

Innovative technology for **BIOENERGY**

DiAMANT 2000

The most powerful Allroad self-propelled

ALBACH®



2006

Milestone

In order to achieve the hacker concept „self-driving and powerful", the **ALBACH** Maschinenbau GmbH & Co. KG was founded in Menning.

Construction of the first prototype and testing phase.



2008

Presentation Silvator 2000

2008 the serial production started and the first **Silvator 2000** was presented to the public.

With a transport width of 3 m and a specially built crane, the machine was up to 50 km/h fast.



2008 - 2014

Evolution

In the following years the **Silvator** was constantly developed and sold in more than 15 countries worldwide.



2013

Shrub press

In 2013 the first **mobile shrub press** was developed and completed.

2014

DIAMANT 2000

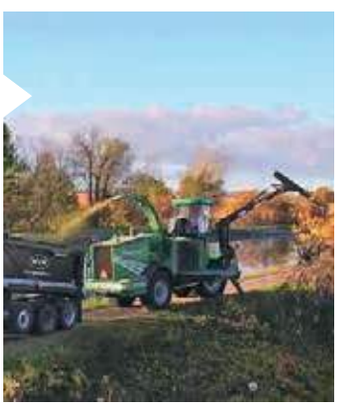
The wood industry demands even more mobility. **ALBACH** presents the new **Diamant 2000** with truck-typical dimensions, a new drive and rotor concept and a maximum speed of of 70 km/h.



2015

Expansion

For the first time, the **Diamant 2000** is also sold in North America.



2015 - 2018

New production facility

Due to the enormous increase in demand for the **Diamant 2000**, a new production site in Langquaid is established.



2018

FÄLLBACH – the mobile felling crane

In 2018 the first newly designed felling cranes **FÄLLBACH** have been delivered to Northern Germany and to the USA.





2019

Highway approval

Presentation of the **Diamant 2000** 80 km/h version.



2021

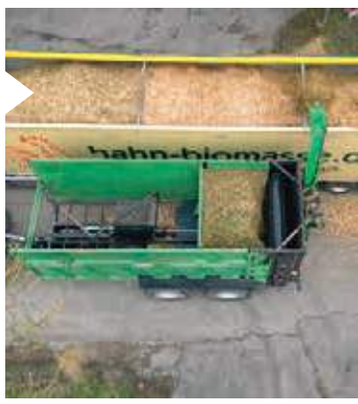
Anniversary

The 500th machine **Diamant 2000** is delivered.

2024

Transfer trailer

Presentation of the **ALBACH transfer trailer** for spreading wood chips and other materials.



2025

Revision Expansion

Revision of **DIAMANT 2000**'s cab operating concept.

Over 850 machines produced and more than 15 international dealer locations.



