



ALBACH

Innovative technology for biomass and tree care

DIAMANT
2000





2006
Foundation of the company
Albach Maschinenbau

In order to put the concept of a „self-propelled and high-performance“ chipper machine into practice, *Albach engineering* was founded. Build of the prototype and testing.



2008
Launch of the *Silvator 2000*

Start of production and sale of the *Silvator 2000*. Self-propelled, with a maximum speed of 30 mp/h, 3 m (9.8 ft) transport width and it's own specially designed 33 ft crane



2008 - 2014
Evolution

Throughout the following years, the *Silvator* has been sold successfully in more than 15 countries and received continuous development to become market leader in chip quality and durability



2013
Brush & Waste Wood Press

Launch of the mobile brush & waste wood press



2014
Launch of the *Diamant 2000*

The growing forestry & biomass sector, demands more mobility and flexibility. The *Albach Diamant 2000* is presented to the public.

45 mp/h travel speed, build to comply with truck regulations. New developed powertrain and revolutionary rotor concept results in high performance capability



2015
Expansion

Launch of the *Diamant 2000* in North America



2015 - 2018
New manufacturing facility

Opening of the new manufacturing plant in Langquaid to answer the higher demand for the *Diamant 2000* whole tree chipper



2018
Faellbach - mobile tree-trimmer

Delivery of the first *Faellbach* tree trimmer to Northern Germany and USA





4



5

Market demands for an **all in one chipper** led to the development of the *Diamant 2000*. In its class, the *Albach Diamant 2000* is considered the **most powerful and flexible wood chipper** in the world.

Equipped with its own 33 ft. crane, loading is a safe and efficient task. Large **42" wheels** and a **4-wheel drive** system, independent hydro-mechanical drive of front and rear axles, provide the ability to maneuver through tough terrain and steep slopes.

The *Diamant 2000* offers unmatched reliability, superior **on & offroad** capabilities, the highest possible through-put, and the best chip quality to any specifications.



Standard equipped with four-wheel and **crab steering**, the *Diamant* gives you enough maneuverability to master any narrow locations or muddy forest roads. The specifically developed **2-speed powershift** transmission from *ALBACH* will give you enough torque and drive to handle any steep hill.



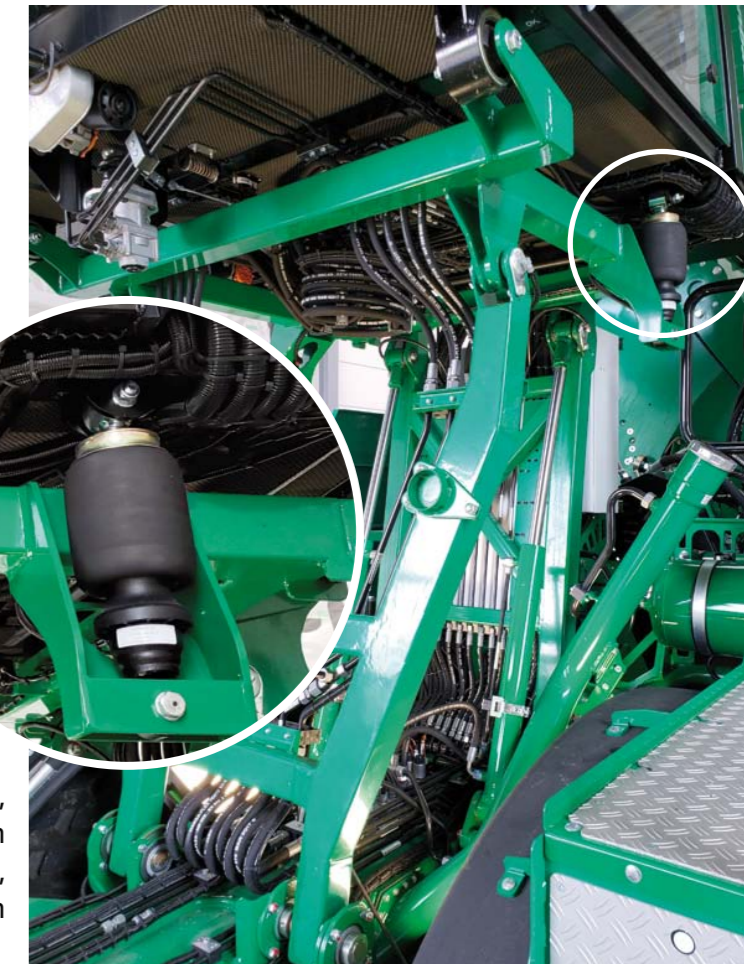
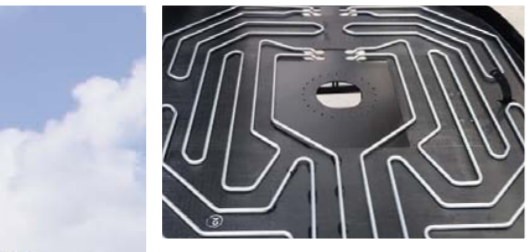
The *Diamant 2000* is particularly noted for the new design of the drive, which can accelerate it to **45 mph travel speed**. In combination with an integrated anti-lock braking system (ABS), you can be assured to reach your next jobsite in the most efficient and safe way possible. We have proven this in more than **33 countries worldwide**.



