



EGG\_Shredding\_2022/09/09\_Version2

Notes

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## The Eggersmann philosophy

As an active practitioner actor in environment and climate protection – with our recycling plants, our special machinery as well as with our many years of experience, in-depth expertise and passion.

We have made it our task to recycle waste materials of all kinds to the highest possible standard.

With our special machines and systems, we can segregate out a high proportion of valuable materials from waste before it goes for incineration or landfill. This significantly cuts down on CO<sub>2</sub> emissions and greatly reduces landfill volumes. As a result fewer pollutants and microplastics are released into the environment.

In our biological waste treatment plants, we generate renewable power from biomass which reduces the incidence of greenhouse gases and the use of fossil fuels. At the same time, we manufacture quality fertiliser for agriculture. In contrast to the mineral fertilisers with high nitrate content that damage the soil, this natural soil improver enriches the ground with copious amounts of humus. Every year, we process about 170,000 tons of biomass into quality compost / fertiliser and this contributes towards sustainable biological food production.

Whether mobile or stationary, Eggersmann recycling machines are the first choice for efficient and user-friendly turning, separating and shredding with the lowest operating costs and highest reliability.

A great many innovative features such as Eggersmann **NRT** Noise Reduction Technology, a setup specifically designed for each machine, helps to reduce the noise levels of all of our machinery.

Further highlights of our machine technology are the Eggersmann Service Features **MMS** Minimum Maintenance System (longest maintenance intervals and minimised maintenance effort for highest machine availability) or the Eggersmann Telematic remote maintenance tool. The latest Stage V engines and Eggersmann **ASC** Auto Standby Control, the automatic standby function, are among the features that deliver more sustainability and the lowest levels of fuel consumption. The new electric generation of mobile TERRA SELECT trommel screens and STAR SELECT star screens come as hybrid version or plug-in version with high-performance drives and offers the highest degree of sustainability



## Eggersmann shredding process

Eggersmann shredders are designed as robust universal shredding tools. In the medium performance range, FORUS two-shaft shredders are the right choice for the job. They combine compact dimensions with great power. TEUTON single-shaft shredders cover the upper performance range. A rotor length of 3,000 mm effectively prevents bridging in the feed area, meaning that there is also scope for using larger wheel loaders here.



Individually adjustable shaft speeds

## FORUS two-shaft shredders

Eggersmann two-shaft shredders offer a high level of operational safety due to their hydromechanical drive. The shafts can be controlled asynchronously either individually or using configured programs. This optimises the results for most crushable materials and at the same time

enables self-cleaning for winding materials. The various secondary shredding beams allow the final grain to be clearly defined through to a market end product.



Long-life marathon rotor

## TEUTON single-shaft shredders

Eggersmann's hydro-mechanically driven single-shaft shredders are characterised by a uniform material quality of output. The various screening basket variants allow the final grain to be clearly defined to a market end product. The different shredding tools used for the various appli-

cations can be exchanged without any problems, eliminating the need for regular welding work. Foreign objects are ejected automatically by reversing the shredding rotor.





# Eggersmann FORUS F 25 / F 25 E

Eggersmann’s **FORUS** series of two-shaft shredders are ideal, universal machines for a wide range of recycling applications. **FORUS** can easily shred numerous types of recyclable waste and prepare it for further processing. The focus here is on the shredding of brittle materials such as scrap wood and demolition timber, roots or railway sleepers.

Due to the innovative, asynchronous shaft drive, the **FORUS** is also a strong partner for waste management applications. Even specialist applications such

as glass processing are no challenge for this great all-rounder.

The final grain sizes and throughputs of the shredder can be adjusted and optimised from 120 mm to 500 mm within just a few minutes, depending on the application, thanks to the hydraulic, modular secondary crusher bar system.



Application: Waste wood



Application: Glass recycling



Application: Pallets



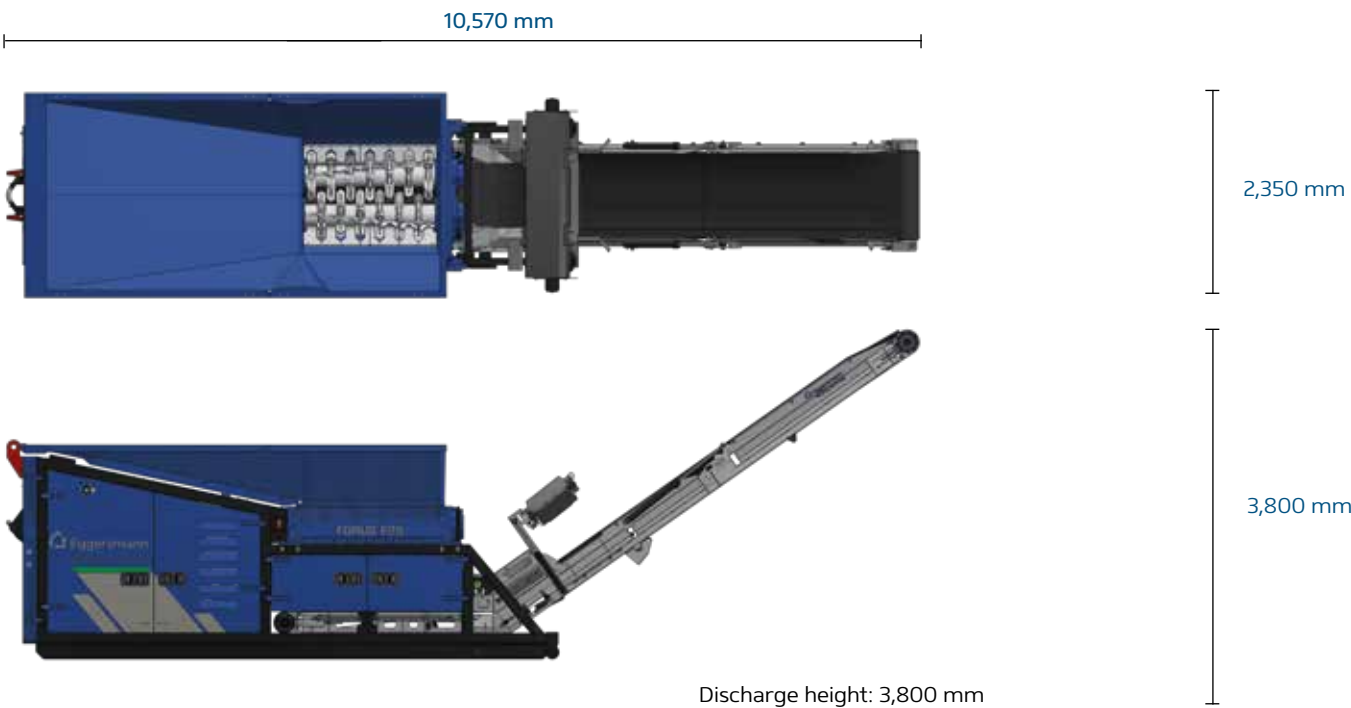
Waste wood up to 30 t/h  
Waste up to 30 t/h

