# AK SERIES Grinders



AK 235

AK 510 BioPower

AK 510 K BioPower

AK 535

AK 635

AK 635 K

AK 635 SA



## **AK SERIES**



#### POWERFUL AND VERSATILE

#### THE AK SERIES - RELIABLE GRINDERS

The high throughput and the patented loadsensing material feed permit using the machine for various grinding tasks. Whatever your application: With the AK you will achieve an optimum and efficient recovery of secondary raw materials.

The Doppstadt grinders stand out for their freeswinging flail holders with separately replaceable wearing tools and the heavy gyrating mass of the flail drum working at approx. 1,000 rpm.

- Easy maintenance thanks to large protection doors on all sides and central lubrication.
- Separate drives for scraper floor and feed-in roller optimizing the material feeding and the throughput.
- Hydraulic support, controlled without engine power by an electric 24 Volt pump.
- Short setup times (<10 min.) thanks to the hydraulically foldable discharge conveyor\*, optional magnetic pulley for Fe-separation\*.

Waste wood processing (shredding and grinding with DW 3060 and AK 635)



Road transport



Moving the machine



# **AK SERIES IN OPERATION**



Grinding of waste wood/pallets

#### ONE GRINDER - MANY POSSIBLE APPLICATIONS

#### MATERIALS AND APPLICATIONS

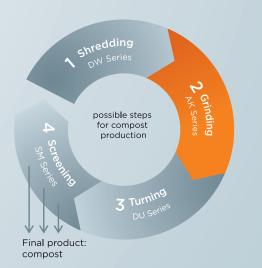
The AK grinders process green waste, yard waste, biowaste, pre-shredded logs and roots, waste wood and wooden pallets.

For special applications, the AK grinders can ideally be combined with other DOPPSTADT products, such as shredders or screens. We will be pleased to give you advice.



Grinding of green waste

#### COMPOSTING, WASTE WOOD PROCESSING





thermal utilization and recycling

Optional: Fe-separation, wind-sifting, further processing









pre-shredded



pre-shredded

# **AK** SERIES



## SLIP-ON COUPLING

By means of the slip-on coupling the machine can be moved with the wheel loader grab (only for machines with drawbar).



#### HINGED COOLER

The hinged cooler is easily accessible and self-cleaning by the reversible large fan wheel. Thanks to the low ventilator speed the noise level is pleasantly quiet.



#### SCRAPER FLOOR

The patented, loadsensing scraper floor transports the material to the feed-in roller.



#### FEED-IN ROLLER

The reversible feed-in roller with bearing feeds the material evenly to the grinding chamber.



#### **MAINTENANCE**

Large doors for optimal maintenance.

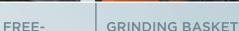


# HYDRAULIC DRIVE

The machine can be moved by means of the hydraulic self-propelled drive\*.







The grain size can be determined by choosing among grinding baskets with mesh sizes between 30 mm and 400 mm (1.18 - 15.75"). With the quick-changing system it takes only 15 minutes to change the baskets.

#### REMOTE CONTROL

Easy operation – e.g. by wheel loader operator, exact adjustment and reading of the machine data by multifunction display. Machine operation by 18-channel remote control\*.

### FLAIL DRUM WITH FREE-SWINGING FLAILS

The large flail drum with its appr. weight of 2,5 t (5,512 lb) gyrating mass grinds the materials. The free-swinging flail holders with easily replaceable tips are resistant against contaminants. The tips can be chosen according to the material.

#### BAFFLE PLATE

A baffle plate with teeth supports the grinding process.



## **AK SERIES**









Bark



Waste wood



AK 235

The flail drum weight of the AK 235 is approx. 1,3 t (2,866 lb). It is equipped with 16 free-swinging flails and 28 teeth and it rotates at approx. 1,200 rpm. For the replaceable grinding basket there are mesh sizes from 30-320 mm (1.2-12.6") available.

| Permissible weight         |    | 15,000 kg (33,069 lb)                                   |
|----------------------------|----|---|
| Drive                      | Ŭ. | Mercedes-Benz OM 926 LA<br>175 kW (239 hp) at 2,200 rpm |
| Flail drum                 |    | 1,480 mm (4'10")<br>900 mm (2'11")<br>16/28             |
| Transport dimensions L/W/H |    | 9,230/2,110/3,100 mm<br>(30'3"/6'11"/10'2")             |