ALBACH



Maximum reach - safe and efficient



Sound-insulated cab, mounted on vibration dampeners, with air suspension

A perfect and safe all-around view at 4.8 m (15'9") eyelevel allows you to keep your surroundings under control. High up stacked wood or road side clearance jobs can be mastered at ease.

The comfort seat can be swivelled 180 degrees for an optimum position while operating and to reduce strain on the body. The combination of 4.8 m (15'9") work height, swivel seat, air

conditioning or heating ensures efficient operation even on long lasting days.

Through the *Albach* operating terminal (touch screen) you can

access real time information, status and controls of the machine at the touch of your fingertips.

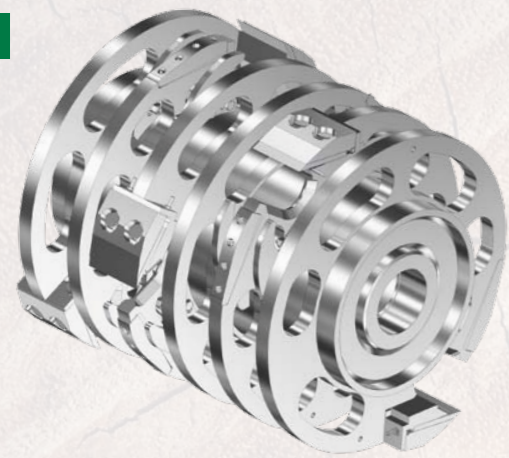
The configuration of controls, as well as sensitivity of josticks, can

be adjusted to suit the operators preferences. 3 individual profiles can be programmed.

Via USB connection you can transfer job management data and

operator profiles to your computer or any other *Diamant 2000*.

For added convenience, a fridge and a microwave are available as options.



Rotor Generation 6

Can be retrofitted in all *Silvator* or *Diamant* chippers. With the standard rotor you have the choice between 6 or 12 knives. With 6 knives it is possible to produce wood chips from 10 mm (0.39") to 40 mm (1.57"). Rotor Gen. 6 is installed with standard accelerator. The Gen. 2 accelerator is available as an option.

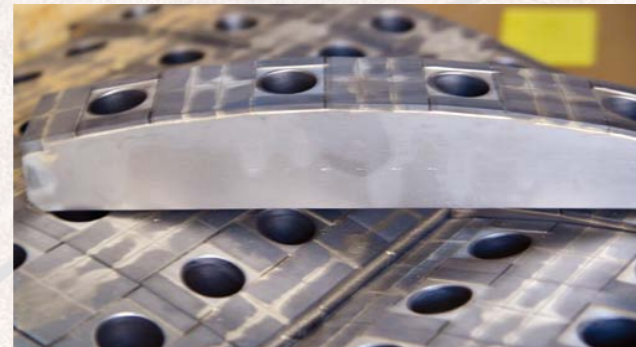
Two different types of knives are available:

- Blades with adapter for shrub and softwood
- Knives 250 mm for universal use (brush and large diameter hardwood)

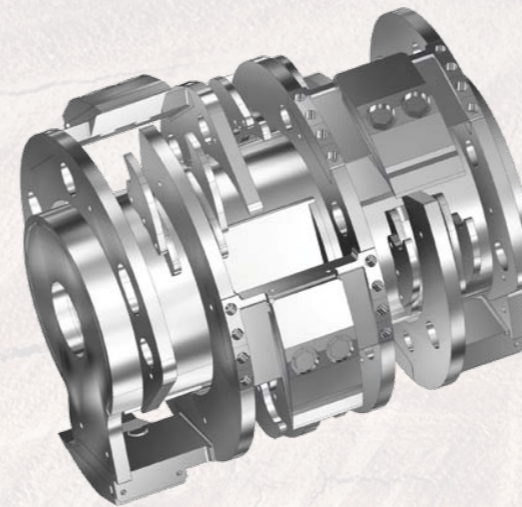
Wear plates (rakers) on the rotor ring are interchangeable!