DIAMANT 2000

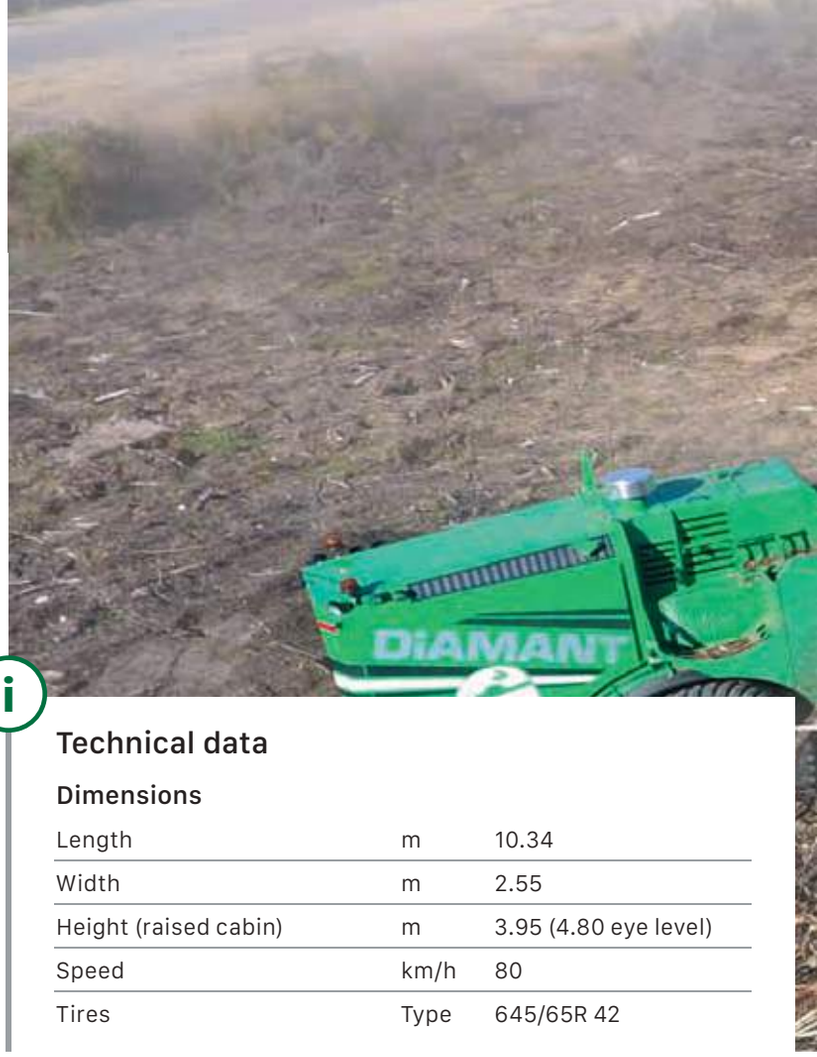


DIAMANT 2000

convinces with the best wood chip quality, which has been combined in the overall concept with **off-road capability** and **durability.**

These requirements, which are set by the market together with self-feeding, are met by the **Diamant 2000** every day in practical use.

With its truck-compliant 80km/h approval the self-propelled all-road vehicle takes you uncomplicated to any place of operation.



Technical data

Dimensions

Length	m	10.34
Width	m	2.55
Height (raised cabin)	m	3.95 (4.80 eye level)
Speed	km/h	80
Tires	Type	645/65R 42



Thanks to the **permanent all-wheel drive system** with independent hydromechanical drive on each axle, it is easy to master hill climbs in rough terrain.







Efficient work – maximum range



Even the heaviest trailer loads do not bring the **Diamant 2000** to its limits. Individual **crab steering or all-wheel steering** enable you to operate in the most confined spaces.

Highway approval



Axle suspension



Steering





CABINE AND TERMINAL

Perfect workplace for the operator

4.8 m eye height guarantees **perfect and safe all-round visibility** even with high wood piles. This means that you can see your field of vision at all times.

The combination of sound-insulated and air-suspended cab with comfort seat, air conditioning and heating incl. underfloor heating allows **fatigue-free work** even on long working days.

For even more comfort, a refrigerator and microwave are optionally available.



Control system



Underfloor heating



Comfort seat



Air susp e





THE SYSTEM SOLUTION FROM ALBACH

Driver display for control and joy-stick-settings up to engine and drive diagnostics.

With the **ALBACH Touch Screen Terminal** you can easily control all functions and adapt the machine to your individual needs.

Working parameters and joystick functions can be conveniently set for specific drivers via USB. A maximum of four different driver profiles can also be saved







Diagnosis made easy: All information about controller and PIN assignment are printed on the cables.



Export of all work orders and import of further driver profiles via USB interface.

