

**Doppstadt**

# AK SERIES

**SMART SHREDDING**

GRINDER LINE

**AK 315**

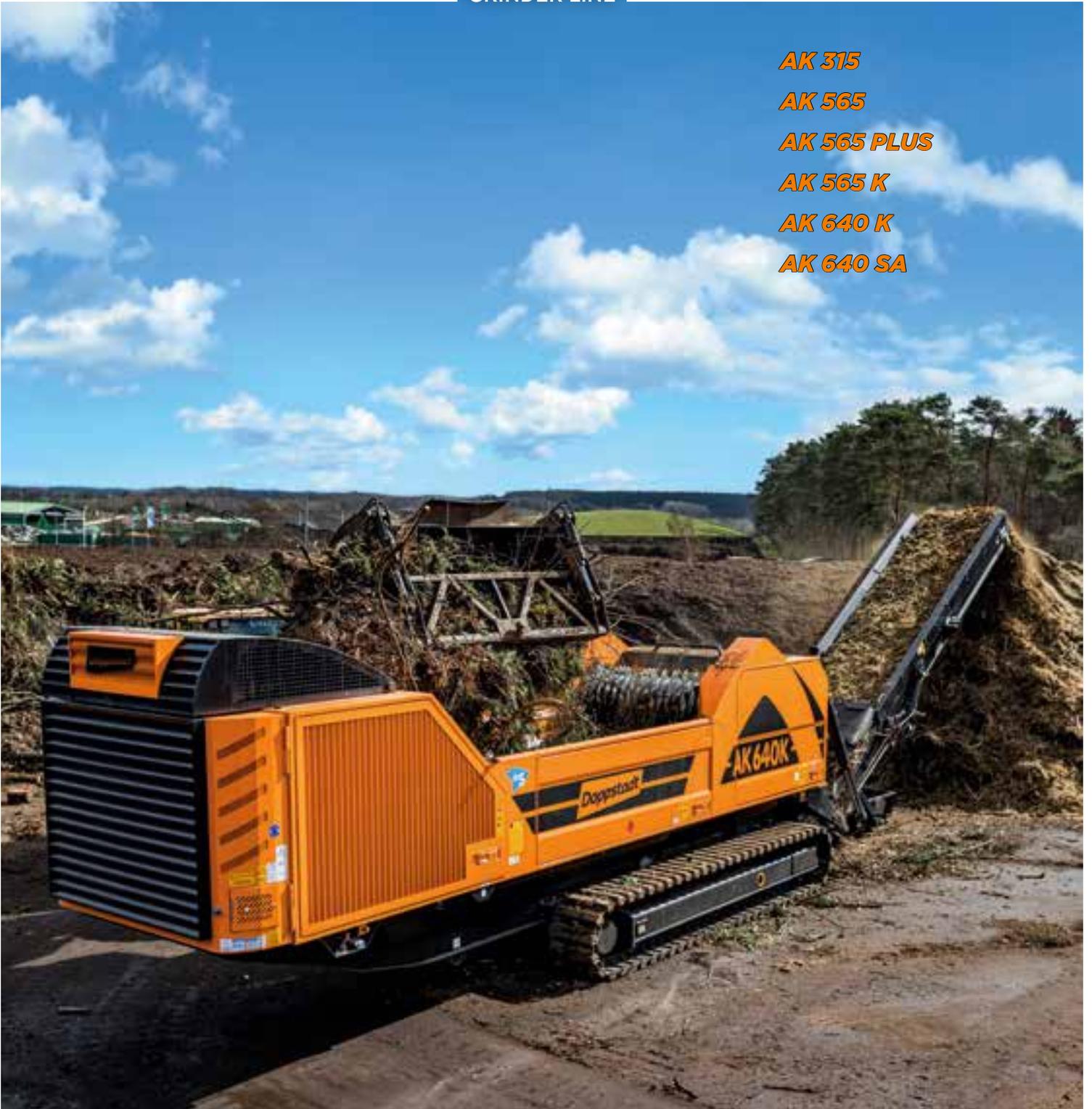
**AK 565**

**AK 565 PLUS**

**AK 565 K**

**AK 640 K**

**AK 640 SA**





With high throughput and low maintenance, our AK series provides optimal shredding solutions for a wide range of requirements.