Exchangeable wear plate, inserts (rakers) will extend the rotor life and also help to adjust to different chip sizes and quality



The standard accelerator can be folded out for maintenance, which allows a quick replacement of all wear liners and wear blades. The spout can be turned in any direction for loading of trailers & discharge of the material. Optionally you can order the remote-controlled spout function. The remote control, enables the truck driver to fill his own trailer or helps to distribute material evenly on the ground. This takes away the task of filling or spreading chips from the operator. He can focus on the chipping process. Filling height up to 6 m (20 ft) are no problem. The hydraulically-driven accelerator can be variable adjusted.



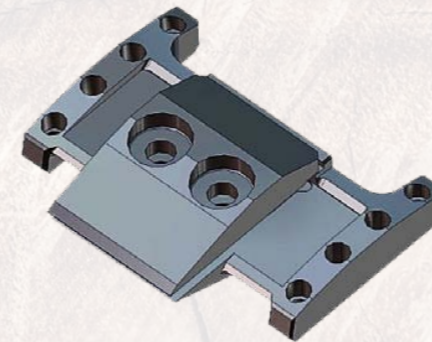
Rotor Generation 7

With our latest rotor development, the *Diamant 2000* is able to produce wood chips from 15 mm (0,6") to 60 mm (2.4"). As a standard feature the Gen. 7 rotor comes with replaceable knife mounts. This will give you a wider field of operation and enables you to fine tune in any kind of material for an even better chip.

The 3 knife mounts options, will help you to save fuel and increase throughput.

Possible blade / knife variations for GEN 7:

- Blades with adapter and quick-change system
- Knives for lengths of cut up to 38 mm (1.5")
- Knives for lengths of cut up to 60 mm (2.4") CHP (Combined heat & power chip)



The Generation 2 accelerator offers the same service features as the standard accelerator. To avoid downtime, you can open the blower liner and swing out the complete accelerator rotor. This accelerator allows maximum throughput at maximum length of cut and chip size. Hydraulically blower drive adjustment ranges between 250 rpm – 630 rpm.



10



Our special rotor concept and its available configurations allows us to adjust and react to any market needs.

Albach Diamant 2000 makes it easy to produce wood chips in all requirements and specifications.



