

**Doppstadt**

# **METHOR**

MULTIPURPOSE RECYCLING SYSTEM



**Best Solution. Smart Recycling.**

[doppstadt.com](https://doppstadt.com)







## METHOR - THE MULTITOOl

### Versatility in a new dimension.

Ideally adaptable, the Methor delivers by far the most versatile range of uses in its class. Operations with smaller volume flows as well as users with special fractions will benefit both from the machine's precisely controllable, efficient performance, and its ability to convert the obstruction-resistant shredding to changing material quickly and as needed.

#### **UNIVERSAL RECYCLING SYSTEM - HANDLES WHATEVER COMES ITS WAY**

With the Methor, Doppstadt takes a new approach. As a universal shredding system for smaller quantities and frequently changing applications, it is designed and geared to handle a wide variety of waste fractions, such as commercial waste, con-

struction waste, mattresses, bio waste as well as waste wood or green waste. At the same time, it includes all the advantages of our larger series, offering the uncompromising quality of Doppstadt's high-performance technology.

#### **FLEXIBLY. TO EVERY TASK**

As an optimally adaptable system, Methor offers smart operability, easy-to-perform maintenance, a modular design as well as many upgrade options, ensuring that it can be easily adapted and configured to changing material flows in the future. Processing small volumes efficiently is a real challenge. Anyone who generally has had to handle small quantities, particular batches or materials that change frequent-

ly will agree. At Doppstadt, we have made it our task to deliver a solution. The result is the Methor: a versatile shredding system that has been developed from scratch and which is distinguished by:

- Ideal adaptability
- Maximum versatility
- Rugged - optimum resistance to obstructions
- Easy to use

This ensures that you are well equipped for tasks that were previously very difficult, if not impossible, for professional shredding solutions to handle.

#### **RETHINKING SHREDDING PRACTICES**

The objective was to develop a shredder without compromising versatility, availability or resilience to wear and tear. That is why we have redesigned the entire system concept.

Starting with the perpendicularly installed shredding shaft and a much simplified material feed and discharge system through to HydraulicDirect Drive system, which delivers an ideally metered performance without gearbox. The result is a machine that is equally well suited for all conceivable applications in the waste disposal and recycling industries.

For small to medium-sized enterprises as well as operations that typically do not have their own shredder yet, the Methor ensures

efficiency and flexibility for economically shredding, even special batches, for instance.

#### **SIMPLY A SMARTER SETUP**

Its modular design makes a decisive contribution to the Methor's flexibility. Every machine is literally built on the basis of a modular system: The shredding system forms the core component that is the same in every unit. By changing the shaft, the system can be retrofitted to three different tooth sizes within 45 minutes.

Everything else, from the self-propelled to the attached variant, on hook-lift or tracked chassis, can be customized to suit your individual requirements and equipped with precisely engineered options.

### **THIS IS DOPPSTADT.**

Doppstadt, a family owned company based in Velbert (near Düsseldorf), was founded in 1965. Initially a producer of agricultural machines, Doppstadt has become a leading global supplier of solutions and services in all areas of recycling/environmental technology and resource recovery.

'Best Solutions. Smart Recycling.' True to this motto, we combine proven processes technology into individual solutions that are hallmarked by innovative process flows, maximum operational efficiency and cost-effectiveness.

With sites in Velbert, Wülfrath and Calbe, we serve customers in more than 40 countries through our own dealership network and offer a wide range of services to support the unique Doppstadt product portfolio.



# MACHINE DETAILS



## OPERATING CONCEPT

The Methor has an intuitive control panel, the core functions of which can also be implemented via a wireless remote control. The system can also be used to set up a WiFi hotspot, allowing it to be monitored and evaluated using any browser installed on an internet-enabled device.



## SMART HOPPER

Large feed area with feed hopper. Material feed is controlled automatically in relation to the load of the shredding shaft. In conjunction with the hydraulic drive, it allows a shredding with an optimal load torque curve and corresponding efficiency.