Industrial waste up to 25 t/h  
Green waste up to 25 t/h



# Eggersmann FORUS F 25 / F 25 E

## Working position



## Transport position



## Technical data | FORUS F 25

Engine		
Diesel engine		CAT C 7.1
Rating	kW / HP	186 / 252
Cubic cc / cylinders		7.1 / 6-cylinder
Emissions standard		EPA Tier 4f / EU Stage V
Tank volume	l	250
Drive components		
Hydraulic pumps/ hydr. motors - Manufacturer		2 x axial piston pumps / 2x axial piston motors - Bosch Rexroth
Planetary gear unit - Manufacturer		2 x gear units Bonfiglioli
Chassis		
Perm. GVW	kg	14,500
Filling range		
Filling volume	m³	5
Hopper		hydraulically foldable
Shredder unit		
Number of shafts		2
Opening above the shafts	mm	1,350 x 1,550
Shaft speed	rpm	28-5, shafts driven individually, asynchronously
Loading height	mm	2,500
Conveyor belt		
Chevron belt	mm	1,000

## Technical data | FORUS F 25 E

Engine		
Electric		T3C315L-4
Rating / frequency	kW / Hz	132 / 50
Drive components		
Hydraulic pumps/ hydr. motors - Manufacturer		2 x axial piston pumps / 2x axial piston motors - Bosch Rexroth
Planetary gear unit - Manufacturer		2 x gear units Bonfiglioli
Chassis		
Perm. GVW	kg	14,500
Filling range		
Filling volume	m³	5
Hopper		hydraulically foldable
Shredder unit		
Number of shafts		2
Opening above the shafts	mm	1,350 x 1,550
Shaft speed	rpm	28-5, shafts driven individually, asynchronously
Conveyor belt		
Chevron belt width	mm	1,000

# Eggersmann FORUS F 25

Working position



Transport position





Technical data | FORUS F 25


Engine		
Diesel engine		CAT C 7.1
Rating	kW / HP	186 / 252
Cubic cc / cylinders		7.1 / 6-cylinder
Emissions standard		EPA Tier 4f / EU Stage V
Tank volume	l	250
Drive components		
Hydraulic pumps/ hydr. motors - Manufacturer		2 x axial piston pumps / 2x axial piston motors - Bosch Rexroth
Planetary gear unit - Manufacturer		2 x gear units - Bonfiglioli
Chassis		
Tracked chassis	mm	Panel width 400 mm, 3-web floor panels, 2 speeds
Perm. GVW	kg	17,500
Loading height	mm	2,850
Filling range		
Filling volume	m³	5
Hopper		hydraulically foldable
Shredder unit		
Number of shafts		2
Opening above the shafts	mm	1,350 x 1,550
Shaft speed	rpm	28-5, shafts driven individually, asynchronously
Conveyor belt		
Chevron belt width	mm	1,000


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Tracks


Hook lift


Electric


Diesel


Stationary




# Eggersmann FORUS F 38 / F 38 E

Highly efficient drive technology combined with maximum mobility guarantees the lowest operating costs. Optionally with the latest diesel technology or electrically powered.

The Eggersmann **FORUS F 38** two-shaft shredder is the big brother to the **FORUS F 25**. The universal range of applications and the definable final grain size are also integral aspects of this machine.

Like the **F 25**, the **FORUS F 38** offers a feeding hopper with a capacity of 5 m³ that can be operated hydraulically at the push of a button, ideal for loading from a wheel loader. The hydraulically height-adjustable magnet above the belt can be adjusted in height using the remote control and can be adapted perfectly to suit the flow of materials.

The user-friendly and intelligent control design ensures maximum machine availability with optimum utilisation. The digital display of the performance and level parameters as well as error messages and maintenance intervals ensures a problem-free and reliable shredding process.