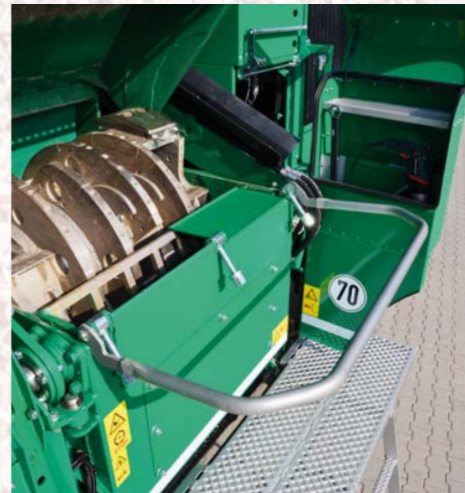
Microchip



G 30



11





ALBACH



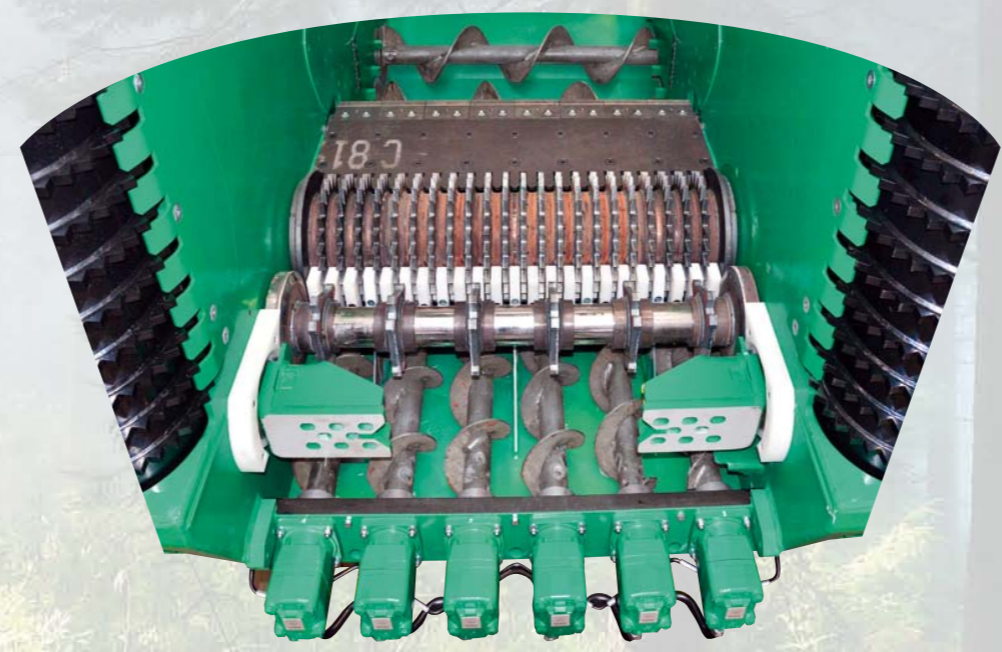
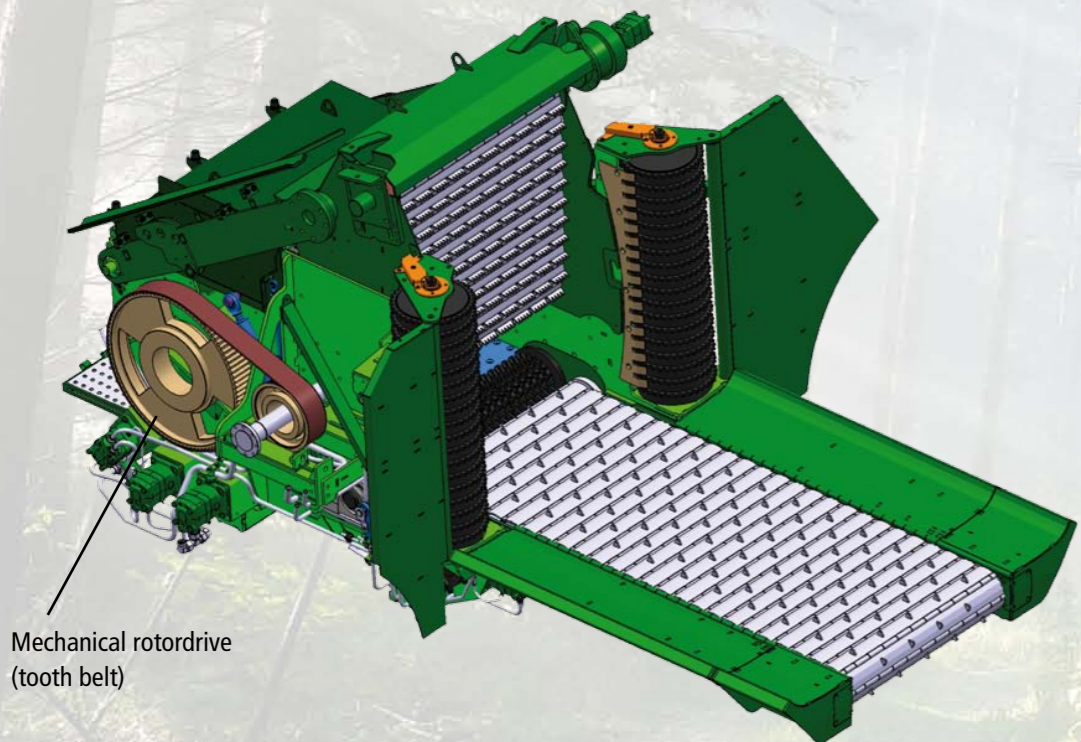
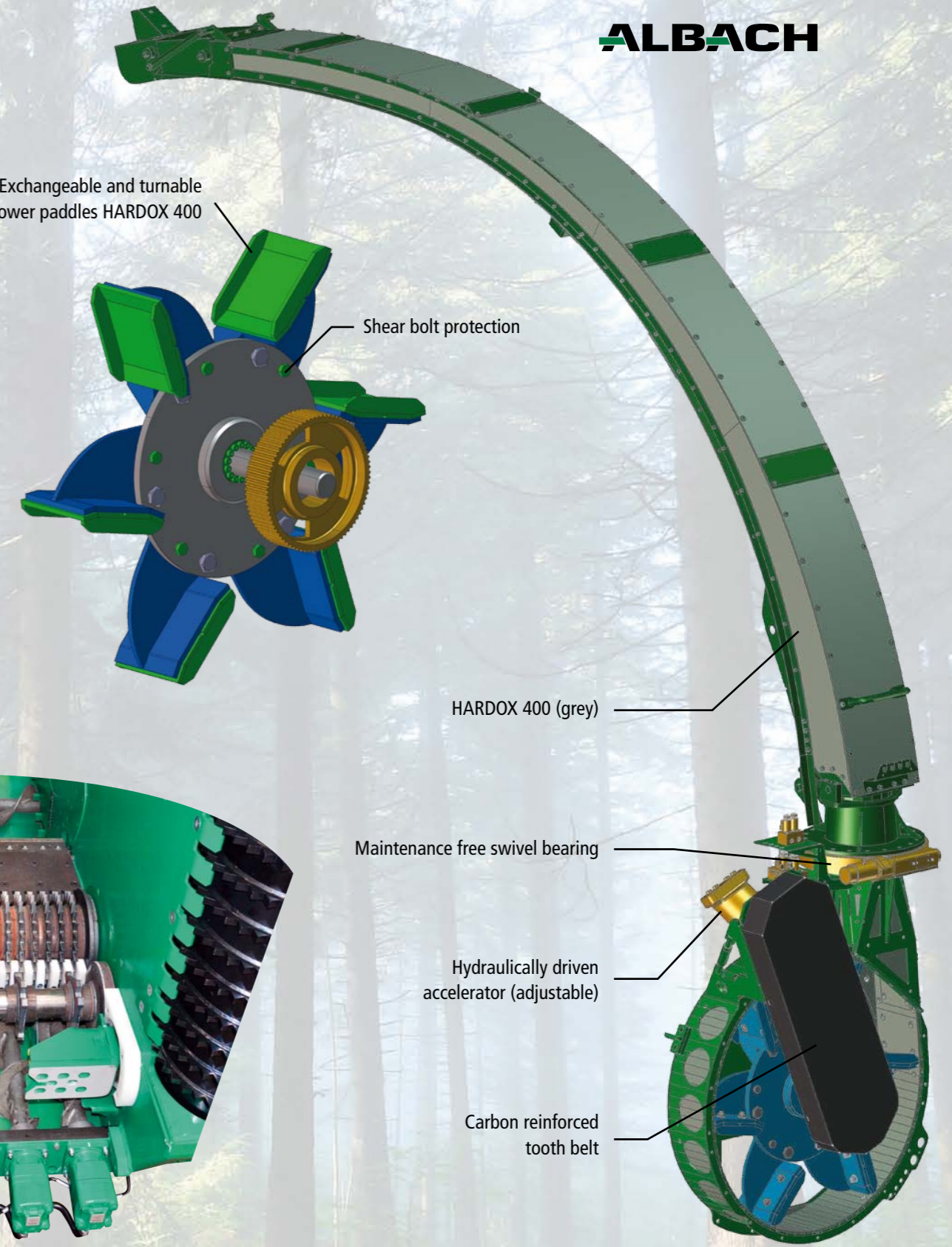