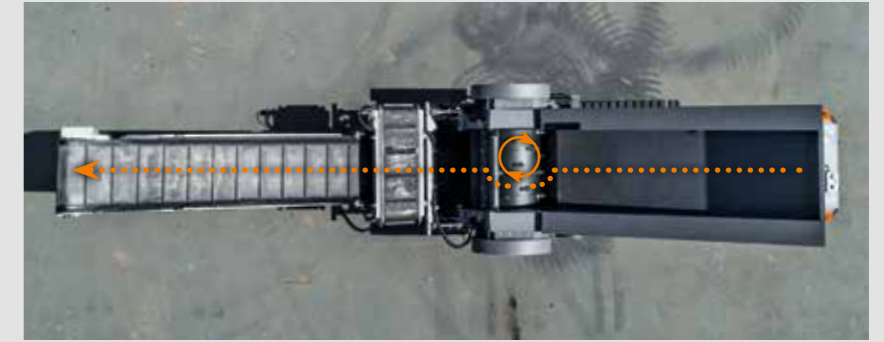
## HYDRAULIC DIRECT DRIVE

A fully hydraulic drive delivers an optimum torque to the shaft and allows the implementation of any engine. The system utilizes the hydraulic pump's intelligent control system to flexibly respond to any blockage.



## OPTION: HEIGHT-ADJUSTABLE OVERBELT MAGNET

Its angle is adjusted hydraulically or with the aid of threaded rods, it can also remain in the transport position of the machine's belt.



## FLUENT PROCESS

To ensure outstanding process reliability, input materials are shredded and discharged in the belt's direction of conveyance. The shredding chamber is designed in such a way that it operates with a conveyor belt without an articulated and lower belt. That also simplifies assembly and disassembly.



## COOLING CONCEPT

The hydraulic unit has its own cooling system, which is independent of the drive system. The fan is driven hydraulically. It is designed for a maximum blockage (obstruction) of up to 50 % of the area and its rotational speed is regulated in relation to the system's temperature. As a result, it can be used at an ambient temperature of up to 48 °C.



## SHAFT DRIVE AND SUPPORT

The shaft is driven by slow speed radial piston motors with high torque. They achieve a high degree of efficiency and minimal loss of power without requiring a gearbox. The drum is supported by truck tires, which also allows for a quick switchover (approx. 45 minutes).



## OPTION: AUXILIARY CHASSIS & DRAWBAR

For the mobile hook lift Methor, there is an auxiliary chassis available with rugged solid rubber tires and drawbar. That makes it easy to move the machine around on site by lifting it up with the aid of the hydraulic cylinder



## EASY ACCESS CONCEPT

All drive and hydraulic components are optimally ventilated and can be easily accessed via the large door panels.



## OPTION: HYDRAULIC QUICK COUPLINGS

For a quick and leak-free removal of the roller, the Methor can be equipped with hydraulic quick couplers that can be released without tools.



## SHAFT DESIGN

The shaft utilize our tried-and-tested Dopp-Lock® system and are designed with attention placed on cost and weight optimization. The shredding shafts are available in the sizes L, M and S. The spacing between the comb bar and shaft can be adjusted.



## MODULAR DESIGN

The Methor is available as hook lift variation, with tracked chassis and as stationary machine. While it is factory-equipped with a diesel engine or an electric motor, it is also possible to integrate any other drive.





## ***THE HYDRAULIC DIRECT DRIVE*** **Delivers the power and ruggedness you need to overcome obstructions.**

The Methor's powertrain is just as important as the shredding system. The innovative HydraulicDirect Drive ensures that operation is flexible, powerful and efficient. At the same time, it allows the system to quickly respond to obstructions, thus protecting itself.

### **CONTROLLED POWER**

The HydraulicDirect Drive transfers the driving power to the shredding shaft via two radial piston motors without a gearbox. As a result, the shaft can be operated at up to 34 revolutions per minute and a torque of 75,200 Nm. Control is handled proportionally via the pump pressure: If the load on the shredder mechanism

increases, the pump swivels back. Doing so continuously optimizes the load torque on the drive, which has a positive impact on consumption and wear and tear. In addition, pump pressure is also used to regulate the supply of material via the feed hopper.

### **RESPONDING QUICKLY TO RESISTANCE**

If there are obstructions blocking the shredder mechanism, the pump automatically switches via neutral to reverse without delay. After briefly running in reverse, it switches back again to the direction of operation. If pressure builds up again, it will reverse for a longer period. That is how the system automatically overcomes any

obstructions or blockage and protects the drive from damage.

### **CONNECTED IN EVERY RESPECT**

The Methor's control system communicates exclusively with the hydraulic pump, which is equipped with speed and pressure sensors. As a result of the system design, the Methor may also be easily integrated into existing operational processes. Of course, the main drive of systems with factory-installed engines can also be started using the control system, which will also regulate the drive's speed.