Green waste

# **AK 510 BIOPOWER**





Cutting wood



Waste wood



Green waste

#### AK 510 BioPower

The flail drum weight of the AK 510 BioPower is approx. 2,5 t (5,512lb) and it rotates at approx. 1,000 rpm. The replaceable grinding basket can be equipped with mesh sizes from 30 - 400 mm (1.2 - 15.75").

| Permissible weight         |          | 19,000 kg (41,888 lb)                                   |
|----------------------------|----------|---|
| Drive                      | <u> </u> | Mercedes-Benz OM 460 LA<br>375 kW (510 hp) at 2,000 rpm |
| Flail drum                 |          | 1,750 mm (5'9")<br>1,100 mm (3'7")<br>36                |
| Transport dimensions L/W/H |          | 9,700/2,500/3,960 mm<br>(31'10"/8'2"/13')               |



Green waste

# **AK 510 K BIOPOWER**





Green waste



Root timber



Log and root timber

#### AK 510 K BioPower

The AK 510 K BioPower is equal to the AK 510 BioPower, but on tracks with hydraulic drive.

| Total weight               |   | approx. 29,000 kg (63,934 lb)                           |
|----------------------------|---|---|
| Drive                      | J | Mercedes-Benz OM 460 LA<br>375 kW (510 hp) at 2,000 rpm |
| Flail drum                 |   | 1,750 mm (5'9")<br>1,100 mm (3'7")<br>36                |
| Transport dimensions L/W/H |   | 8,680/3,000/3,390 mm<br>(28'6"/9'10"/11'1")             |



Shrubs





Green waste



Waste wood



#### AK 535

The flail drum weight of the AK 535 is approx. 2,5 t (5,512lb) and it rotates at approx. 1,000 rpm. The permissible weight of the central-axle trailer chassis with 3 axles is 22,000 kg.

| Permissible weight         |          | 22,000 kg (48,502 lb)                                   |
|----------------------------|----------|---|
| Drive                      | <u> </u> | Mercedes-Benz OM 460 LA<br>375 kW (510 hp) at 2,000 rpm |
| Flail drum                 |          | 1,750 mm (5'9")<br>1,100 mm (3'7")<br>36                |
| Transport dimensions L/W/H |          | 9,885/2,540/3,750 mm<br>(32'5"/8'4"/12'4")              |



Shrubs Pallets





Green waste



Compost



#### AK 635

The flail drum weight of the AK 635 is approx. 2,5 t (5,512lb) and it rotates at approx. 1,000 rpm. The grinding basket can be equipped with mesh sizes from 30-400 mm (1.2-15.75").

| Permissible weight         |   | 25,000 kg (55,116 lb)                                   |
|----------------------------|---|---|
| <b>Drive</b> diese         | _ | Mercedes-Benz OM 502 LA<br>440 kW (598 hp) at 2,000 rpm |
|                            |   | 1,750 mm (5' 9")<br>1,100 mm (3' 7")<br>36              |
| Transport dimensions L/W/H |   | 11,235/2,500/3,750 mm<br>(36'10"/8'2"/12'4")            |



Shrubs Pallets

# AK 635 K



### AK 635 K

The AK 635 K is equal to the AK 635, but on tracks with hydraulic drive.

| Permissible weight         |    | 32,000 kg (70,548 lb)                                   |  |
|----------------------------|----|---|--|
| Drive                      | Ŭ. | Mercedes-Benz OM 502 LA<br>480 kW (653 hp) at 2,000 rpm |  |
| Flail drum                 |    | 1,690 mm (5'7")<br>1,100 mm (3'7")<br>36                |  |
| Transport dimensions L/W/H |    | 10,025/3,000/3,390 mm<br>(32'11"/9'10"/11'1")           |  |





