



ARTHOS

The glutton of hammermills!





Always your partner!

Reliable. Competent. Flexible.

If you are challenged to recycle a few thousand tons of material every day, you may not need a machine initially - but you will need the best possible advice! With a team of highly qualified specialists, and over 30 years experience, we are at your disposal for exactly this purpose. Avoid mistakes early in the planning stage and invest for the long term - product loyalty is the key to your success!

We are available for project consulting in both the planning and design phases, for new projects, as well as for existing operational processes with potential for improvement. The most suitable machines for your individual requirements are the products of every consultation.

We have the competence to plan and install your recycling plants ATEX-compliant. In addition, we can give you important ideas on how to optimise the workflow, efficient machine use and the design of recycling plants. In addition - besides achieving maximum performance - aspects of efficiency and environmental protection also play an important role.

For individual advice, please contact your HAAS sales contact or info@haas-recycling.de





HAAS guarantees...

Quality

- „Made in Germany“
- High-quality materials and components
- Processing at a consistently high level
- Particularly robust construction
- Long service intervals
- Minimised downtime
- Readily available spare parts

Customer focus

- „HAAS customised“ - tailor-made machines and plants
- With our „HAAS Roadshow“ we are regularly on demo tour. Your desired HAAS machine on your input material and in your location. During a live demonstration at your site, you can convince yourself of the exceptional performance of HAAS machines.



Shredder

Shredding - Breaking - Chipping



Screening & Separating Technology

Screening - Sifting - Separating



Loading & Unloading Systems

Docking - Filling - Emptying



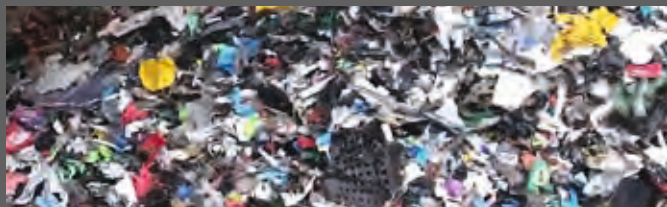
**ARTHOS easily processes
pre-shredded materials such as:**



Waste Wood



Green Waste



Plastics



Bulky Waste

Easily up to
100 t/h throughput



Biomass



Bark



Industrial Waste



PVC



mobile / diesel

ARTHOS 1600



- Infeed width 1.600 mm
- Power 566 kW



stationary / electric

ARTHOS 1300-E



- Infeed width 1.300 mm
- Power 132 - 315 kW

ARTHOS 1600-E



- Infeed width 1.600 mm
- Power 160 - 400 kW

ARTHOS 2000-E



- Infeed width 2.000 mm
- Power 315 - 630 kW



The hammermill with the viking is resistant against impurities and requires very low maintenance.

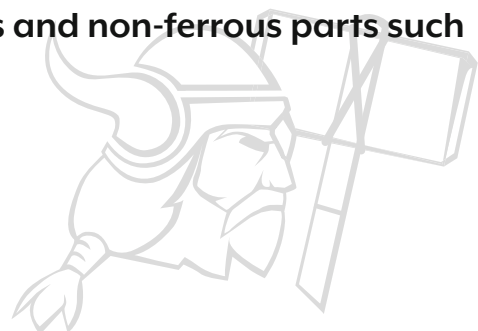
1990 was the birth of the first HAAS ARTHOS, formerly known as HSZ hammermill.



The glutton eats

ARTHOS' STRENGTHS:

- **Insensitive** to foreign parts due to swinging tools
- **Ballistic chute** - Impurities will be ejected automatically with the ballistic chute developed by HAAS!
- **Easy screen change system** - Screen exchange in shortest time due to hydr. openable screen basket.
- **Effortless exchange** of hammers and hammer shafts.
- Special HAAS hammer and counter knife combinations **minimize the fine fraction.**
- **Robust construction** - downtimes are reduced, operating costs minimised.
- **Uniform end product** and exposure of ferrous and non-ferrous parts such as nails and staples.





almost everything



ARTHOS Service Packages

Service packages tailored to your specific needs at fair prices guarantee foreseeable machine costs.



ATEX-Compliant

If required, we can design and supply the hammermill ATEX-compliant for use in potentially explosive areas.