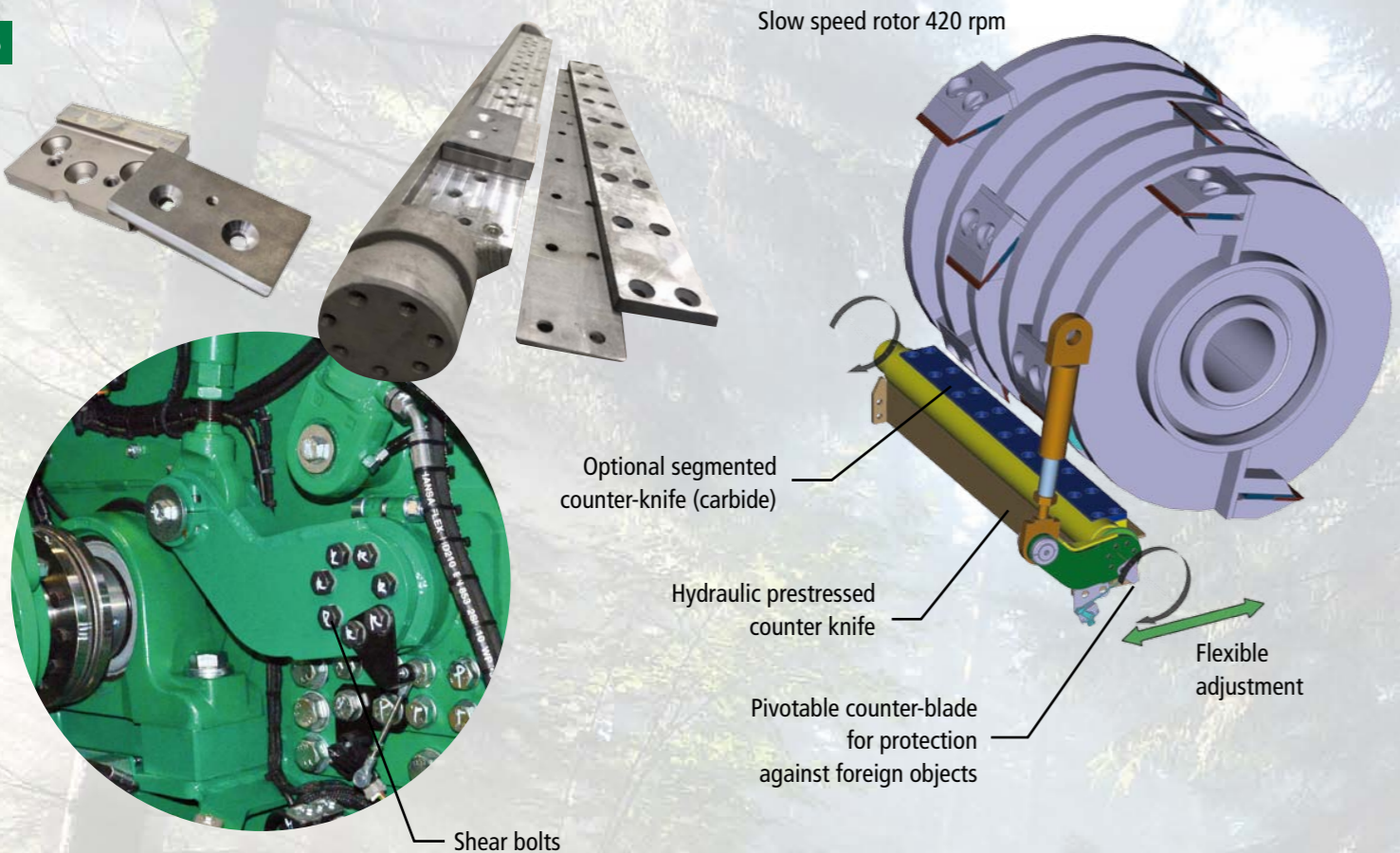
1 t lift capacity
at full extension
to 10 m (33 ft)