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CHIPPING UNIT

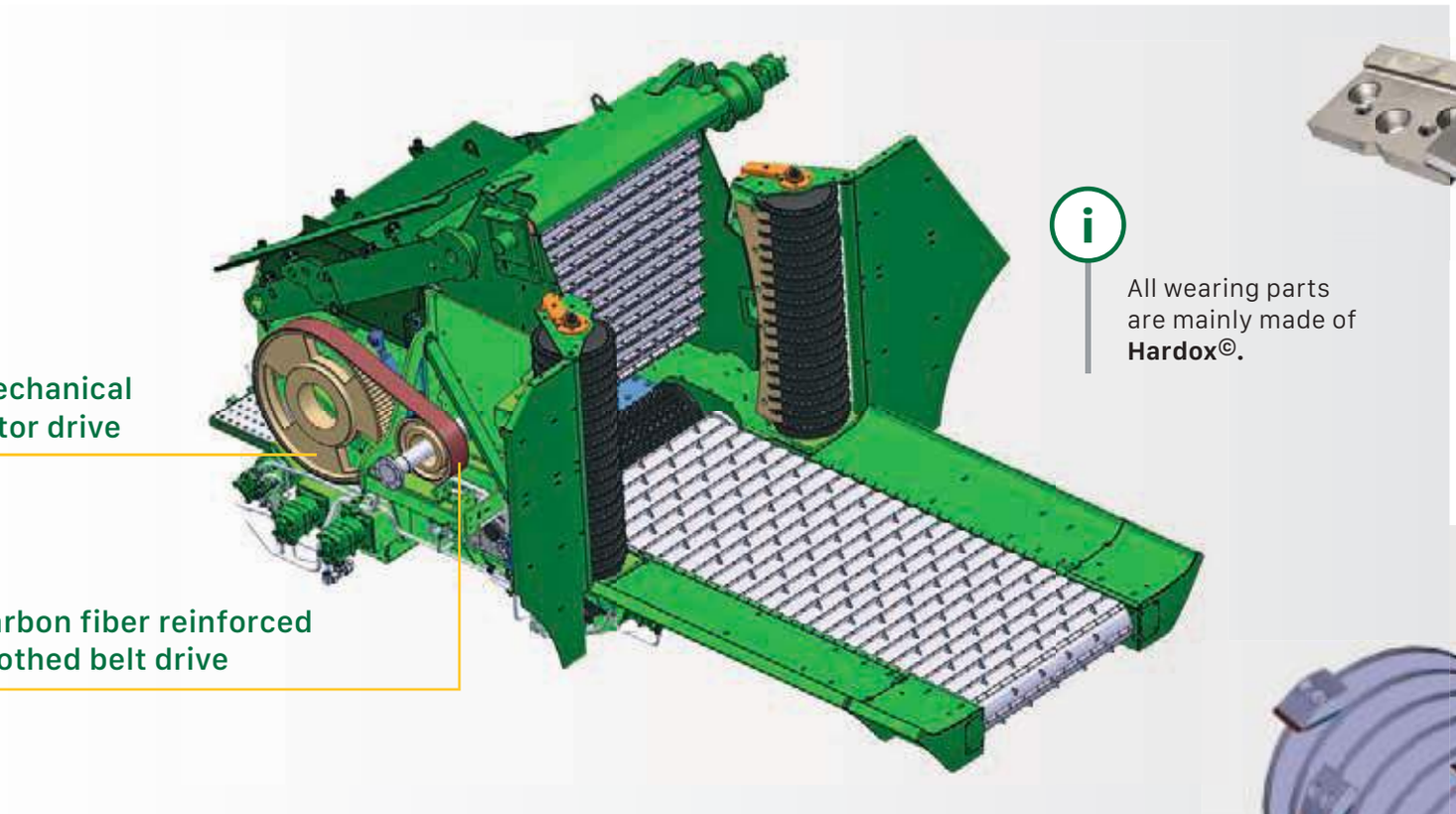
Quality that pays off

Chipping unit with vertical infeed belt, direct drive for infeed chain and infeed roller.

Laterally arranged infeed rollers guarantee a trouble-free infeed, e.g. when chipping complete trees and branches.

The augers in the discharge floor are all driven driven by specially mounted oil motors.

The Diamant has a **unique guarding system** to protect the rotor against foreign material. If the counter-blade is triggered by a sensor, the rotor clutch and infeed are switched off within a fraction of a second.

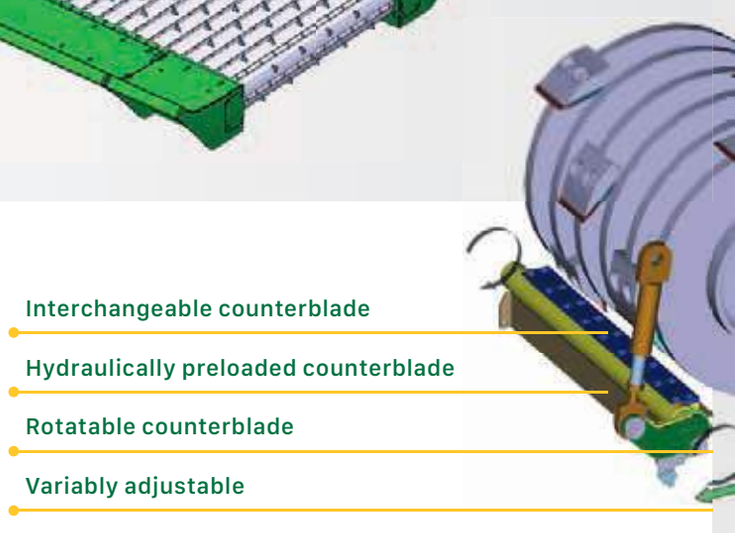


Mechanical rotor drive

Carbon fiber reinforced toothed belt drive

All wearing parts are mainly made of **Hardox©.**

To protect the rotor and rotor shaft from damage in a controlled manner, additional predetermined breaking points are installed.



