Doppstadt

METHOR

SLOW SPEED SHREDDER LINE

Best Solution. Smart Recycling.

doppstadt.com

THE METHOR

The definition of flexibility.

With the Methor, Doppstadt takes a new approach! It is the first shredder that we have designed for processing several materials containing very different waste fractions (e.g. wood, commercial waste, green waste as well as construction and demolition waste). At the same time, it includes all the advantages of our larger shredders, offering the uncompromising quality of Doppstadt's high-performance technology.

RESPONDING FLEXIBLY. TO EVERY TASK

Processing small volumes efficiently is a real challenge. Anyone who generally has had to handle small volumes, particular batches or materials that change frequently will agree. At Doppstadt, we have made it our task to deliver a solution. The result is the Methor: a shredder that has been developed from scratch and which is distinguished by:

- **maximum flexibility**
- **reliable performance**
- **good resistance against extraneous material**
- **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 pursued while designing the Methor was to develop the most flexible single-shaft shredder in the world – without compromising improved uptime, resistance to wear or even performance! That is why we have redesigned the entire system concept. Starting with the horizontally installed shredding shaft and a much simplified material feed and discharge system through to HydraulicDirect Drive system, which delivers an ideally metered output 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 companies as well as operations that do not typically 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: As core component, the shredding system is the only component that is the same in every unit. By changing the shaft, the system can be retrofitted to four different tooth sizes within 60 minutes. Everything else, from drive system to carrier version as hook lift arrangement or with tracks, can be customized to suit your individual requirements and equipped with precisely engineered options. In other words, the Methor demonstrates maximum adaptability, even in terms of site of use.

THIS IS DOPPSTADT.

The family owned business Doppstadt with headquarters in Velbert, Germany, was founded in 1965. While the company focused in the beginning on the development of agricultural machinery, Doppstadt is now a leading internationally active solution and full-service provider in all areas of environmental technology and recycling. "Best Solution. Smart Recycling." – in line with this slogan, we combine proven processes to create complete individual solutions that are distinguished by innovative process operations, maximum efficiency and optimum economic viability. Especially in the fields of water-based separation systems and wet recycling, we impress our customers with our flexible systems designed to handle every challenge. From our locations in Velbert, Wülfrath, Calbe and Wilsdruff, we serve customers in more than 40 countries with our own network of authorized dealers, offering comprehensive services that cater to Doppstadt's unique 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

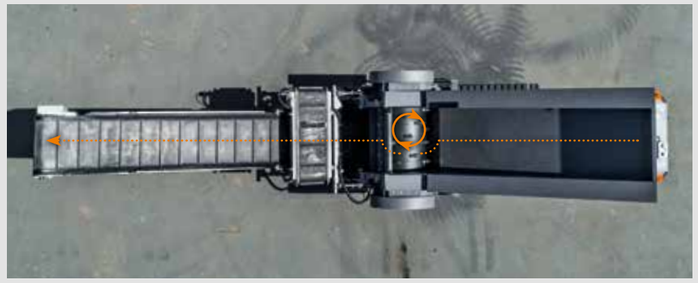
Large feed area with tipping hopper. Material feed is controlled automatically in relation to the load of the shredding shaft. In conjunction with the hydraulic drive, it allows a shredding with an optimal load torque curve and corresponding efficiency.

HYDRAULICDIRECT DRIVE

This 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 compartment is designed in such a way that it operates with a conveyor belt without an articulated and under 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 pumps with high torque. They achieve a high degree of efficiency and minimal loss of power without requiring a gearbox. The shaft is supported by truck tires, which also allows for a quick switchover (approx. 60 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 via hydraulic rams.

EASY ACCESS CONCEPT

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

OPTION: HYDRAULIC QUICK COUPLERS

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

SHAFT DESIGN

The shafts utilize our tried-and-tested Dopp-Lock® system and are designed with emphasis placed on cost and weight optimization. The shredding shafts are available with tooth sizes XL, L, M and S.

MODULAR DESIGN

The Methor is available on a hook lift frame, on tracks or as a stationary system. While it is factory-equipped with a diesel engine or an electric motor, it is also possible to integrate any other drive.

THE HYDRAULICDIRECT DRIVE

Delivers the power you need.

The Methor's drive train 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 extraneous material, thus protecting itself.