Waste wood up to 45 t/h  
Waste up to 50 t/h

Industrial waste up to 30 t/h  
Green waste up to 35 t/h



Application: Railway sleepers



Application: Waste



Application: Waste wood



Eggersmann FORUS F 38 / F 38 E

Working position



Transport position



Technical data | FORUS F 38

Engine		
Diesel engine		CAT C9.3
Rating	kW / HP	280 / 380
Cubic cc / cylinders		9.3 L / 6-cylinder
Emissions standard		EPA Tier 4f / EU Stage V
Tank volume	l	400
Drive components		
Hydraulic pumps/ hydr. motors - Manufacturer		2 x axial piston pumps / 2 x axial piston motors - Bosch Rexroth
Planetary gear unit - Manufacturer		2 x gear units - Bonfiglioli
Chassis		
Perm. GVW	kg	approx. 15,500
Filling range		
Filling volume	m³	5
Hopper		hydraulically foldable
Shredder unit		
Number of shafts		2
Opening above the shafts	mm	2,034 x 1,450
Shaft speed	rpm	23-5, shafts driven individually, asynchronously
Loading height	mm	2,500
Conveyor belt (height-adjustable)		
Chevron belt width	mm	1,200

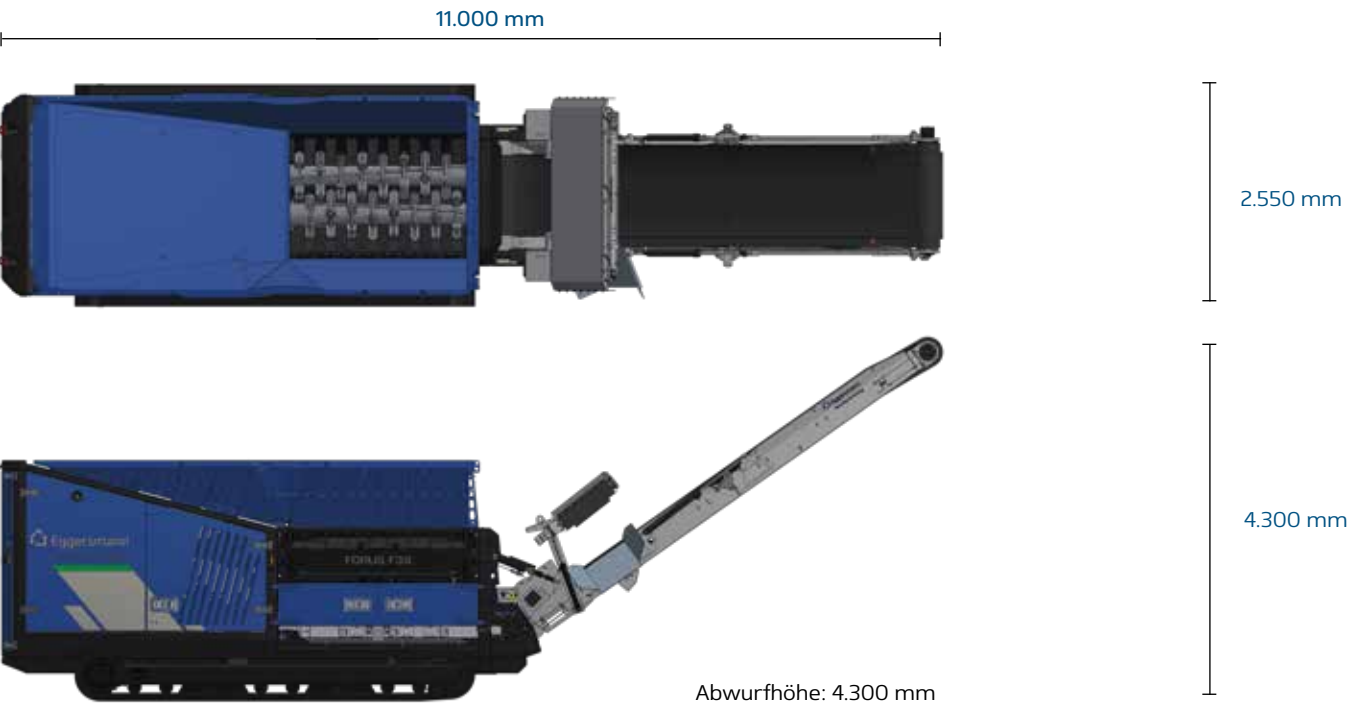
Technical data | FORUS F 38 E

Engine		
Electric		T3C315L-4
Rating / frequency	kW / Hz	200 / 50 Hz
Drive components		
Hydraulic pumps/ hydr. motors - Manufacturer		2 x axial piston pumps / 2 x axial piston motors - Bosch Rexroth
Planetary gear unit - Manufacturer		2 x gear units - Bonfiglioli
Chassis		
Perm. GVW	kg	approx. 15,500
Filling range		
Filling volume	m³	5
Hopper		hydraulically foldable
Shredder unit		
Number of shafts		2
Opening above the shafts	mm	2,034 x 1,450
Shaft speed	rpm	23-5, shafts driven individually, asynchronously
Conveyor belt (height-adjustable)		
Chevron belt width	mm	1,200