Interchangeable counterblade

Hydraulically preloaded counterblade

Rotatable counterblade

Variably adjustable





Technical data

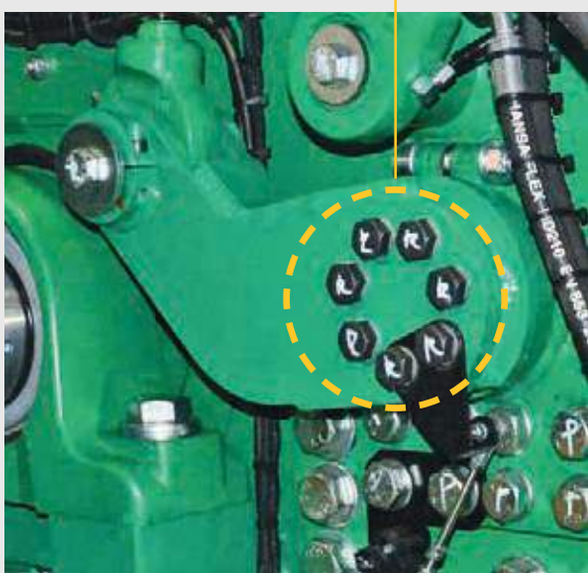
Chipper		GEN 6	GEN 7
Feeding width (with feed rollers)	mm	1230 (1730)	1230 (1730)
Feeding height	mm	980	980
Rotor speed	rpm	up to 420	up to 420
Max. feed rate	m³/h	up to 380	up to 500
Feeding speed	material-dependent 3-step control variable		
Rotor diameter	mm	1100	1100
Number of knives	pcs.	6 (optional 12)	6
Rotor drive		mechanical	mechanical
Accelerator drive		hydraulic – variable adjustable	
Counter blade	2-sided insert / single elements		
Distance counter blade - knife	Knives adjustable after grinding		
Protection counter blade	hydraulic overload protection		
Direction of rotation feed	reversible		

Trouble-free feeding





Shear bolts





ROTOR

For optimum wood chip quality

Thanks to our rotor concept and flexible configuration options we can respond to a **wide range of customer requirements.**

With the **ALBACH** Diamant it is easy to produce wood chips in all specifications and for all purposes.

Rotor Generation 6

With the Rotor Gen. 6 you have the choice between 6 or optionally 12 knives. With 6 knives you can produce chips from 9 to 35 mm, with 12 knives from 9 to 28 mm. The exact setting is possible in 2 mm steps.

Rotor Generation 6 comes with the Gen. 1 accelerator as standard. Optionally the Gen. 2 accelerator is available.

Two different knife variants are available:

- Blades with adapter (quick-change system)
- Knife for universal use (quick-change system)

** Optional retrofitting in all machines of type Silvator and Diamant is possible.*





Rotor Generation 7

With **Rotor Generation 7** you can produce wood chips from 15 to 60 mm. The exact adjustment is possible in 2 mm steps.

Interchangeable knife carriers allow optimal adjustment to a wide range of materials, to produce the best possible chopped material and thus ensure corresponding efficiency.

Possible knife variants for Gen. 7:

- Blades with quick-change system for cutting lengths up to 38 mm
- Blades for cutting lengths up to 38 mm
- Blades for cutting lengths up to 60 mm



Microchip



G 30



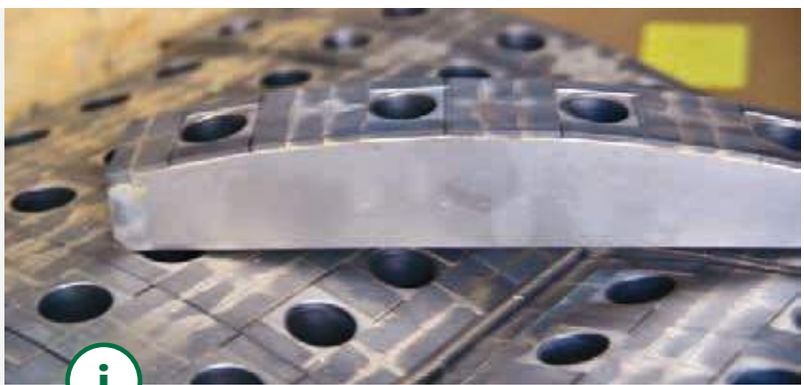
G 50



G 100







Interchangeable wear plates allow long rotor working time and an optimization of the of the wood chip quality.

ACCELERATOR

The hydraulically infinitely variable **Generation 1 accelerator** has a high ejection capacity and throwing range. Overloading is possible in many directions. All wearing parts can be replaced in the shortest exchanged in a very short time.

Optionally, the tower can be ordered with a remote control. This allows the driver to control the tower and fill trailers himself. The chipper driver can concentrate on his work without distraction. Overloading heights of more than six meters are possible without any problems.