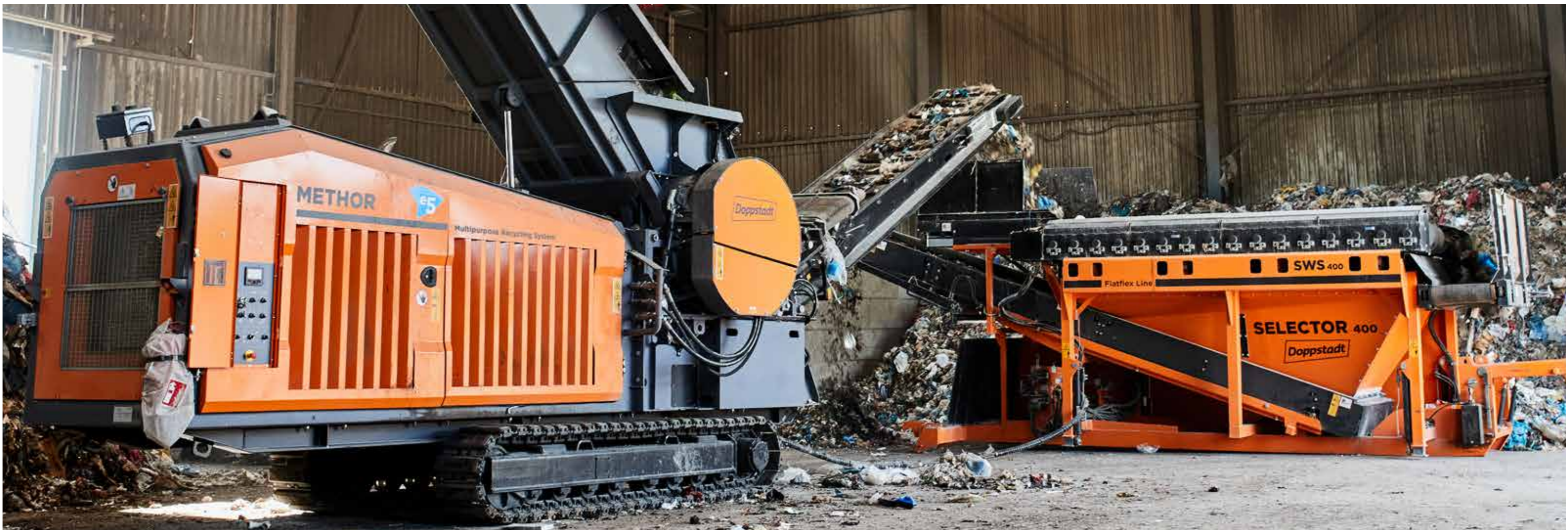
## ***SMART PRODUCT COMBINATION*** **Mobile modular system concepts from Doppstadt.**



The Methor is ideally suited for setting up high-performance mobile process chains when combined with other Smart Solutions from Doppstadt.

Based on material throughput, Methor can be optimally combined, e.g., with the 518 Flex drum screening machine or the Selector 400 with SWS spiral shaft screening deck.





## THE METHOR IS ONE FOR ALL

No other system offers such a broad range of uses.

### JUST CANNOT BE STOPPED

Be it **bag opening, dosing, feeding, crushing, cutting or fractionizing** - Methor offers extreme ruggedness, imperviousness to the obstructions and the broadest range of uses in its class. The Methor's uniquely flexible and powerful machine concept opens up a wide variety of possible application areas:

It is also suited for **container services**, which are dealing with shredding for the first time. Even **smaller recycling facilities** can benefit from utilizing the Methor, for instance, in combination with screening and air-based separation systems, rolling out a full-fledged, mobile processing system. For **smaller sites**, it ensures efficiency and flexibility in processing secondary and

particular materials. After all, it can be incorporated into more complex systems or implemented specifically to reduce the load on the main machine during peak hours.

Its mobility also allows it to be used as a standby solution that can be moved to a site whenever operations require it.

### INDESTRUCTIBLE, EVEN UNDER THE MOST ADVERSE CONDITIONS

Thanks to its **extremely rugged design**, the Methor is not picky in terms of the materials that it can process, even when operating under the most adverse conditions:

- Commercial waste
- Construction and demolition waste

- Mattresses
- Biowaste
- Bulky waste
- Building rubble
- Foils / webs
- Glass panes

With the corresponding equipment, it can even handle **pulper ropes from paper and plastic production** as well as **shred rolls or rolled goods, light scrap** and tearing open recycling bags.