Painting in your company colour

Do you want your HAAS ARTHOS in your corporate colours? We would be pleased to paint your machine according to your requirements. **All we need is your RAL colour code and the service is for free!**



ARTHOS 2000-E horizontal fed



ARTHOS 1600-E without ballistic chute



ARTHOS 1600-E with ballistic chute

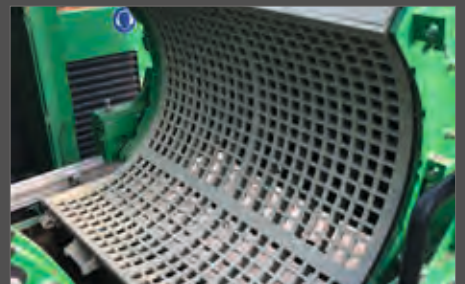
Quality continuously improved!

A close and trustful relationship with our dealers and customers is the basis for the constant development of HAAS machinery and equipment. We have always an open ear for ideas and suggestions.

HAAS machine technology



Easy screen change for highest flexibility



Since the hammermill can be opened hydraulically, the screen can be easily replaced in approx. 30 minutes. Thanks to the individually tailored counter knife and screen basket configurations, the fines content can be reduced to a minimum. Special reinforced screen baskets are available as an option.

- robust and long-lasting

Swinging hammers



Depending on the input material and the required end product, special HAAS hammers, counter knives and milling zones are used, based on long-term experience and permanent development.

Special HAAS hammer and counter-knife combinations minimise the amount of fines.

The hammers and hammer axles can be replaced easily.

Optionally, we provide wear protection caps for your hammer set and/or rotor.



Ballistic chute - wear protection



Impurities such as iron, non-ferrous metal, etc., which may enter the hammermill with the incoming material, had to be removed by hand in the past, which was very time-consuming. Impurities in the input material are now automatically rejected. The hammermill doesn't need to be stopped to remove the contaminants, thus downtime is minimised and costs are reduced!



Customised Solutions

ARTHOS Stationary



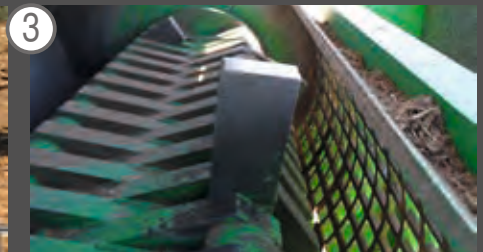
Ballistic chute

- Impurities are automatically separated during operation.
- Wear is due to this minimised.
- Downtimes and costs are significantly reduced.



Easy screen change

- Various screen sizes guarantee maximum flexibility.
- Screen sizes from 30 - 150 mm can be chosen.
- Screen change within minimum time due to the hydraulically openable screen basket.



Hammer system

- The fines content can be reduced to a minimum.
- Due to the flexible swinging hammers, the HAAS hammermills are very resistant against contaminants.



„Since the new hammermill has been installed, we can change the screen with one worker within 30 – 35 min. Downtime and repairs due to foreign bodies are part of the past now.“

Hubert Achberger, Operations Manager Zollikofer



Ideal in combination with HAAS double shaft slow speed shredder TYRON.

For new installations or the integration in existing installations.

Prepared for dust extraction, misting system and/or spark detection/extinguishing.



Control system

- multifunctional display on the control cabinet
- management of machine data
- integration into existing (control) systems
- Star-delta start
- frequency inverter for reducing the starting current (option)
- system control via tablet (option)
- WIFI access (machine data on tablet/mobile phone)
- remote maintenance via online access (option)