With the **Generation 2 accelerator** you get all advantages of the Generation 1 accelerator. In addition by folding out the accelerator makes daily maintenance easier and access for service work.

The Generation 2 accelerator enables highest throughputs due to its direct drive even with the longest cut lengths. Here you can adjust the speed independently hydraulically. Speed fluctuations of the engine are compensated by the hydraulically variable drive.





Gen. 2



Gen. 1



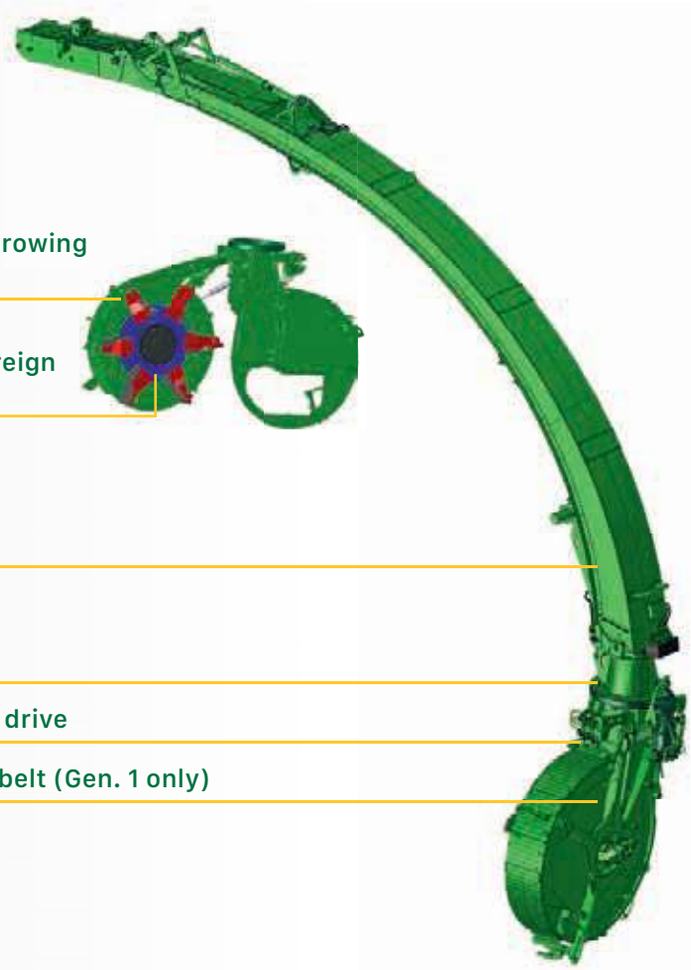


Technical data

Accelerator		GEN 1	GEN 2
Number of rotor blades	pcs.	6	6
Rotor speed	rpm	hydraulic – stepless variable adjustable	
Rotor diameter	mm	1200	1250
Ejection tower rotation angle	°	270	270
Length of ejection tower	m	6.2	6.5
Drive		Toothed belt	Planetary gear







Exchangeable and reversible throwing blades made of Hardox© 400

Overload protection against foreign objects

Hardox© 400 (gray)