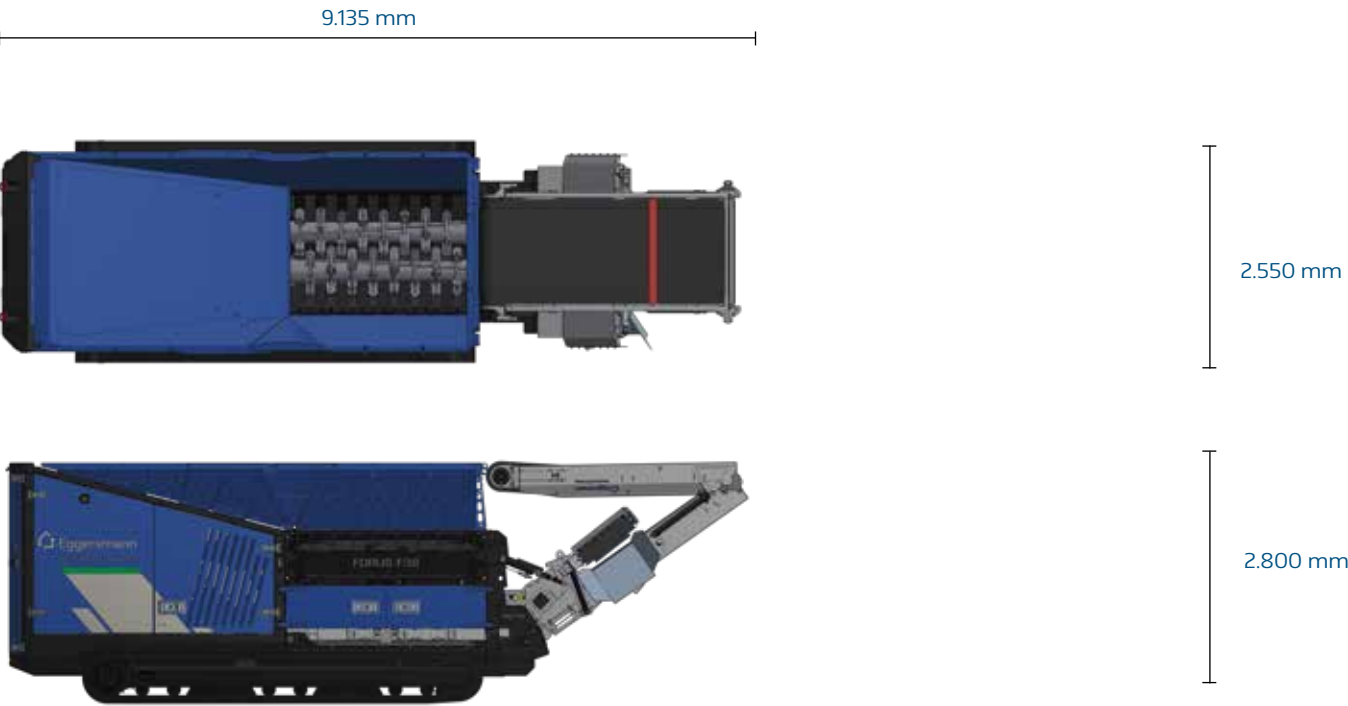


# Eggersmann FORUS F 38 / F 38 E

Working position



Transport position



Technical data | FORUS F 38

Engine		
Diesel engine		CAT C9.3
Rating	kW / HP	280 / 380
Cubic cc / cylinders		9.3 L / 6-cylinder
Emissions standard		EPA Tier 4f / EU Stage V
Tank volume	l	400
Drive components		
Hydraulic pumps/ hydr. motors - Manufacturer		2 x axial piston pumps / 2 x axial piston motors - Bosch Rexroth
Planetary gear unit - Manufacturer		2 x gear units - Bonfiglioli
Chassis		
Tracked chassis	mm	Panel width 400 mm, 3-web floor panels, 2 speeds
Perm. GVW	kg	approx 18,000
Filling range		
Filling volume	m³	5
Trichter		hydraulically foldable
Shredder unit		
Number of shafts		2
Opening above the shafts	mm	2,034 x 1,450
Shaft speed	rpm	23-5, shafts driven individually, asynchronously
Conveyor belt (height-adjustable)		
Chevron belt	mm	1,200

Technical data | FORUS F 38 E

Engine		
Elektric		T3C315L-4
Rating	kW / Hz	200 / 50 Hz
Drive components		
Hydraulic pumps/ hydr. motors - Manufacturer		2 x axial piston pumps / 2 x axial piston motors - Bosch Rexroth
Planetary gear unit - Manufacturer		2 x gear units - Bonfiglioli
Chassis		
Chain chassis	mm	Panel width 400 mm, 3-web floor panels, 2 speeds
Perm. GVW	kg	approx 18,000
Filling range		
Filling volume	m³	5
Trichter		hydraulically foldable
Shredder unit		
Number of shafts		2
Opening above the shafts	mm	2,034 x 1,450
Shaft speed	rpm	23-5, shafts driven individually, asynchronously
Conveyor belt (height-adjustable)		
Chevron belt	mm	1,200

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# Eggersmann TEUTON Z 50

The wide range of applications with the new generation of Eggersmann **TEUTON** universal shredders is impressive and virtually inexhaustible. The **TEUTON** series of machines are just as efficient at shredding recycled wood, roots, green waste or bulky household refuse as they are at shredding tyres, plastics, mattresses or batches of special and mono-material. Like the other **TEUTON** shredders, the **TEUTON Z 50** also has replaceable shredding tools. Where necessary, depending on the type of application, these can be selected and easily changed within a

very short space of time. The optional screening basket system makes it possible to shred material down to a marketable grain size in a single operation. Another prominent feature of the machine is the large and wide conveyor belts, which enable material discharge, free from clogging, with all applications. The material ejection height is up to 5 metres. The conveyor belt speed is continuously variable.