Shrubs Green waste





Waste wood



Plywood



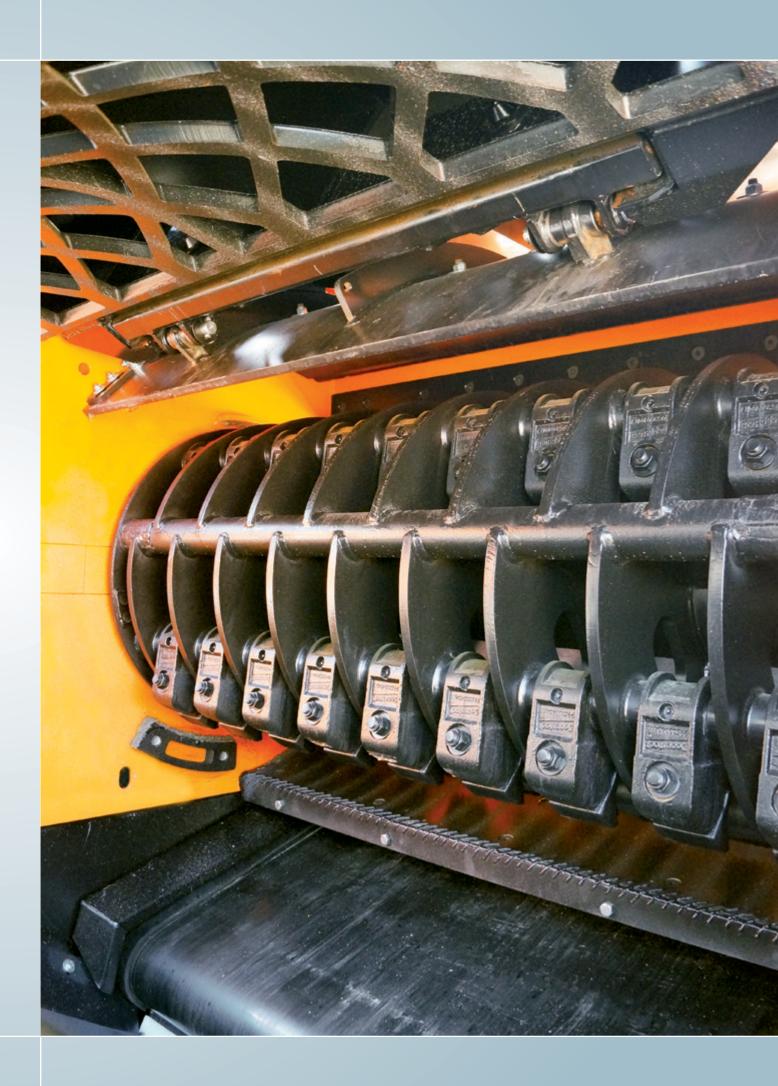
#### AK 635 SA

The flail drum weight of the AK 635 SA is approx. 2.5 t (5,512 lb) and it rotates at approx. 1,000 rpm. The grinding basket can be equipped with mesh sizes from 30-400 mm (1.2-15.75").

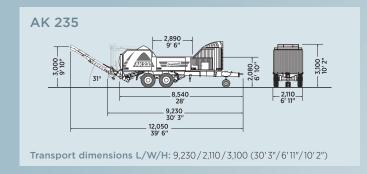
| Permissible weight   |  | 30,000 kg (66,139 lb)                                   |
|--|--|---|
| and the second s |  | Mercedes-Benz OM 502 LA<br>440 kW (598 hp) at 2,000 rpm |
| Flail drum   |  | 1,750 mm (5'9")<br>1,100 mm (3'7")<br>36                |
| Transport dimensions L/W/H   |  | 12,410/2,500/3,930 mm<br>(40'9"/8'2"/12'11")            |

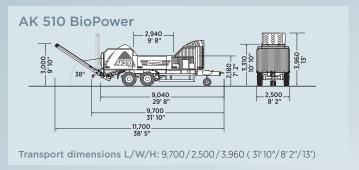


Shrubs Green waste



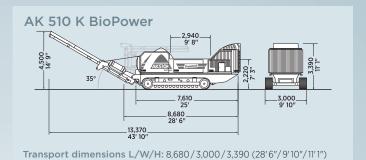
# TECHNICAL DATA AK SERIES

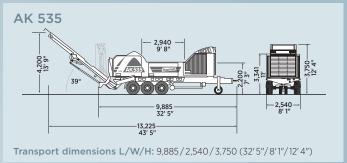




| Model | AK 235 | AK 510 BioPower |
|-------|--------|-----------------|
|       |        |                 |