The Methor shows its true potential when it is working: It is designed for maximum **durability and operational reliability**. The formula for smooth, trouble-free operation involves rugged components, an intuitive operating concept, a drive system that quickly responds to obstructions and an easy access to all areas where maintenance is important.

## Which one is your Methor? We will be glad to advise you!

One of the major advantages offered by the Methor is its well-thought-out **modular design**. That ensures the Methor can be precisely adapted to your requirements.

### DRIVE SYSTEMS:

Both a diesel engine with 200 kW and an electric motor with 200 kW are available by default as primary drive units. The hydraulic drive is also equipped with speed and pressure sensors. That also enables you to operate the Methor's HydraulicDirect Drive using other external engines.

### CARRIER VARIATIONS:

The Methor is available as hook lift machine, with optional auxiliary or permanently installed tracked chassis. There is also a version available for stationary installation, which only includes the shredder with feed hopper.

### SHREDDING SYSTEM:

Shafts with a total of three tooth sizes make sure that the Methor's shredding system can be precisely adapted to the material to be processed.

### CONTACT US!

To make the Methor the right shredding solution for your requirements, we would be very happy to advise you! Contact your local Doppstadt sales partner. You can find one under Contact at [doppstadt.de](http://doppstadt.de).







COMMERCIAL WASTE



GLASS PANES



FOIL/ WEBS



PAPER ROLLS



BIOWASTE



# METHOR – The MULTITOOL

Versatility in a new dimension.



MATTRESSES



BULKY WASTE



BUILDING RUBBLE



MIXED CONSTRUCTION WASTE



LIGHT SCRAP

Best Solution. Smart Recycling.

More information is available at [doppstadt.de/methor](http://doppstadt.de/methor)





# THE SHREDDING CONCEPT

## Our recommendation: The perfect solution for every use

A wide variety of materials require for precisely matched tools to achieve optimum results.

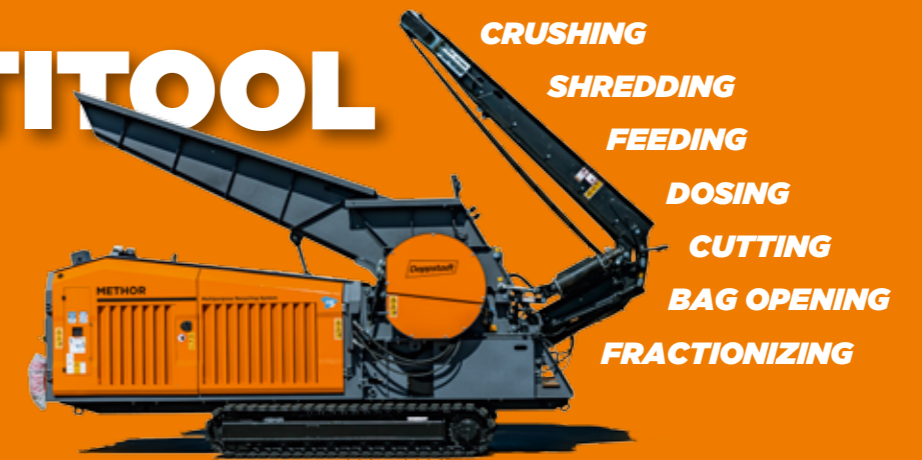
There is a large selection of shredder packages available for the Methor, which can be combined respectively

with individual components such as the shaft, shredding tools and comb bar. If your source material should change later on, the Methor can be easily and quickly adapted to meet your subsequent requirements.

Based on extensive testing and our practical experience, we would like to provide you with an overview of equipment options that we recommend for specific materials to be processed:

# The MULTITOOl

Versatility in a new dimension.