Application: Green waste



Application: Waste wood



Application: Waste



Waste wood up to 50 t/h  
Waste up to 85 t/h

Industrial waste up to 60 t/h  
Green waste up to 95 t/h

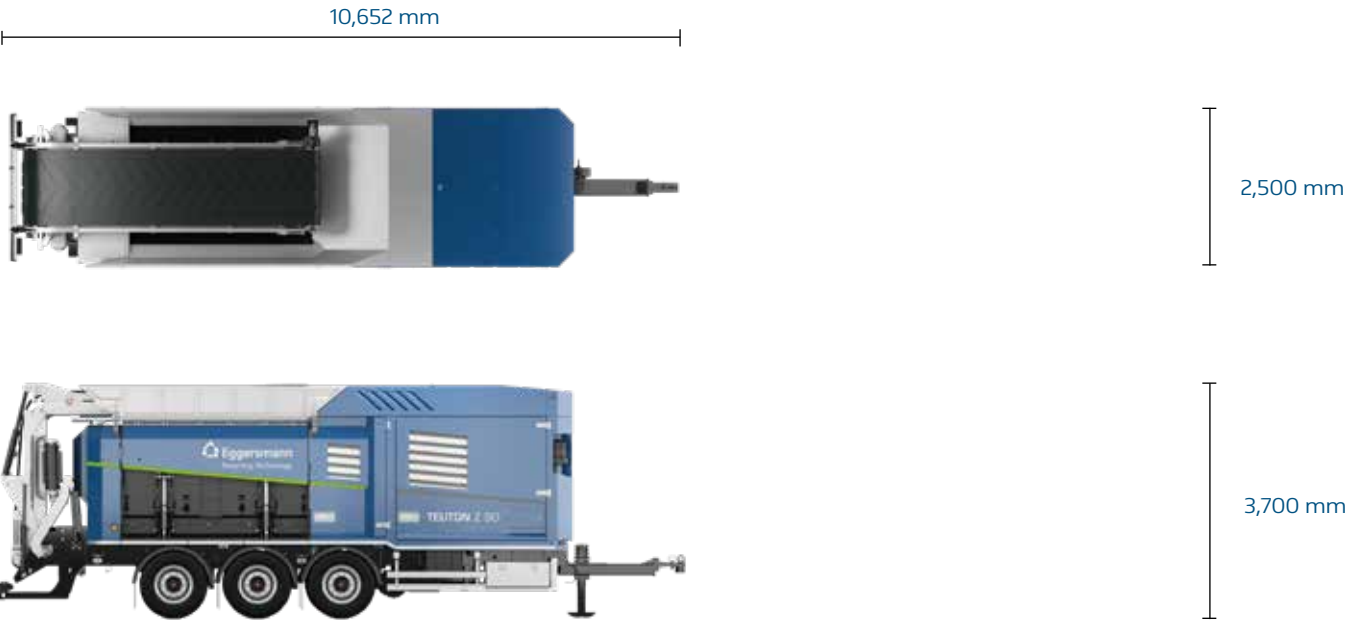


# Eggersmann TEUTON Z 50

Working position



Transport position



Technical data | TEUTON Z 50

Engine		
Diesel engine		Cummins X12
Rating	kW / HP	373 / 507
Cubic cc / cylinders		12 L / in-line six-cylinder
Exhaust emission standard		EU Stage V, Optional II
Chassis		
		3-axle central axle chassis in accordance with StVZO, equipped with ABS/ESP
Tyres		385/65 R22,5
Total weight	kg	25,000
Lighting	V	24
Filling area		
Filling volume	m³	7.5
Filling height	mm	3,000
Filling width	mm	3,000 - 4,000
Shredding unit		
Number of tools on rotor	pcs	30
Number of teeth on counter blade	pcs	19
Rotor length	mm	3,000
Rotor diameter	mm	600, max. flight circle diameter 1,050
Rotor speed	rpm	20 - 40, reversible
Rear conveyor belt		
Length	mm	6,570
Width	mm	1,200
Discharge height (infinitely variable)	mm	2,000 - 5,000



# Eggersmann TEUTON Z 50

Working position



Transport position



Technical data | TEUTON Z 50

Engine		
Diesel engine		Cummins X12
Rating	kW / HP	373 / 507
Cubic cc / Cylinders		12 L / in-line six-cylinder
Emissions standard		EU Stage V, Optional II
Tank capacity	l	650
- Diesel		85
- Add blue		
Tracked chassis		
Tracked chassis	mm	Panel width 400 mm, 3-web floor panels, 2 speeds
Total weight	kg	27,500
Lighting	V	24
Filling area		
Filling volume	m³	7,5
Filling height	mm	3,000
Filling width	mm	3,000 – 4,000
Shredding unit		
Number of tools rotor	pcs	30
Number of teeth of counter blade	pcs	19
Rotor length	mm	3,000
Rotor diameter	mm	600, max. flight circle diameter 1,050
Rotor speed	rpm	20 - 40, reversible
Rear conveyor belt		
Length	mm	6,570
Width	mm	1,200
Discharge height (infinitely variable)	mm	2,000 – 5,000

Technical data | TEUTON Z 50 E

Engine		
Elektric motor		T3C315L-4
Rating	kW / Hz	200 / 50 Hz
Tracked chassis		
Tracked chassis	mm	Panel width 400 mm, 3-web floor panels, 2 speeds
Total weight	kg	27,000
Lighting	V	24
Filling area		
Filling volume	m³	7.5
Filling height	mm	3,000
Filling width	mm	3,00 – 4,700
Shredding unit		
Number of tools rotor	pcs	30
Number of teeth of counter blade	pcs	19
Rotor length	mm	3,000
Rotor diameter	mm	600, max. Flugkreisdurchmesser 1,050
Rotor speed	rpm	20 – 40, reversible
Rear conveyor belt		
Length	mm	6,570
Width	mm	1,200
Discharge height (infinitely variable)	mm	2,000 – 5,000

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Trailer



Tracks



Diesel



Stationary



# Eggersmann TEUTON Z 60

There are 30 interchangeable shredding tools on the three-metre long shredding rotor. The counter-blade has 19 teeth. The design is simple and robust and allows the distances between the shredding tools of the shredding rotor and the counter blade to be varied quickly and flexibly. This means that, depending on requirements, the end product size can be adjusted with over ten different setting options.

After passing the counter blade, the material falls onto the discharge belt. In addition, a screening basket can be provided. The optional screening basket system enables the machines of the **TEUTON** series to produce a defined unit size in a single operation if required. After shredding, the material first falls onto this screen basket, which encloses the lower half of the shredding rotor. Only material smaller than or equal to the defined grain size passes through the screening basket.