Filling and distribution of wood chips into trailers made easy with a 240 degree turn radius of the spout. Re-positioning for the next available trailer becomes an easy

task and increases your efficiency. For discharging into lower trailers, you can adjust the height of the spout by 3.1 m (10 ft). Additionally we can install our up-side down spout extension.

This allows you to blow chips under low profile doors and openings.



- Direct drive of Infeed chain, infeed roller and vertical infeed chain
- 2 vertical side-infeed rollers make whole tree chipping easy. No blockages occur while

- feeding wide grown trees into the chipper
- Chip material transport through direct driven augers towards the blower. Each auger is driven by a single oil-motor

- The *Diamant 2000* comes with the most advanced safety features against foreign objects to avoid rotor damage
- Pivottable counterknife with angle sensor, will automatically

- turn off infeed and rotor-drive if activated by no more than 3 % of its rest position
- As a safety feature against bigger objects, the counter-knife pivot arm is equipped with

- shear bolts. This allows the anvil to fold out completely to avoid major damage
- All wear parts are made of highly wear-resistant HARDOX material

18 **16.1 litre Volvo engine - 3 options**

High power, excellent torque output and low speed - the design of the Volvo engine and the chipping and driving characteristics of our self-propelled wood chipper are an ideal combination.



The standard Diamant 2000 is powered by the **450 kW (612 hp)** Volvo engine (Tier 4 final). The transmission and hydraulics are designed to match the torque characteristics of the engine to ensure powerful, dynamic and still economical operation with sufficient power and low fuel consumption for both chipping and road travel.



The power transmission in the **515 kW (700 hp)** Albach Diamant 2000 with its Volvo inline 6-cylinder engine (emission level EPA 4 final), 16.1 litre displacement, pump nozzle injection (PNI), SCR catalytic converter and AdBlue is now even more efficient.

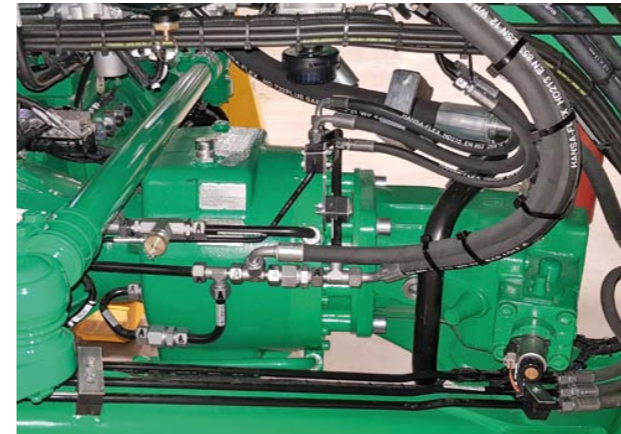
**VOLVO
PENTA**



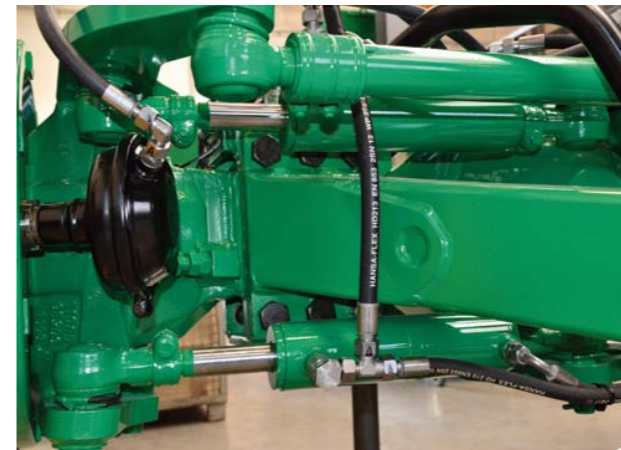
For even more power the Albach Diamant 2000 also offers **565 kW (768 hp)** Volvo inline 6-cylinder engine with 16.1 litre displacement and pump nozzle injection (PNI). The robust power pack does not require AdBlue, SCR catalytic converter and exhaust gas recirculation.

Country specific available

19



Powershift



Steering



Suspension



Stay cool in any conditions

The Albach Diamant 2000 is equipped with a split cooling system.

ALBACH

Hydraulic oil cooler with automatic reverse function



Water, intercooler and airconditioning located at the back of the machine. Automatic reverse function standard.

20 The all in one solution from Albach

Operator display - diagnostics - joystick mapping - engine and driveline diagnostics



Diagnostics made easy. Pin, controller and wire number on every wire.

ALBACH - worldwide at home



21

Albach factory training for operators and service technicians

With every machine sold we offer a high quality training on the machine and along the production line. We want your staff to be trained in the best possible way.



Spare parts back up and availability

Albach keeps you running, we help you cut down-time. We have one of the highest stock levels including wear-parts, maintenance and engine parts, as well as complete engines.

Volvo and Epsilon parts are available directly from us, which will save you time and hassle. Beside that, we also offer complete overhauls and refurbished components from engines, driveline and crane components.