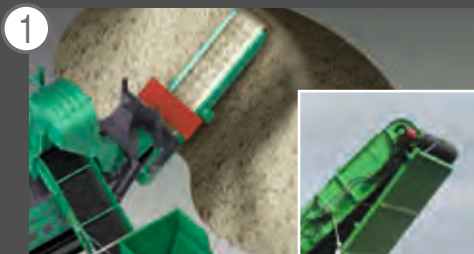
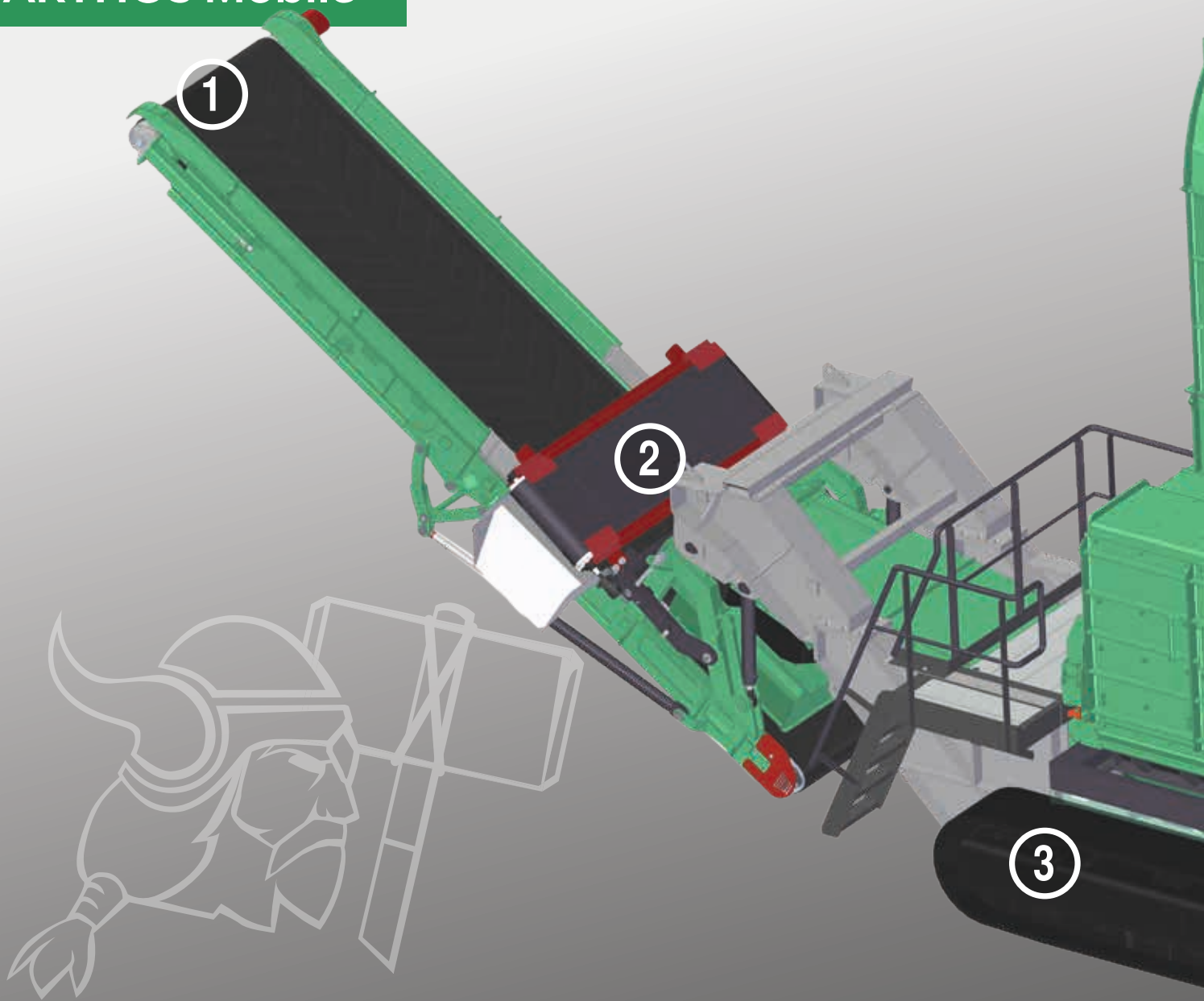
Steelwork

- steel support incl. maintenance platform
- stairs or ladder access
- easy maintenance access
- crane beam with chain hoist for screen change
- individual solutions depending on local conditions

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...individually configured

ARTHOS Mobile



Discharge conveyor

- 1400 mm wide
- slewable discharge conveyor +/- 30° individual discharge height up to 3900 mm
- belt with steel core inlay (option)
- adjustable belt speed (option)
- magnetic head drum (option)