Maintenance-free slewing ring

Hydraulic, stepless accelerator drive

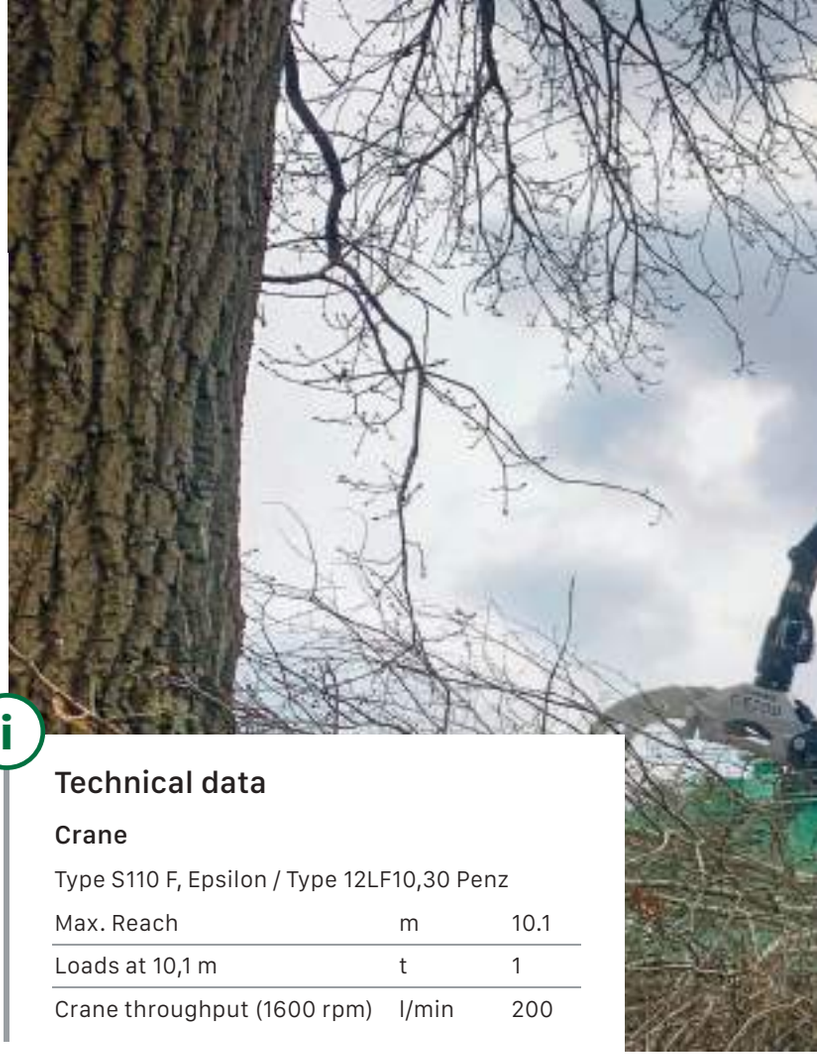
Carbon fiber reinforced timing belt (Gen. 1 only)

CRANE AND LOAD IN ALL DIRECTIONS

More efficiency – less idling

The 270-degree swiveling and height-adjustable tower ensures **easy handling by transporting** the chipping material. The extended angle of rotation of the ejector tower allows almost any positioning of the transport vehicles.

This variety of vehicle positioning allows the simultaneous use of several transport vehicles at the same time. The saving of idle time during maneuvering further increases efficiency during chipping.