## THE AK SERIES

### Heavy-duty high-tech for best results

With their high throughput performance and patented, load-dependent material feed technology, our AK line of mobile grinders offer highly efficient solutions for a wide range of recycling tasks. Whether you want to process waste wood, green waste, organic waste, pre-crushed tree roots or RDF, our AK series of fine shredders will give you premium results. They can also be combined with pre-shredders or screening machines to create the perfect end-to-end solution for a wide range of tasks related to processing mechanical-biological waste, biomass, or refuse-derived fuels.

#### HIGH-PERFORMANCE CONCEPT

All AK series models feature separate drives for the conveyor and swinging feed roller to ensure optimum material feed. The conveyor feed is electro-hydraulically controlled to ensure maximum motor efficiency.

This ensures consistently high throughput. All the Doppstadt AK series models feature free-swinging flail holders with individually replaceable wear parts and patented Dopp-Lock® technology. The flail drum, which operates at approximately 1,000 revolutions per minute, has a large flywheel mass of approximately 2.5 t on the majority of models.

AK grinders are powered appropriately to requirements, enabling maximum throughput performance while ensuring economical operation.

#### SMART SHREDDING WITH THE GRINDER LINE

The mobile, high-speed shredders of our Grinder Line offer you a comprehensive range of solutions for a wide variety of different recycling requirements. From the smallest high-performance AK 315 mobile shredder to our AK 640 SA flagship model, our enormous range of shredder dimensions and performance specifications enables you to choose exactly the

right solution for your needs. Flexibility is one of the core features of the Grinder Line. Each model includes, for example, 3D rear baskets to ensure a high-quality homogenous end-product when processing waste wood, while the tracked AK models feature an optional off-road track system for a significant increase in ground clearance. They also use smart technology: Doppstadt's cloud-based telematics solution uses GPS to provide customers with real-time visual access to their equipment parameters anytime and anywhere.

#### ABOUT DOPPSTADT

Headquartered in Velbert, Germany, the Doppstadt family firm was founded in 1965. While the company has its origins in developing agricultural machinery, Doppstadt today is a leading, globally active solutions and services provider in all areas of recycling/environmental technology and recyclables extraction. "Best Solution. Smart Recycling." – With this as our guiding principle, we combine proven processes to create customised end-to-end solutions characterised by innovative processes, optimum effici-

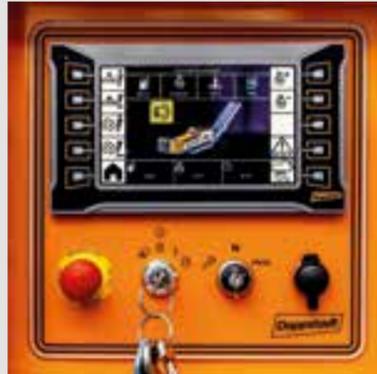
ency, and maximum cost-effectiveness. Particularly in the areas of water-based separation systems and wet recycling, we impress our customers by providing flexible systems to tackle every challenge. With locations in Velbert, Wülfrath, Calbe, and Wilsdruff, Germany, we serve customers in more than 40 countries through our own dealer network and offer comprehensive services for every product in Doppstadt's unique portfolio.

# EQUIPMENT DETAILS



## VARIABLE-SPEED FAN

Featuring a large, reversible cooling fan, the swivel cooler is easily accessible and self-cleaning. Effective fan speed control ensures powerful cooling performance and provides optimum fresh-air ventilation of the engine compartment.



## DISPLAY

The new graphical user controls provide an at-a-glance overview of the machinery's status and functions.