### SHREDDING SYSTEM SIZE M



### SHREDDING SYSTEM SIZE S



### SHREDDING SYSTEM SIZE L 174



### SHREDDING SYSTEM SIZE L 130



SHREDDING SYSTEM SIZE M			SHREDDING SYSTEM SIZE S		SHREDDING SYSTEM SIZE L 174			SHREDDING SYSTEM SIZE L 130
M-V1	M-V2	M-V3	S-V1	S-V2	L174-V1	L174-V2	L174-V3	L130-U1
<b>MATTRESSES</b> Ø Particle size: -- mm	<b>WASTE WOOD A1-A3</b> Ø Particle size: 300 mm	<b>COMMERCIAL WASTE</b> Ø Particle size: 300 mm	<b>CARPET / WEBS</b> Ø Particle size: -- mm	<b>WASTE WOOD A1-A3</b> Ø Particle size: 250 mm	<b>MATTRESSES</b> Ø Particle size: -- mm	<b>TRUNKS/LOGS</b> Ø Particle size: 500 mm	<b>WASTE WOOD A1-A3</b> Ø Particle size: 500 mm	<b>LIGHTWEIGHT PACKAGING</b> Ø Particle size: -- mm

	<b>COMMERCIAL WASTE</b> Ø Particle size: 250 mm
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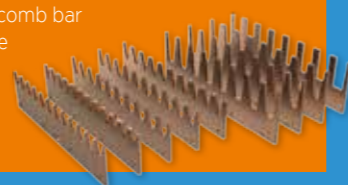
	<b>WASTE WOOD A4</b> Ø Particle size: 500 mm
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	<b>COMMERCIAL WASTE</b> Ø Particle size: 500 mm
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### UNIVERSAL RECYCLING SYSTEM

The tools are secured to the shaft using Doppstadt's proven and patented Dopp-Lock® system. The entire shredding system, which is available in the sizes M, S and L, can be switched out very easily and quickly within 45 minutes.

And not only that: The easily adjustable spacing between comb bar and shaft as well as the different comb bar designs that are available ensure a very broad range of possible uses and make the Methor a truly universal recycling system.