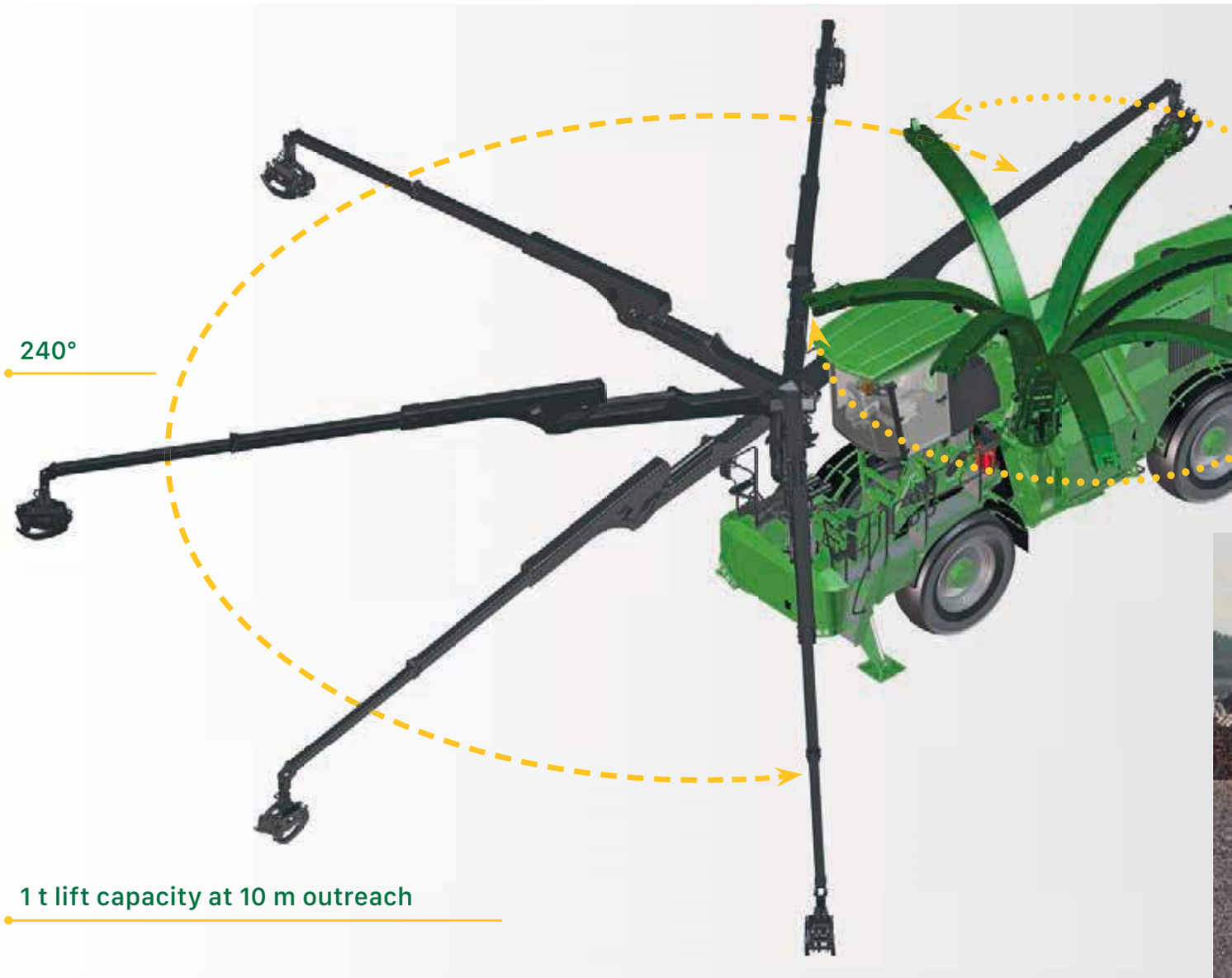


Technical data

Crane

Type S110 F, Epsilon / Type 12LF10,30 Penz

Max. Reach	m	10.1
Loads at 10,1 m	t	1
Crane throughput (1600 rpm)	l/min	200






270°









ENGINE

Volvo or MAN engine with 16.1/16.2-liter displacement – 3 options

Highest power and torque output already at low engine speeds! The engine variants, combined with the chipping and driving characteristics of the **Diamant 2000**, are an ideal combination for the self-propelled wood chipper.

Transmission and hydraulics are optimally adapted to the torque characteristics of the respective engine to ensure powerful, dynamic and economical operation with sufficient performance with low fuel consumption.

Allocation according to emission levels:

Currently, for new registrations

- in Europe is exhaust stage V (EU 2016 / 1628)
- in the USA Tier4 (according to EPA/CARB)
- rest of countries – country-specific different requirements, mostly based on to Tier V or Tier 4, in some cases even no specific requirement

In general, the country-specific availability to be checked.



MAN 6-cylinder in-line engine **581 kW (790 hp)** with 16.2 liters displacement with common rail injection system, AdBlue, SCR catalytic converter and exhaust gas recirculation.



Volvo 6-cylinder in-line engine (Tier 4) **515 kW (700 hp)** with 16.1 liter displacement, unit injector system, AdBlue, SCR catalytic converter and exhaust gas recirculation.



Technical data

Engine	Type	
Series engine MAN (exhaust level V)	D4276	581 kW (790 hp)
Volvo engine (exhaust level V)	TWD1683VE	585 kW (795 hp)
Standard Volvo engine (exhaust level Tier 4)	TAD1672VE	515 kW (700 hp)
Volvo engine (exhaust level Tier 4)	TAD1671VE	450 kW (612 hp)
Volvo engine	TAD1643VE-B	565 kW (768 hp)
Cylinder		6
Displacement	l	16.1/16.2
Engine speed at chopping	rpm	1600 - 1800
Tank capacity	l	942
Travel drive 2-speed transmission	hydromechanical	
All-wheel drive		✓
Travel speed	km/h	80
Turning radius	m	approx. 8.50

SPLIT COOLING SYSTEM

With the split cooling system of the Diamant 2000 you always keep a cool head.



Hydraulic oil cooler with reversing function

Water, intercooler and air-conditioning cooler are installed in the rear of the chipper.

Automatic reversing function as standard.



TRACTION DRIVE

Best driving characteristics – on the road and off-road



Gearbox



Steering

Slope levelling



Axle suspension



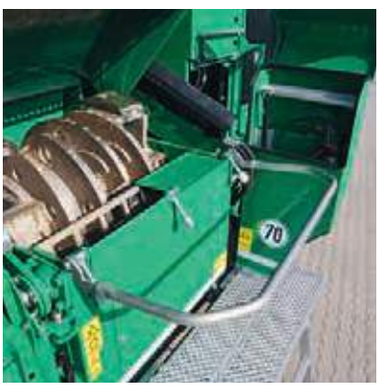


MAINTENANCE AND SERVICE

















TRAINING AND SERVICE PARTS

ALBACH training for drivers and service technicians

For each machine delivered by **ALBACH** we offer a qualified training. This training takes place on the machine and also on the individual components. Our goal is to provide you with the **best know-how.**







Spare parts supply and availability

Our motto is: **Everything from one source.** Motors, gearboxes and crane parts are directly from **ALBACH.**

We guarantee complete spare parts inventory for service, wear parts and all drive parts including motors.