| Weight                            | max. 15,000 kg (33,069 lb)   | max. 19,000 kg (41,888 lb)  |
|-----------------------------------|--|---|
| Chassis                           | central-axle trailer chassis with 2 axles, for 80 km/h (50 mph), with ABS  | central-axle trailer chassis with 2 axles, for 80 km/h (50 mph), with ABS   |
| Drive                             | diesel engine (optional electric motor)  | diesel engine (optional electric motor)   |
| Туре                              | Mercedes-Benz OM 926 LA  | Mercedes-Benz OM 460 LA   |
| Power                             | 175 kW (239 hp) at 2,200 rpm   | 375 kW (510 hp) at 2,000 rpm  |
| max. torque                       | 850 Nm at 1,200 – 1,600 rpm  | 2,200 Nm at 1,300 rpm   |
| Exhaust level                     | EUROMOT III B  | EUROMOT III B   |
| Fuel tank                         | 215 I (57 gal)   | 450 I (119 gal)   |
| Flail drum                        |  |   |
| Width                             | 1,480 (4'10")  | 1,750 (5' 9")   |
| Diameter                          | 900 (2'11")  | 1,100 (3'7")  |
| Weight (with flail tips)          | approx. 1,310 kg (2,888 lb)  | approx. 2,500 kg (5,512 lb)   |
| Speed (depending on engine speed) | 1,140 - 1,320 rpm  | 850 - 1,000 rpm   |
| No. of flails/teeth               | 16/28  | 36  |
| Flail weight (incl. tip)          | approx. 14.5 kg (31 lb)  | approx. 14.5 kg (31 lb)   |
| max. infeed height                | 530 (1'9")   | 650 (2'2")  |
| Discharge conveyor                |  |   |
| Length                            | 5,250 (17′ 3″)   | 4,000 (13'1")   |
| Width                             | 1,500 (4'11")  | 1,800 (5′11″)   |
| Belt speed                        | 2.0 m/s (6'7"/s)   | 1.8 m/s (5' 3"/s)   |
| Discharge height                  | 3,000 (9'10")  | 3,000 (9'10")   |
| Standard equipment                | grinding basket, available mesh sizes<br>30 - 320 (1.2 - 12.06") or re-grinding<br>comb with hood  | grinding basket, available mesh sizes<br>30 - 400 (1.2 - 15.75"), remote control  |
| Options                           | remote control, additional hydraulic connection,<br>twin drive, magnetic pulley, overband magnet,<br>damping facility, baffle plate with cutting bar | additional hydraulic connection, magnetic pulley,<br>overband magnet, twin drive, damping facility,<br>fine shredding comb, fuel tank 600 I / 159 gal,<br>baffle plate with cutting bar |



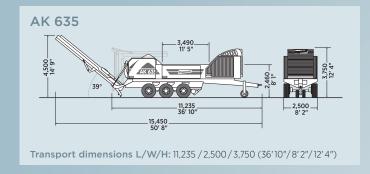


#### AK 510 K BioPower

#### AK 535

| approx. 29,000 kg (63,934 lb)  | max. 22,000 kg (48,502 lb)   |
|--|--|
| track drive with two speeds  | central-axle trailer chassis with 3 axles,<br>for 80 km/h (50 mph), with ABS   |
| diesel engine  | diesel engine  |
| Mercedes-Benz OM 460 LA  | Mercedes-Benz OM 460 LA  |
| 375 kW (510 hp) at 2,000 rpm   | 375 kW (510 hp) at 2,000 rpm   |
| 2,200 Nm at 1,300 rpm  | 2,200 Nm at 1,300 rpm  |
| EUROMOT III B  | EUROMOT III B  |
| 600 I / 159 gal  | 600 I / 159 gal  |
|  |  |
| 1,750 (5′9″)   | 1,750 (5'9")   |
| 1,100 (3'7")   | 1,100 (3'7")   |
| approx. 2,500 kg (5,512 lb)  | approx. 2,500 kg (5,512 lb)  |
| 850 - 1,000 rpm  | 850 – 1,000 rpm  |
| 36   | 36   |
| approx. 14.5 kg (31 lb)  | approx. 14.5 kg (31 lb)  |
| 650 (2'2")   | 650 (2'2")   |
|  |  |
| 7,000 (23')  | 6,000 (19'8")  |
| 1,500 (4'11")  | 1,800 (5'11")  |
| 1.6 m/s (5' 3"/s)  | 1.8 m/s (5′ 3″/s)  |
| 4,500 (14'9")  | 4,200 (13'9")  |
| grinding basket, available mesh sizes 30 - 400 (1.2 - 15.75"), additional hydraulic connection                                     | additional hydraulic connection, remote control, grinding basket,<br>a vailable mesh sizes 30 - 400 (1.2 - 15.75"), twin drive         |
| remote control, overband magnet, magnetic pulley, twin drive, damping facility, fine shredding comb, baffle plate with cutting bar | hydraulic self-propelled drive, overband magnet, magnetic pulley, damping facility, fine shredding comb, baffle plate with cutting bar |