## LATEST ENGINE AND EXHAUST TECHNOLOGY

In addition to providing more power due to higher torque, the engine also meets the requirements of the latest EU stage V emissions standards. The charge air and intake piping, the exhaust system and the emissions control unit are all made entirely of stainless steel and encased in the highest quality integral insulation.



## FLAIL DRUM WITH FREE-SWINGING FLAILS

The large-scale flail drum with its approximately 2.5-tonne flywheel crushes the material. The free-swinging flail holders feature easily replaceable tool tips mounted with patented Dopp-Lock® technology and are resistant to contaminants. The tips can be selected appropriate to the materials to be processed.

## BAFFLE PLATE

A toothed baffle plate supports the crushing process. A variety of styles are available for different purposes.



## CONVEYOR & FEED ROLLER

The load-controlled conveyor transfers the material to the swing-mounted feed roller. This is equipped with a reversing function and feeds the material to be crushed evenly to the crushing chamber.

## FINE SHREDDING BASKET

You determine the desired granularity of the finished product by selecting the appropriate fine shredding basket. These baskets feature mesh sizes ranging from 30-400 mm and can be swapped out in just 15 minutes using the quick-change system.



\*Option:  
3D shredding basket specially designed for waste wood



## NEW, LOWERABLE REAR CONVEYOR\*

Processed material is discharged via a fully lowerable rear conveyor. This enables the operator to easily switch tools or perform maintenance. Magnetic metals can be separated using a magnetic roller\* or an overbelt magnet\*.

\*Option



## SLIP-ON COUPLER

The slip-on coupler allows the machine to be moved with a ball hitch. This can, for example, be secured to the grab of a wheel loader.



## HYDRAULIC DRIVE

The machine can be powered hydraulically\*.



## RADIO REMOTE CONTROL

Enables simple, one-person operation (from a wheel loader, for example), and precise control and reading of the machine data via a multifunction display.



## TELEMATICS

Smart connections: A cloud-based telematics solution uses GPS to provide real-time visual access to the equipment parameters.



## OFF-ROAD CHASSIS

In all tracked AK models, an optional off-road\* track system offers considerably more ground clearance.

\*Additional equipment/options

Explanations and illustrations are based on the AK 565 Plus



## **FULLY REDEVELOPED**

### **Exciting innovations – the future as standard**

The new AK series provides numerous additional benefits. From ease of maintenance to increased performance and new, modular electronics, we have tailored the AK series precisely to your requirements. This allows you to profit from solutions which enable you to carry out your recycling tasks even more successfully and efficiently.

#### **LATEST ENGINE TECHNOLOGY FOR MORE PERFORMANCE**

All models are equipped with new engines which not only provide more power due to higher torque, but which also meet the EU emissions standards Stage V requirements. Innovations in the engine compartment include the all-stainless-steel charge air

and intake piping, exhaust system and emissions control unit, as well as the use of high-quality integral insulation.

#### **EASIER MAINTENANCE AND SERVICE**

The new rear conveyor is fully lowerable, almost to the ground, ensuring easy and quick access during service and maintenance work on the flail drum, tools, and shredding basket. The new AK series also allows greater maintenance and service efficiency through the increased use of standard component assemblies. This means low spare parts requirements and easier replacement. The new modular electronics and radio systems allow diagnostics and support to be provided via WLAN or Bluetooth, while Doppstadt's

cloud-based telematics system enables real-time equipment parameters to be displayed anywhere in the world.

#### **IMPROVED EFFICIENCY AND WEAR RESISTANCE**

The new Carbide PLUS flail tips are supplied as standard and have a service life of up to 20 percent longer. Another new feature is the intelligent cooler control system, which ensures that the optimum operating temperature is reached faster and continuously maintained through adaptive cooling performance.

Lowering the speed of the generously sized fan wheel has significantly reduced fan noise, while the automatic air flow

reverse function keeps the cooling system actively clean.