Waste wood up to 55 t/h  
Waste up to 95 t/h

Industrial waste up to 65 t/h  
Green waste up to 95 t/h



Application: Waste wood



Application: Roots

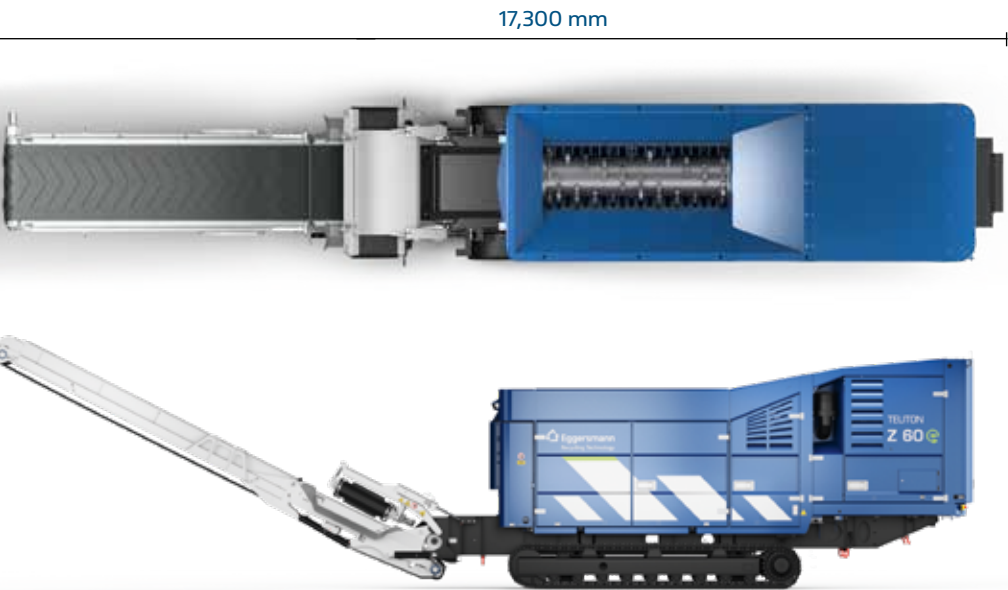


Application: Waste

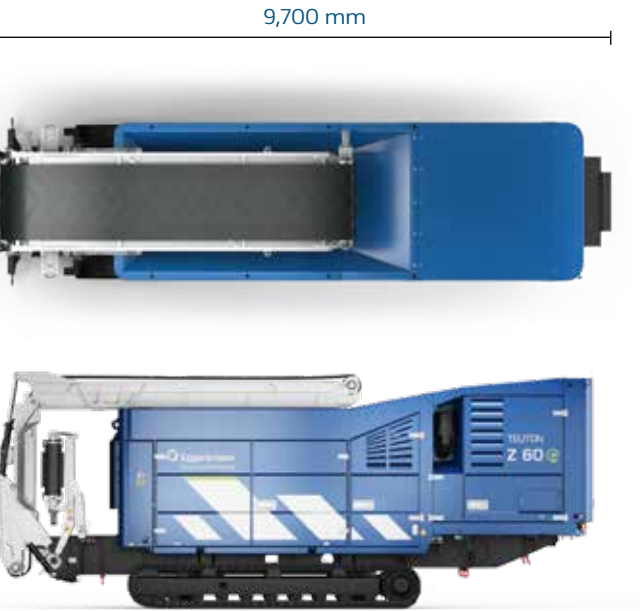


# Eggersmann TEUTON Z 60

Working position



Transport position



2,540 mm

3,700 mm

Technical data | TEUTON Z 60

Engine		
Diesel engine		Cummins QSX 15 EU Stage V, EPA Tier 4 final
Rating	kW / HP	447 / 600
Cubic cc / Cylinders		15 L / in-line six-cylinder engine
Emissions standard		EU Stage V, Optional II
Tracked chassis		
Tracked chassis	mm	Panel width 400 mm, 3-web floor panels, 2 speeds
Total weight	kg	34,000
Lighting	V	24
Filling area		
Filling volume	m³	7.5
Filling width	mm	3,000 – 4,000
Shredding unit		
Number of tools on rotor	pcs	30
Number of teeth of the counter blade	pcs	19
Rotor length	mm	3,000
Rotor diameter	mm	600, max. flight circle diameter 1.050
Rotor speed	rpm	20 - 40, reversible
Discharge conveyor belt		
Length	mm	7,560
Width	mm	1,200
Max. discharge height	mm	4,000 - 5,000
Loading height		
Loading height to upper edge of hopper	mm	3,400
Loading height to top edge of hopper elevation	mm	3,800
Loading volume		
Loading volume without hopper elevation	l	4,400
Loading volume with one hopper extension (plug-in)	l	6,580
Loading volume with two hopper extensions (plug-in)	l	8,770



# Eggersmann TEUTON Z 60

Working position



Transport position



Technical data | TEUTON Z 60

Engine		
Diesel engine		Cummins QSX 15 EU Stage V, EPA Tier 4 final
Rating	kW / HP	447 / 600
Cubic cc / Cylinders		15 L / in-line six-cylinder engine
Emissions standard		EU Stage V, Optional II
Chassis		
Total weight	kg	32,000
Filling area		
Filling volume	l	4,400
Filling height	mm	3,000
Filling width	mm	3,000 – 4,000
Shredding unit		
Number of tools on rotor	pcs	30
Number of teeth of the counter blade	pcs	19
Rotor length	mm	3,000
Rotor diameter	mm	600, max. flight circle diameter 1.050
Rotor speed	rpm	20 – 40, eversible
Discharge conveyor belt		
Length	mm	7,560
Width	mm	1,200
Max. discharge height	mm	3,980
Loading height		
Loading height to upper edge of hopper	mm	3,200
Loading height to top edge of hopper elevation	mm	3,600
Loading volume		
Loading volume without hopper elevation	l	4,400
Loading volume with one hopper elevation	l	6,580
Loading volume with two hopper elevation	l	8,770