Drawers only



2 drawers und fridge



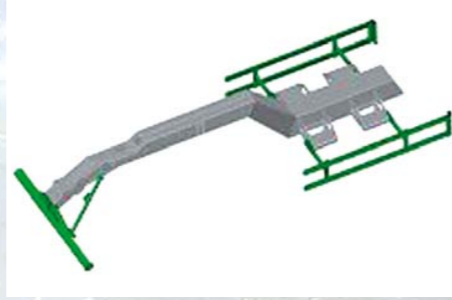
1 drawer, microwave and fridge



Spout remote control



Electric winch



Drive under protection



Wood splitter



Grapple splitter with quick change



Screen bracket



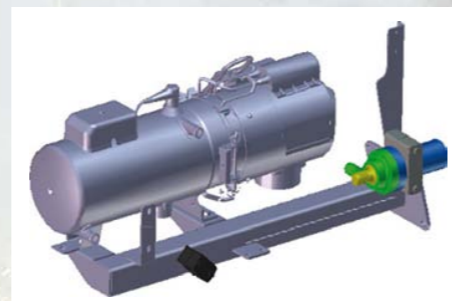
Camera options



LED light package



Spout upside down extension



Independent heater



Log grapple



Country specific tow hitch



Additional batteries

Engine

Engine	Type	Volvo
Standard engine	TAD1671VE	450 kW (612 hp)
Engine variant I	TAD1672VE	515 kW (700 hp)
Engine variant II	TAD1643VE	565 kW (768 hp)
Cylinder		6
Displacement	l	16.1
Engine RPM in Operation	RPM	1500-1700
Tank capacity	l (US gal.)	995 (263)
Drive 2 – speed-powershift		hydromechanical
Four-wheel drive		permanent
Road speed max	mph	45 mph (50 mph country specific)
Turning circle	m (in)	approx. 8.50 (27'11")

Chipper

		GEN 6	GEN 7
Infeed width	mm (in)	1230 (48)	1230 (48)
Infeed width incl. feed rolls	mm (in)	1730 (68")	1230 (68")
Vertical infeed opening	mm (in)	980 (39")	980 (39")
Rotor/ chip speed	RPM	up to 420	up to 420
Max. output	m³/h	up to 380	up to 500
Infeed speed		depending on material (variable)	
Rotor diameter	mm (in)	1040 (41")	1040 (41")
Quantity of knives	#	6 (optional 12)	6
Rotor drive		mechanical direct drive (tooth belt)	
Accelerator drive		hydraulic - variable speed	
Counter knife		bilateral usage (optional segmented)	
Distance counter blade - knife		variable	
Foreign object protection (Anvil)		hydraulic overload protection	
Infeed direction		reversible	

Accelerator

		Standard	GEN 2
# Rotor paddles	#	6	6
Accelerator speed	RPM	hydraulic - variable speed	
Rotor diameter	mm (in)	1200 (47")	1250 (49")
Rotation angle chute	°	270	270
Chute length	m (in)	6,2 (20'4")	6,5 (21'3")

Crane

Crane (Type S110F) Forwarder crane from Epsilon		
Max. reach	m (in)	10,1 (33'2")
Lift capacity max extended	t (us t)	1 (1.1)
Hydr. oilflow (1600 RPM)	l/min (gal/min)	200 (53)

Dimensions

Length	m (in)	10.34 (33'2")
Width	m (in)	2.55 (8'4")
Height, (lifted cab eye level)	m (in)	3.95 (12'11"), 4.80 (15'8")
Tires	Type	650/65R 42

Reserve technical changes.

**Key values:**

- Travel speed 45 mph
- 42" wheels
- Independent differential lock
- Central lubrication system (Beka Max)
- 4WD with hydraulic motors directly mounted on each axle
- Easy exchange of counter knife (segmented optional)
- Efficient chip extraction through screw conveyor drive
- Hydraulic drive of all systems except chipping rotor
- Automatic reversing engine and hydraulic fan
- Automatic pressure compensation of crane outriggers
- Loss free transfer of logs from infeed table to chipper rotor.
- No chain drives
- Operator seat rotates 180 degree, improving manoeuvrability especially in reverse
- Safe operation at night with 32 worklights (LED option)
- Automatic chipper set up at a touch of a button in less than 30 seconds
- Highway mode - crane outriggers and parking brake automatically disabled

ALBACH DIAMANT

2000



*The most powerful 4-WD
self-propelled whole tree chipper!*

Manufacturer:

Albach Maschinenbau GmbH

Schlierstraße 20

D-85088 Menning

Tel.: +49 (0) 84 57 93 46 88 - 0

Fax: +49 (0) 84 57 93 46 88 - 1

email@albach-maschinenbau.de

www.albach-maschinenbau.de