#### **OFFROAD CAPABILITY**

In order to increase ground clearance and off-road capability in specific environments, an additional "off-road" option is now available for all tracked AK models in addition to the standard tracks.

This gives you more options for tackling different tasks, such as land clearing vegetation in less accessible areas.





## HIGH YIELD, LITTLE EFFORT

### Maximum efficiency for maintenance and service

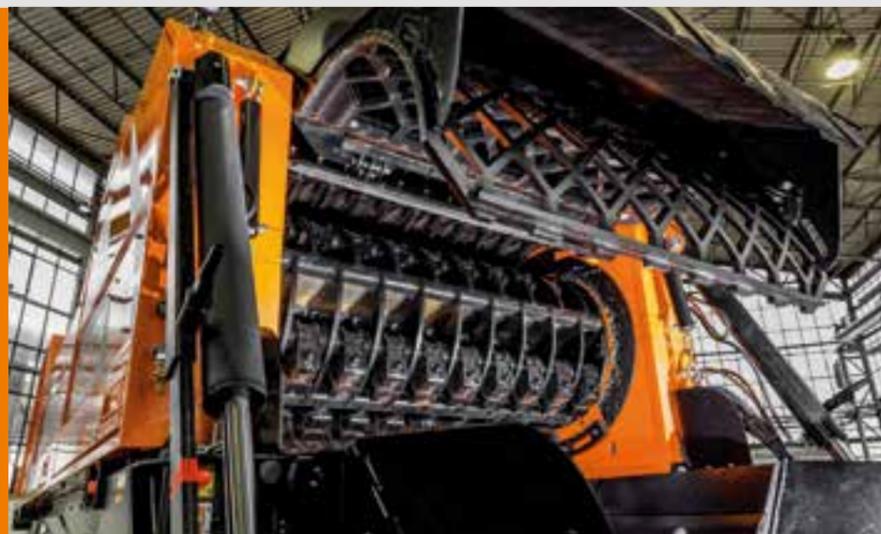
All models in the new AK series feature the option to lower the rear conveyor almost to the ground. This ensures quick and easy access to the flail drum, as well as to the various tools, baffle plates and crushing baskets available for different applications and materials. Whether you want to switch tools in order to process a different substance or carry out maintenance and service operations, effort is reduced and the work is more convenient. To enable them to be swapped very easily

and quickly, the flail tips are equipped as standard with our patented Dopp-Lock® mounting technology. Here, the screw is not part of the tool mounting system – instead, it functions purely as a loss prevention device, as the innovative coupling system disperses the forces exerted on the tool via the flail holders. Using Doppstadt original tools with purpose-appropriate material qualities means longer service life, less maintenance, and increased equipment availability.

The engine compartment is enclosed by generously dimensioned protective hatches in an improved design to allow easy, convenient access for maintenance and repairs. The bottom line is that these innovations have significantly further reduced operational downtime, thus extending the productive life of your equipment.

#### PLUG AND PLAY

With patented Dopp-Lock® technology for easy replacement, the new Carbide PLUS tool tip has been optimised to allow users to benefit from up to 20% longer service life. Combine with Doppstadt 3D baskets for a neat and homogenous waste wood product.