# Solutions



Tracked chassis or lift axle



Individually adjustable shaft speeds



Hydraulically height-adjustable neodymium magnetic separator



TEUTON: Screening basket system - to create a finished final grain size



FORUS: tool-free exchangeable secondary crushing bars for variable final grain size



Material moistening device - for dust containment



Robust tracked drives, 2 speeds, ground protection plates



Powerful neodymium magnetic separator, hydraulically height-adjustable, scrap ejection on both sides



Hopper automation (FORUS) - for automatic optimisation of loading



30-channel wireless system with integrated emergency stop function



Ball mounting adapter - for uncomplicated manoeuvring of the entire machine



Shredding flap - can be deployed hydraulically = free access to shredding area

# Applications

For more than 30 years, product brands from Eggersmann have been used worldwide in various applications. In the process, we shred, screen, mix, separate and compost a wide variety of materials. The following is a small foretaste of the variety of applications for Eggersmann Recycling Technology.

We are happy to advise you if you want to dedicate yourself to a new application, optimise existing processes or go completely new ways. As we gain experience worldwide, there are almost no requirements that we have not already solved in this or a similar way.







## Service & Spare Parts

Reliable · Fast · Worldwide

To ensure the long operating life and uptime of your Eggersmann machines, we are always on call as your expert service partner to support you. Our service advisers, technicians, mechanics, mechatronic engineers and programmers are at your service worldwide. So take advantage, today, of the experience of our service personnel and the expert support of our regional dealers.

### **Eggersmann service in detail:**

- › Commissioning, assembly & machine instruction
- › Preventive maintenance operations
- › Servicing
- › Troubleshooting
- › Modernisation and upgrading of machines
- › Professional advice

When your Eggersmann machine is inspected by our trained service staff, the complete basic set-up is checked for wear and tear, functionality and safety; essentially, the current condition of the machine is assessed. From this, you will receive a service checklist and a service report.