CONTROLLED POWER

The HydraulicDirect Drive transfers the torque to the shredding shaft via two radial piston pumps 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 switches to reverse. 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 is extraneous material blocking the shredding 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 PARTNER FOR COMBINING.

The Methor is ideally suited for setting up high-performance process chains when combined with other Smart Solutions from Doppstadt. Based on material throughput, it can be optimally combined, e.g., with the Airflex 1500 air-based separator, the 518 FLEX drum screening machine or the Selector 400 with SWS spiral shaft screening deck.

SIMPLY WELL-DESIGNED

The Methor takes care of all your needs.

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 many different 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.

Thanks to the Methor's **extremely rugged design**, it is not picky in terms of the materials that it can process:

- **construction and demolition waste**
- **waste wood**
- **commercial and industrial waste**
- **green waste**

With the corresponding equipment, it can even handle ropes from paper and plastic production as well as shred rolls or rolled goods, mattresses and 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 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.

CARRIER OPTIONS:

The Methor is available as hook lift machine or on tracks. There is also a version available for stationary installation, which only includes the shredder with feed hopper.

DRIVE SYSTEMS:

Both a diesel engine with 205 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.

SHREDDING SHAFT:

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

CONTACT US!

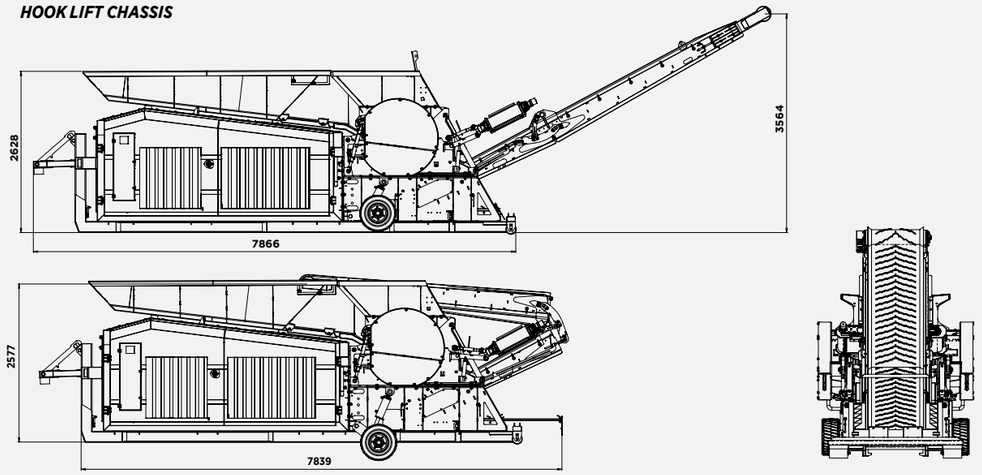
To make the Methor the right shredding solution for your requirements, we would be very happy to advise you! Contact your local Doppstadt sales partner. You can find one under Contact at doppstadt.de.

TECHNICAL SPECIFICATIONS

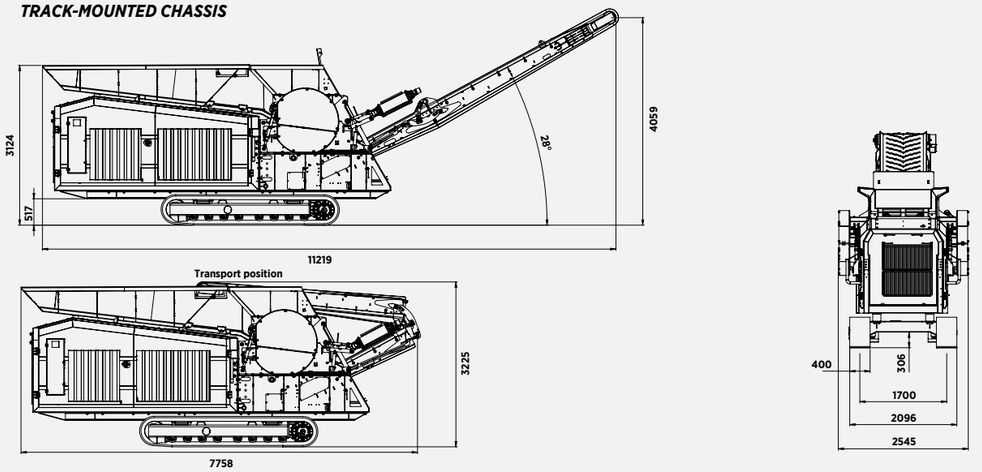
METHOR	HOOK LIFT CHASSIS	TRACK-MOUNTED CHASSIS
Overall weight	13,400 kg	15,700 kg
Chassis	Hook lift	Track-mounted
Drive	Diesel engine	Diesel engine
Type	Caterpillar C 7.1	Caterpillar C 7.1
Nominal output	205 kW/278 HP	205 kW/278 HP
Emission standard	STAGE V	STAGE V
Cubic capacity	7.1 L	7.1 L
Fuel tank capacity	300 L	300 L
Shaft diameter	600 mm for XL/L, 800 mm for M/S	600 mm for XL/L, 800 mm for M/S
Shaft speed	max. 33 rpm	max. 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 XL, L, M or S, fire extinguisher, overbelt magnet, drawbar, auxiliary chassis	Water spraying system, work lighting, Electric hydraulic pump, shredder packages Size XL, L, M or S, fire extinguisher, overbelt magnet