OPTIONAL ACCESSORIES



3 drawers



2 drawers and refrigerator compartment



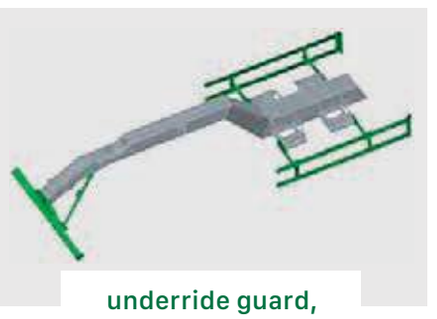
1 drawer, microwave / refrigerator compartment



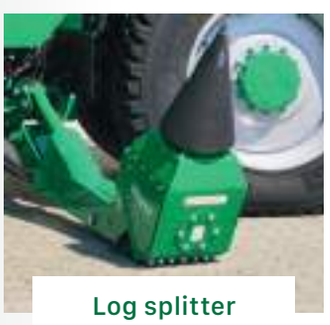
Remote control for tower



Winch



underride guard, country specific



Log splitter



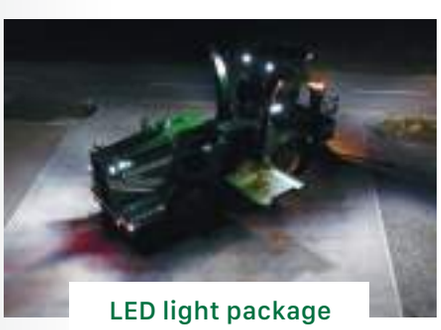
Splitting tongs



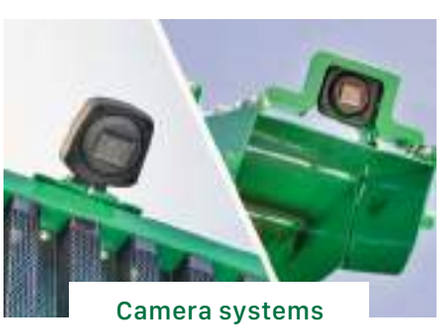
Log splitting tongs or finger gripper



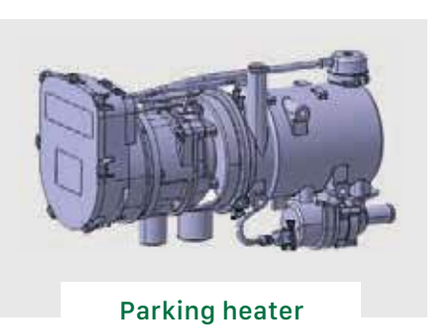
Ejector-Reverse flap



LED light package



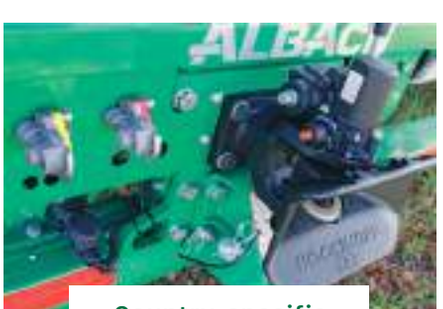
Camera systems



Parking heater



Sieve holder



Country-specific trailer hitches



Auxiliary batteries



ALBACH®

ARGUMENTS THAT CONVINCE

Quality made in Germany

As a premium manufacturer, **ALBACH** focuses on the highest standards – in all areas.

- Design – reliable machines – extremely robust construction as a basis for the future
- High vertical range of manufacture
- High flexibility
- Trained, experienced specialists
- Loading and shipping

Contact partners worldwide

In addition to production in Langquaid, the company headquarters are also located in Menning, Upper Bavaria, Germany.

Our international customers have contacts in many countries around the world.

Individual solutions

Mechanical engineering belongs to the classical engineering sciences.

In this field, the company **ALBACH** Maschinenbau has specialized in the production and further development of chippers.

Comprehensive service

Our know-how – your benefit

- In a personal consultation, we address your individual project requirements
- We advise you on which machine is right for you
- You receive transparent information about the operating and service costs of the machine even before you make your purchase
- With our worldwide sales and service partners, you will find a competent contact person close to you

DiAMANT 2000



Innovative technology for BIOENERGY

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