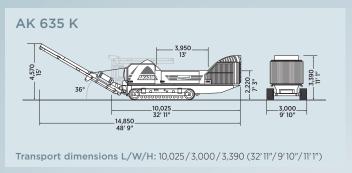
# TECHNICAL DATA AK SERIES



AK 635

As of April 2014 – subject to technical alterations. The specifications are approximate. Illlustrations and descriptions may include options that are not part of the standard equipment.

Model



**AK 635 K** 

| Weight                            | max. 25,000 kg (55,116 lb)   | max. 32,000 kg (70,548 lb)   |
|-----------------------------------|--|--|
| Chassis                           | central-axle trailer chassis with 3 axles,<br>for 80 km/h (50 mph), with ABS   | track drive with two speeds  |
| Drive                             | diesel engine  | diesel engine  |
| Туре                              | Mercedes-Benz OM 502 LA  | Mercedes-Benz OM 502 LA  |
| Power                             | 440 kW (598 hp) at 2,000 rpm   | 480 kW (653 hp) at 2,000 rpm   |
| max. torque                       | 2,800 Nm at 1,300 rpm  | 3,000 Nm at 1,300 rpm  |
| Exhaust level                     | EUROMOT III B  | EUROMOT III B  |
| Fuel tank                         | 750 I (198 gal)  | 750 l (198 gal)  |
| Flail drum                        |  |  |
| Width                             | 1,750 (5′9″)   | 1,690 (5'7")   |
| Diameter                          | 1,100 (3'7")   | 1,100 (3'7")   |
| Weight (with flail tips)          | approx. 2,500 kg (5,512 lb)  | approx. 2,500 kg (5,512 lb)  |
| Speed (depending on engine speed) | 970 - 1,140 rpm  | 970 - 1,140 rpm  |
| No. of flails/teeth               | 36   | 36   |
| Flail weight (incl. tip)          | approx. 14.5 kg (31 lb)  | approx. 14.5 kg (31 lb)  |
| max. infeed height                | 650 (2' 2")  | 650 (2'2")   |
| Discharge conveyor                |  |  |
| Length                            | 6,150 (20'2")  | 7,000 (23')  |
| Width                             | 1,500 (4'11")  | 1,500 (4'11")  |
| Belt speed                        | 2.2 m/s (7'3"/s)   | 2.0 m/s (6'7"/s)   |
| Discharge height                  | 4,500 (14'9")  | 4,500 (14'9")  |
| Standard equipment                | additional hydraulic connection, remote control, grinding basket, available mesh sizes 30 - 400 (1.2 - 15.75"), twin drive | additional hydraulic connection, remote<br>control, grinding basket, available mesh<br>sizes 30 - 400 (1.2 - 15.75"), twin drive |
| Options                           | hydraulic self-propelled drive, overband magnet, magnetic pulley, damping facility, baffle plate with cutting bar          | overband magnet, magnetic pulley, damping facility, baffle plate with cutting bar  |

# 5,770 18' 11" 2,500 17,200 56' 5"

Transport dimensions L/W/H: 12,410 / 2,500 / 3,930 (40' 9" / 8' 2" / 12'11")

#### **AK 635 SA**

4,500 (14'9")

twin drive, damping facility

## max. 30,000 kg (66,139 lb) 3-axle-semitrailer chassis, for 80 km/h (50 mph), with ABS diesel engine Mercedes-Benz OM 502 LA 440 kW (598 hp) at 2,000 rpm 2,800 Nm at 1,300 rpm EUROMOT III B 900 I (238 gal) 1,750 (5'9") 1,100 (3'7") approx. 2,500 kg (5,512 lb) 970 - 1,140 rpm approx. 14.5 kg (31 lb) 650 (2'2") 7,000 (23') 1,500 (4'11") 2.0 m/s (6'7"/s)

additional hydraulic connection, remote control, grinding basket, available mesh sizes 30 - 400 (1.2 - 15.75"), rear conveyor,

overband magnet, magnetic pulley, baffle plate with cutting bar

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