reinforced steel construction)	•
Automatic engine switch-off function	٠
Loading equipment 16.7 m reach (boom 8.9 m, stick 7.0 m)	•
Powershift transmission	٠
Standard colour	٠
Single solid rubber tyres (SETCO) 470 × 1499 mm	٠
Chassis with 4-point outriggers	٠
Air-cushioned comfort seat	٠
Rearview backup camera	٠
Rupture valves for lifting and stick cylinders	٠

ENGINE	Ado	d option
Diesel engine		
Electric engine		
Engine pre-heating		
UNDERCARRIAGE		
Standard mobile		
Crawler		
Crawler gantry		
Pylon	m	
4 point stabilizers, individually controllable		
LOADING EQUIPMENTS		
Boom cylinder damping system (piston accumulator)		
Loading equipment 18 m reach		
Loading equipment 20 m reach		
LIGHTS		
Light package H3 or LED (for boom stick or cabin)		
Head lamp and flashlight protector		
CABIN		
Auxiliary heating with timer and temperature preselection		
Cabin with bullet proof glass front and above		
Horizontal und vertical hydraulically adjustable cabin		
FOPS-top guard for the cab's roof		
Protection installation driver's cab		

CABIN	Add option
Powder fire extinguisher with holder inside the cab	
Joystick steering	
Lower screen washing device	
Pedal for swingbreak lock	
Voltage converter 12 V (incl. 2.5 m cable)	
Radio CD / USB	
Air-conditioned seat with heating	
Socket 12 V	
Joystick steering & driving	
Joystick steering & driving · cab floor with glass window	
Special joystick function (detailed plan for joystick functions necessary)	
Mechanically switchable joystick-functions	
ASSISTANCE SYSTEMS	
Overload and work area control (incl. reach / hight limitation, overload warning device and overload switch-off device)	
Overload warning device basic (without angle sensors)	
Travel alarm with flashing alarm light with acoustic warning signal	
FURTHER OPTIONS	
Reversible fan for hydraulic oil cooler and water- / intercooler	
Float switch	
Filtration system for attachements	
Electric refuelling pump	
Generator 20 kW	
Generator 30 kW	
Bio-hydraulic oil PANOLIN HLP SYNTH 46 (first filling)	
Hydraulic-oil XTREME TEMP (first filling)	
Engine pre-heating*	
Hydraulic oil pre-heating*	
Stick protection	
Telematics System (2 years duration, renewable on demand)	
Prolongation Telematics for 1 additional year	
Active cyclone prefilter (Top Air)	
Individually controllable 4-point outriggers	
Extended outrigger plates (for reduced surface pressure)	
Central greasing system for undercarriage - manually	
Central greasing system for undercarriage - automatic	
Increased corrosion protection (cabin, covers, steel construction)	

\* (230V-50Hz by external power supply)

#### NOTES



# **ON FLEET MANAGEMENT.**

### Fuchs Telematics System: Recognize and Optimize Potential.

## The Fuchs Telematics system: know exactly how and where everything is running.

The system offers a modern solution to help you analyze and optimize the efficiency of your machines. It records and communicates valuable information on the operating status of each individual machine. Where are the machines? How are they working? Is a service check pending? Take advantage of this advanced software and get a handle on your fleet management with the tool that connects for you.



#### ALL-IN-ONE MACHINE MANAGEMENT. EVERYTHING AT A GLANCE: OPERATING DATA, MACHINE STATUS, GPS DATA

#### Record, display, and analyse data: high efficiency through precise information

- Available online anywhere and at any time\*: comprehensive information on the GPS location, start and stop times, fuel consumption, operating hours, maintenance status, and much more.
- User-friendly interface: displays information clearly for at a glance metrics and diagnostics. Take action before damage occurs: predetermined maintenance intervals are signaled and error messages are displayed in plain text messages.
- The Fuchs Telematics system is optionally available or can be retrofitted into existing machines to help control your operating costs and keep your machines in top shape.

\* Internet connection required

#### www.terex-fuchs.com

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