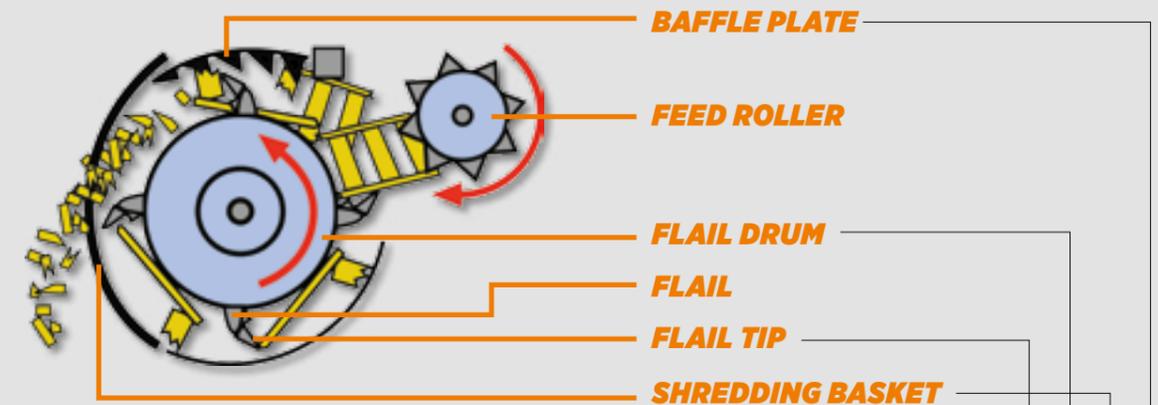
## THE SHREDDING CONCEPT

### The perfect solution for every application

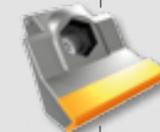
Processing a wide range of materials requires precisely tailored tools to achieve perfect results.

We therefore provide an extensive array of equipment options for the AK series. Our high-speed shredders can be customised

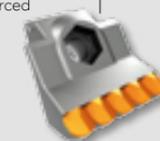
to create a wide variety of solutions for tackling tough tasks.



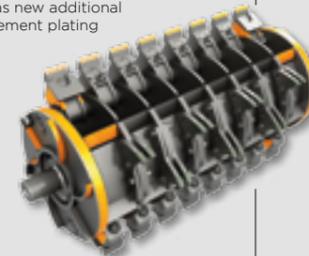
Flail tip: Carbide PLUS



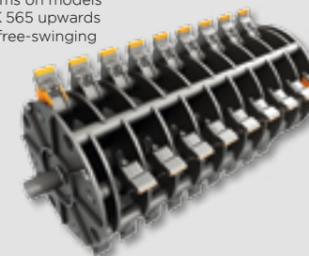
Flail tip: Carbide-reinforced "Bear Paw"



Flail drum on AK 315 with fixed teeth and free-swinging flails, as well as new additional reinforcement plating



Flail drums on models from AK 565 upwards feature free-swinging flails



Rear gate: Rhombus Various mesh sizes from 30-400 mm



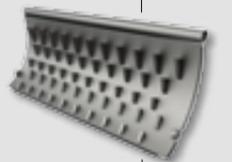
Comb gate: Specially designed for green waste



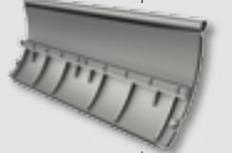
Rear gate: 3D Specially designed for waste wood Various mesh sizes from 80-300 mm