### **Advantages of regular Eggersmann service checks:**

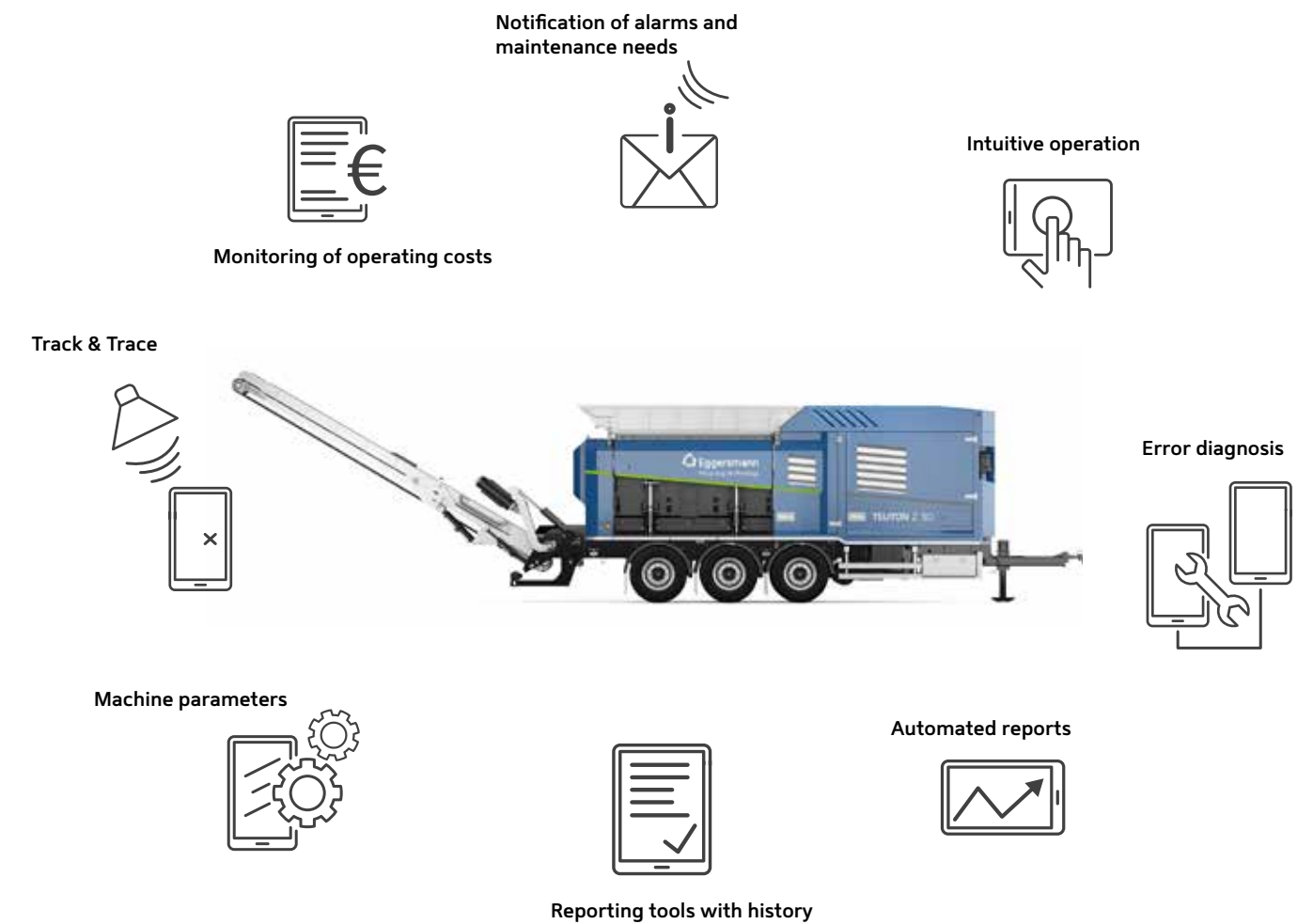
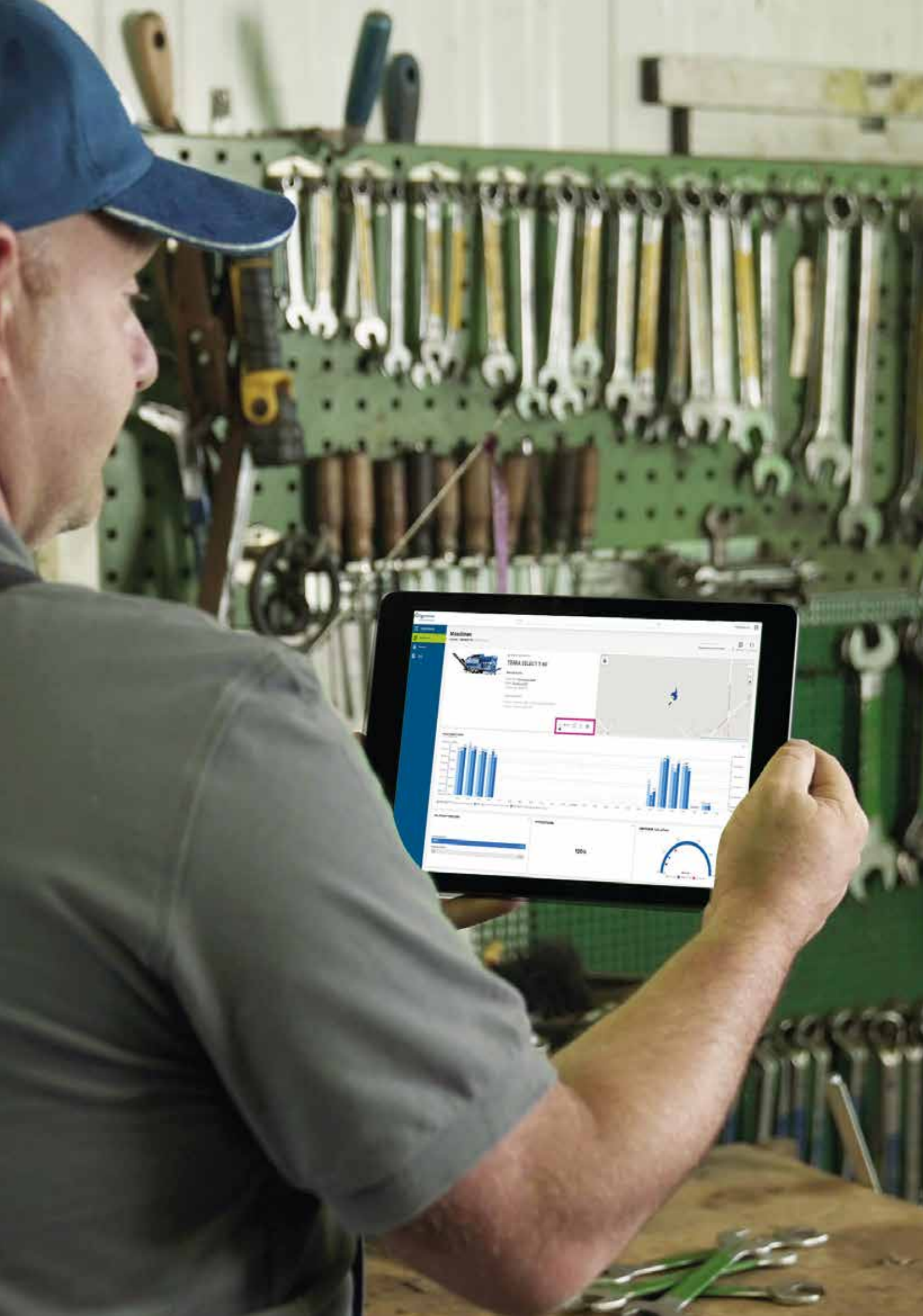
- › Extended operating life and uptime of the machine
- › Early warning system for wear: Early-stage, plannable troubleshooting leads to less machine downtime
- › Cost reduction through low repair costs
- › Comprehensive consultancy support

You would like to register your machine for inspection or maintenance? You have a service case? No problem! Do not hesitate and contact us today. Our employees are on duty for you worldwide and will be happy to help you on site.

Find your local service partner on  
**[www.f-e.de](http://www.f-e.de)**

Simply contact us and we will arrange an on-site appointment as soon as possible. We guarantee a short processing time.





## Eggersmann Telematic

### Remote Service and Machine Monitoring

A useful addition to the cost control and operational monitoring of your machines is the Eggersmann Telematic System.

It significantly simplifies maintenance and service operations. The machine sends the service partner the pending maintenance requirement or informs him directly in the event of a malfunction. The service partner has access to the relevant parameters and can make optimum preparations for the operation in both cases. Eggersmann will pay the costs for the first year of Eggersmann Telematic for you.

#### Telematic documents your success

Thanks to Eggersmann Telematic, work data, resource consumption and the location of your machine can be called

up and evaluated continuously via the Internet and PC, laptop or smartphone live or subsequently in the Eggersmann Telematic Portal.

The Eggersmann Telematic Tool is included as standard equipment in all of our machines..