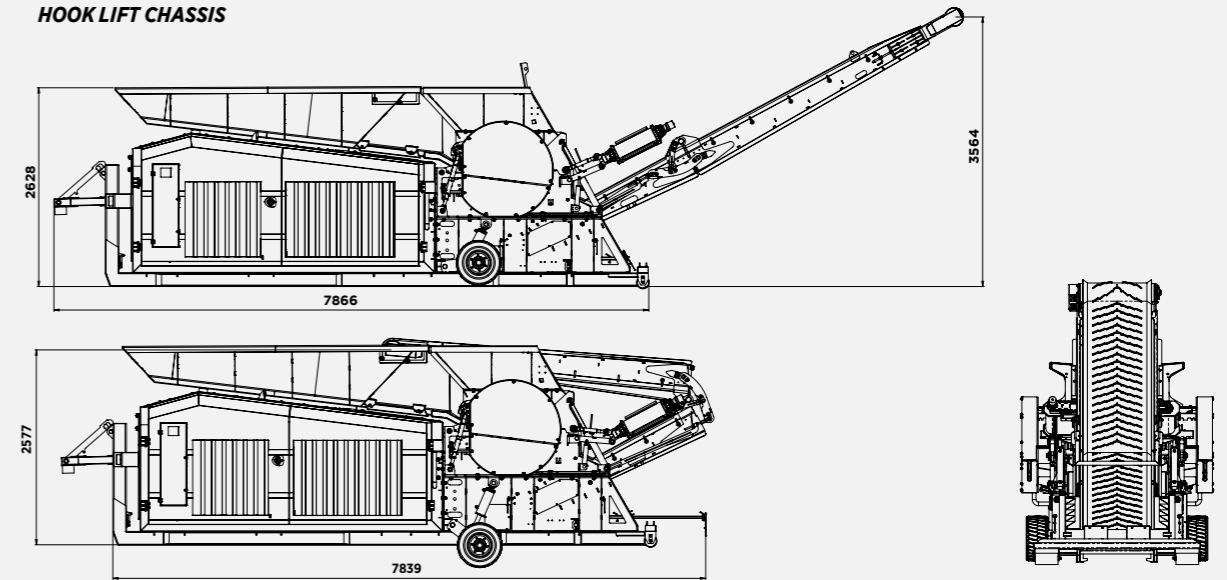
# TECHNICAL SPECIFICATIONS

METHOR	HOOK LIFT CHASSIS	TRACK-MOUNTED CHASSIS
		
Overall weight	13,400 kg	15,700 kg
Chassis	Hook lift	Track-mounted chassis
Drive	Diesel engine	Diesel engine
Type	Caterpillar C 7.1	Caterpillar C 7.1
Nominal output	205 kW / 278 HP	205 kW / 278 HP
Emission standard	STAGE V	STAGE V
Cubic capacity	7.1 L	7.1 L
Fuel tank capacity	300 L	300 L
Shaft diameter	600 mm for L, 800 mm for M/S	600 mm for L, 800 mm for M/S
Shaft speed	33 rpm	33 rpm
Rear belt width	1,000 mm	1,000 mm
Rear belt length	6,900 mm	6,900 mm
Discharge height	3,564 mm	4,059 mm
Conveying speed	adjustable 1 m/s to 4 m/s	adjustable 1 m/s to 4 m/s
Optional equipment	Water spraying system, work lighting, Electric hydraulic pump, auxiliary hydraulic shredder packages size L, M or S, fire extinguishers, overbelt magnet, drawbar, auxiliary chassis	Water spraying system, work lighting, Electric hydraulic pump, shredder packages size L, M or S, fire extinguishers, overbelt magnet

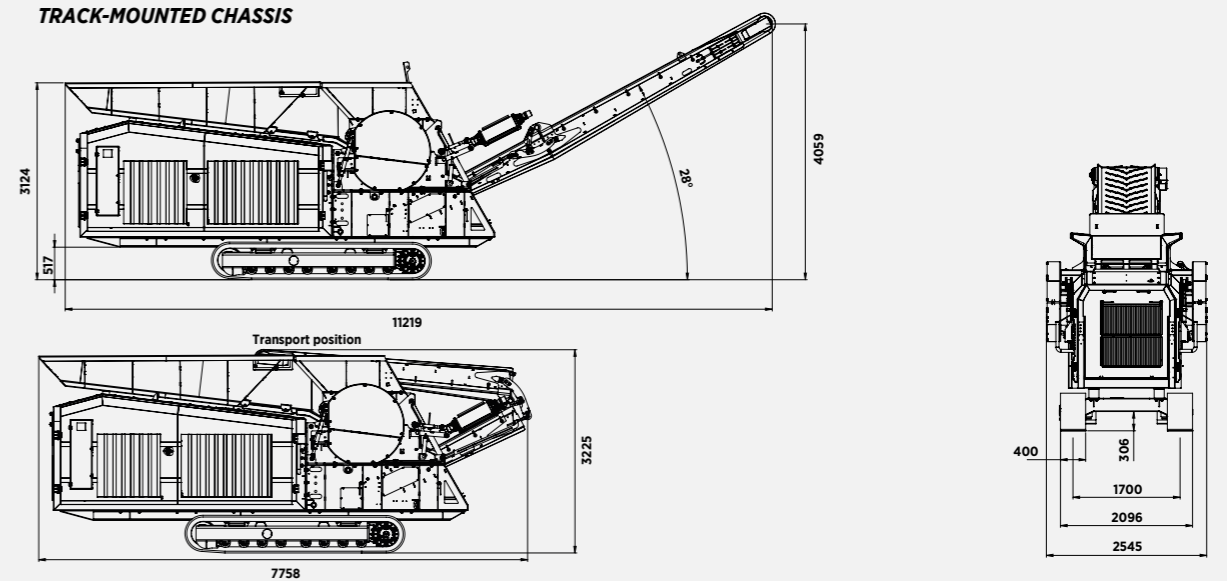
As of May 2021 - Subject to changes. All dimensions shown in mm. The information is to be regarded as approximate. Figures and descriptions might include options or additional components that are not part of the standard equipment.



## HOOK LIFT CHASSIS



## TRACK-MOUNTED CHASSIS



## SHREDDING PACKAGES

PACKAGE	SIZE L (600)	SIZE M (800)	SIZE S (800)
Type			
Type	Shredding shaft with 8 teeth	Shredding shaft with 26 teeth	Shredding shaft with 36 teeth
Diameter	600 mm	800 mm	800 mm
Tooth length	174 or 130 mm	100 mm	60 mm
Comb bar	Selectable for all sizes according to input materials (Note: see recommendations on pp. 12/13)		





## Masters every task. Worth every penny.

- System designed for maximum adaptability and versatility
- Only single-shaft shredder with the broadest range of uses in its class
- Efficient universal shredding solution for smaller volume flows and special batches
- Unique quick tool replacement with optimum accessibility
- HydraulicDirect Drive for ensuring obstruction-resistant output and operation that meets your needs



[doppstadt.com](https://www.doppstadt.com)

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