Baffle plate: toothed



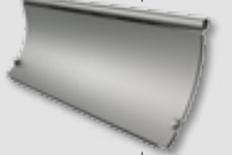
Baffle plate: with counter blade



Baffle plate: with counter blade, reinforced



Baffle plate: smooth



Baffle plate: with counter blade and row of teeth

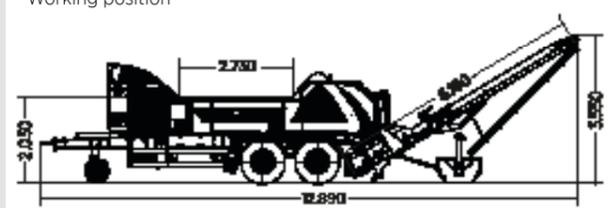


# TECHNICAL SPECIFICATIONS – AK 315

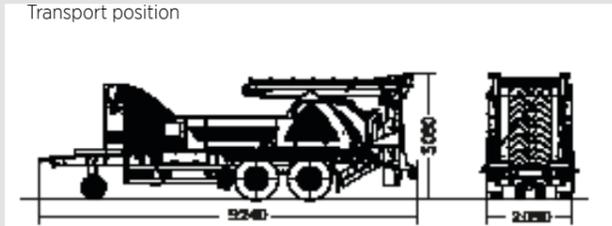
DIMENSIONS	
Chassis	2-axle trailer
Total weight (kg)	16000
Length (mm)	12890
Width (mm)	2130
Height (mm)	3550
Transport length (mm)	9240
Transport width (mm)	2130
Transport height (mm)	3080
ENGINE	
Engine type	Diesel engine
Manufacturer	MTU 6R 1000
Emissions standard	Stage V
Motor power (kW / hp)	230 / 310
Tank capacity (l)	300
Torque (Nm)	1300 Nm at 1200-1600 rpm
Engine type 2	MTU 6R 1000
Emissions standard	Euromot III A
Motor power (kW / hp)	230 / 310
Torque (Nm)	1250 Nm at 1200-1600 rpm
DISCHARGE CONVEYOR	
Width (mm)	1500
Length (mm)	6000
Belt speed (m/s)	2
Discharge height (mm)	3550
FLAIL DRUM	
Width (mm)	1470
Diameter (mm)	900
Rotational speed (min <sup>-1</sup> )	1140 - 1320 rpm (depending on engine speed)
Number of flails / teeth	16/28
FEED HOPPER	
Fill width (mm)	2730
Loading height (mm)	2050



Working position



Transport position

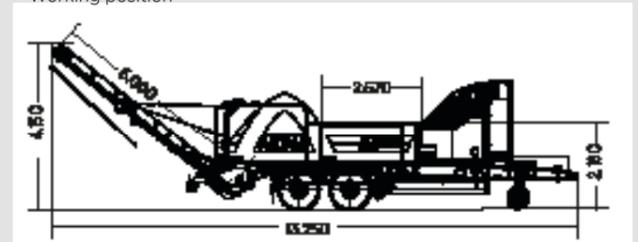


# TECHNICAL SPECIFICATIONS – AK 565

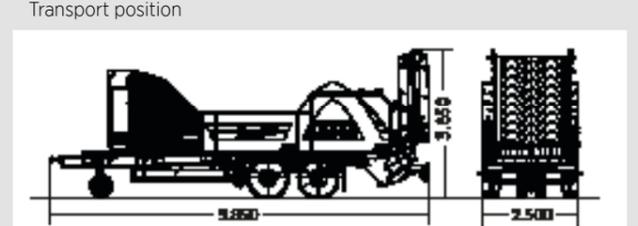
DIMENSIONS	
Chassis	2-axle trailer
Total weight (kg)	19000
Length (mm)	11780 / 13250
Width (mm)	2500
Height (mm)	3310
Transport length (mm)	9770 / 9850
Transport width (mm)	2500
Transport height (mm)	3850
ENGINE	
Engine type	Diesel engine
Manufacturer	MTU 6R 1300
Emissions standard	Stage V
Motor power (kW / hp)	390 / 530
Tank capacity (l)	450 / 600
Torque (Nm)	2600 Nm at 1300 rpm
Engine type 2	MTU 6R 1300
Emissions standard	Euromot III A
Motor power (kW / hp)	390 / 530
Torque (Nm)	2460 Nm at 1300 rpm
DISCHARGE CONVEYOR	
Width (mm)	1800
Length (mm)	4000 or 6000* (*optional)
Belt speed (m/s)	2
Discharge height (mm)	3000 / 4150
FLAIL DRUM	
Width (mm)	1750
Diameter (mm)	1120
Rotational speed (min <sup>-1</sup> )	850-1000 rpm (depending on engine speed)
Number of flails / teeth	36
FEED HOPPER	
Fill width (mm)	2670
Loading height (mm)	2180