As of May 2020 – 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 XL (600)	SIZE L (600)	SIZE M (800)	SIZE S (800)
Type	Shredding shaft with 6 teeth	Shredding shaft with 8 teeth	Shredding shaft with 26 teeth	Shredding shaft with 36 teeth
Diameter	600 mm	600 mm	800 mm	800 mm
Tooth length	170 mm	174 mm	100 mm	60 mm

Masters every task.
Worth every penny.

- machine concept geared to deliver maximum flexibility
- only single-shaft shredder in its class
- efficient shredding solution for smaller volume flows and special batches
- unique quick tool replacement
- HydraulicDirect Drive to ensure a smooth and high production and operation that meets your needs

May 2020

Doppstadt

Doppstadt Umwelttechnik GmbH
Steinbrink 13, 42555 Velbert
Germany

Phone +49 2052 889-0
info@doppstadt.de

doppstadt.com

TRITURADOR PRIMARIO METHOR K

Aplicaciones

El triturador primario Doppstadt Methor puede procesar todo tipo de residuo: residuos sólidos urbanos, voluminosos, de construcción y demolición, restos de poda...incluso los materiales más complicados, como colchones, o residuos que lleguen en forma de bobinas. Un equipo para triturarlos a todos.

DIMENSIONES	
Chasis	Chasis de orugas
Peso total (kg)	15700
Largo (mm)	11219
Ancho (mm)	2545
Alto (mm)	4059
Ancho de transporte (mm)	2545
Alto de transporte (mm)	3225
Largo de transporte (mm)	7758
MOTOR	
Tipo de motor	Motor Diesel
Marca	CAT C7.1
Nivel de emisiones	Euromot V
Potencia (kW/hP)	205/278
Combustible (l)	300
Torque (Nm)	75200
CINTA DE DESCARGA	
Ancho (mm)	1000
Largo (mm)	6900
Velocidad de cinta (m/s)	1,0-4,0
Alto de descarga (mm)	4059
TOLVA	
Altura de carga (mm)	3124
ROTOR	
Disposición	Transversal
Longitud (mm)	1300
Versiones	S/M/L/XL
Diámetro tipo L (mm)	600
Nº dientes tipo L	8

Ventajas

- Tritura-todo: el triturador más flexible del mercado.
- Nunca más recargar ejes. Herramientas de desgaste atornillables.
- Diseño robusto y sencillo.
- Cambio fácil de ejes para distintas aplicaciones.
- Sistema eficaz para pequeños volumenes y muchos tipos de residuos.
- Único triturador primario con sistema hidráulico a bajas revoluciones.
- Las ventajas de la transmisión hidráulica (inversión de giro, arranque con carga) sin la penalización en rendmiento de la hidráulica convencional.
- Sin la penalización en rendmiento de la hidráulica convencional.
- Posibilidad de combinarse con el sistema de separación por sinfines Selector 400

Vídeos disponibles en

http://bit.ly/DoppMethor

HJM Hispano Japonesa de Maquinaria
HITACHI BELL Doppstadt metso FUCHS SEREX ESCO