Working position



Transport position

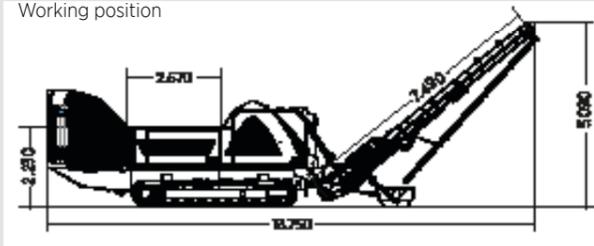


# TECHNICAL SPECIFICATIONS – AK 565 K

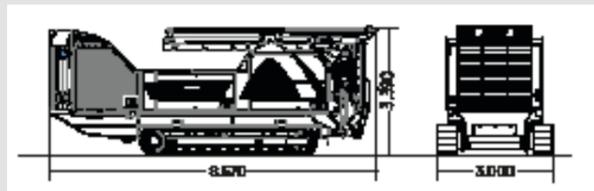
DIMENSIONS	
Chassis	Steel-tracks
Total weight (kg)	29000
Length (mm)	13750
Width (mm)	3000
Height (mm)	5090
Transport length (mm)	8670
Transport width (mm)	3000
Transport height (mm)	3390
ENGINE	
Engine type	Diesel engine
Manufacturer	MTU 6R 1300
Emissions standard	Stage V
Motor power (kW / hp)	390 / 530
Tank capacity (l)	600
Torque (Nm)	2600 Nm at 1300 rpm
Engine type 2	MTU 6R 1300
Emissions standard	Euromot III A
Motor power (kW / hp)	390 / 530
Torque (Nm)	2600 Nm at 1300 rpm
DISCHARGE CONVEYOR	
Width (mm)	1500
Length (mm)	7500
Belt speed (m/s)	2
Discharge height (mm)	5090
FLAIL DRUM	
Width (mm)	1750
Diameter (mm)	1120
Rotational speed (min <sup>-1</sup> )	850-1000 rpm (depending on engine speed)
Number of flails / teeth	36
FEED HOPPER	
Fill width (mm)	2670
Loading height (mm)	2230



Working position



Transport position

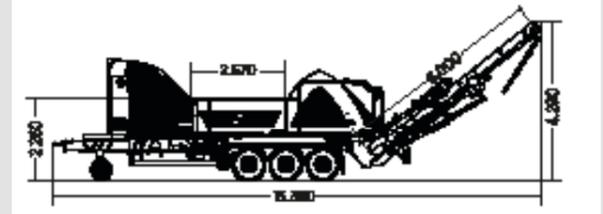


# TECHNICAL SPECIFICATIONS – AK 565 PLUS

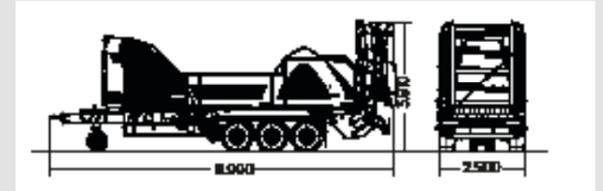
DIMENSIONS	
Chassis	3-axle trailer
Total weight (kg)	22000
Length (mm)	13380
Width (mm)	2500
Height (mm)	4290
Transport length (mm)	9990
Transport width (mm)	2500
Transport height (mm)	3810
ENGINE	
Engine type	Diesel engine
Manufacturer	MTU 6R 1300
Emissions standard	Stage V
Motor power (kW / hp)	390 / 530
Tank capacity (l)	600
Torque (Nm)	2600 Nm at 1300 rpm
Engine type 2	MTU 6R 1300
Emissions standard	Euromot III A
Motor power (kW / hp)	390 / 530
Torque (Nm)	2460 Nm at 1300 rpm
DISCHARGE CONVEYOR	
Width (mm)	1800
Length (mm)	6000
Belt speed (m/s)	2
Discharge height (mm)	4290
FLAIL DRUM	
Width (mm)	1750
Diameter (mm)	1120
Rotational speed (min <sup>-1</sup> )	850-1000 rpm (depending on engine speed)
Number of flails / teeth	36
FEED HOPPER	
Fill width (mm)	2670
Loading height (mm)	2260



Working position



Transport position

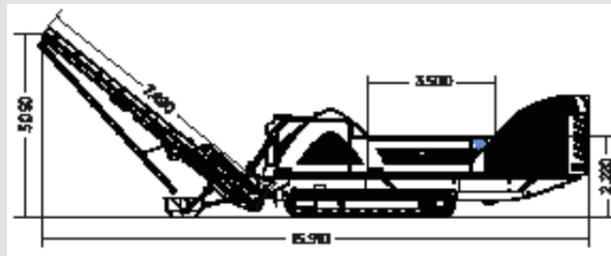


# TECHNICAL SPECIFICATIONS – AK 640 K

DIMENSIONS	
Chassis	Steel-tracks
Total weight (kg)	32500
Length (mm)	15910
Width (mm)	3000
Height (mm)	5090
Transport length (mm)	10020
Transport width (mm)	3000
Transport height (mm)	3390
ENGINE	
Engine type	Diesel engine
Manufacturer	MTU 6R 1500
Emissions standard	Stage V
Motor power (kW / hp)	480 / 652
Tank capacity (l)	750
Torque (Nm)	3100 Nm at 1300 rpm
Engine type 2	MTU 6R 1500
Emissions standard	Euromot III A
Motor power (kW / hp)	460 / 625
Torque (Nm)	2900 Nm at 1300 rpm
DISCHARGE CONVEYOR	
Width (mm)	1500
Length (mm)	7500
Belt speed (m/s)	2
Discharge height (mm)	5090
FLAIL DRUM	
Width (mm)	1750
Diameter (mm)	1120
Rotational speed (min <sup>-1</sup> )	970-1140 rpm (depending on engine speed)
Number of flails / teeth	36
FEED HOPPER	
Fill width (mm)	3500
Loading height (mm)	2220



Working position



Transport position

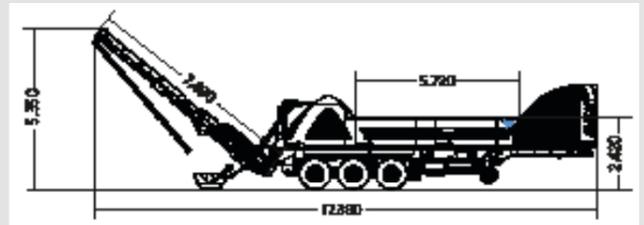


# TECHNICAL SPECIFICATIONS – AK 640 SA

DIMENSIONS	
Chassis	Semi-trailer
Total weight (kg)	32000
Length (mm)	17380
Width (mm)	2530
Height (mm)	5350
Transport length (mm)	11990
Transport width (mm)	2530
Transport height (mm)	3650
ENGINE	
Engine type	Diesel engine
Manufacturer	MTU 6R 1500
Emissions standard	Stage V
Motor power (kW / hp)	480 / 652
Tank capacity (l)	900
Torque (Nm)	3100 Nm at 1300 rpm
Engine type 2	MTU 6R 1500
Emissions standard	Euromot III A
Motor power (kW / hp)	460 / 625
Torque (Nm)	2900 Nm at 1300 rpm
DISCHARGE CONVEYOR	
Width (mm)	1500
Length (mm)	7500
Belt speed (m/s)	2
Discharge height (mm)	5350
FLAIL DRUM	
Width (mm)	1750
Diameter (mm)	1120
Rotational speed (min <sup>-1</sup> )	970-1140 rpm (depending on engine speed)
Number of flails / teeth	36
FEED HOPPER	
Fill width (mm)	5720
Loading height (mm)	2420



Working position



Transport position



# The future as standard – Powerful solutions for fine shredding

- State-of-the-art, high-performance engine and exhaust technology
- Fast, easy access during maintenance, service and parts replacement due to almost fully lowerable rear conveyor
- Highest quality flail tips with patented Dopp-Lock® technology
- Separate patented conveyor and feed roller drives for optimum material feed and high throughput
- Track option for off-road operation



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

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