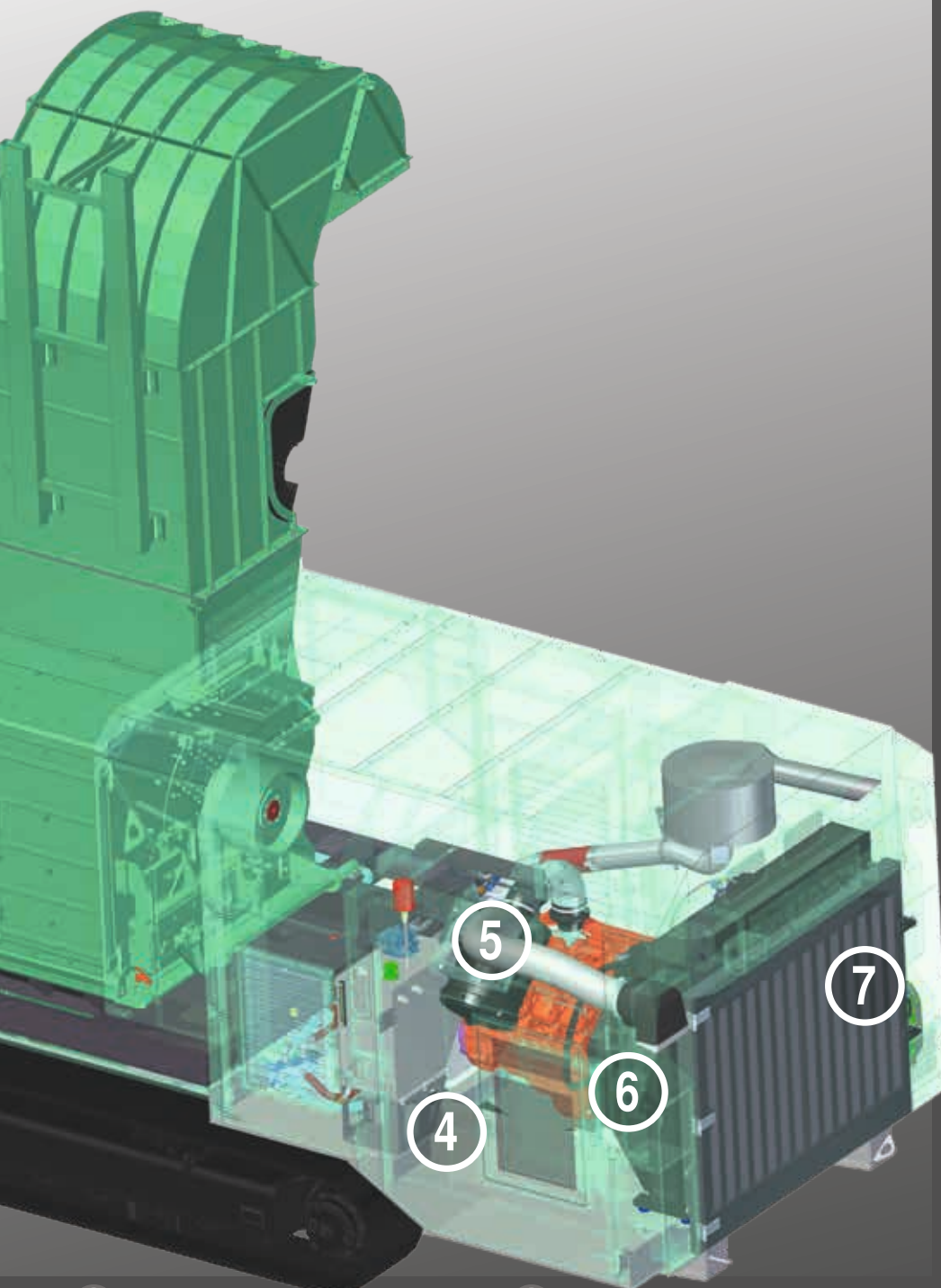
Powerful overband magnet

- hydraulically height adjustable
- tilt angle additionally manually adjustable
- extra strong neodymium magnet



On tracks

- high mobility on site
- additional rubber shoes provide best mobility on hard ground while protecting your concrete floor



Multifunctional control

- control board and management of the machine data
- input/output test electrical system
- all languages available
- diagnosis via HAAS Tracking Portal
- WIFI access (machine data on tablet/mobile phone)



Generously sized engine compartment

- integrated acoustic insulation
- Cleanfix® reversible fan
- electric pump for hydraulic oil
- heating (display, hydraulic tank)
- traffic light system for operating status
- fire extinguishing system (option)



HAAS Tracking Portal

- with this online platform you have a clear overview of the machine data and operating conditions of your HAAS machines and plants.



Reversible fan

- Cleanfix® multi-patented reversing fan for automatic radiator cleaning
- blowout of dust and debris
- more cooling, more power, reduced downtime.



Remote control

- hammermill start/stop
- operating the tracks
- opening/closing screen basket
- magnet height adjustment
- slewing the discharge conveyor (option)
- emergency stop button



Scania diesel engines

- V8 with 566 kW
- low fuel consumption
- only 1750 rpm
- latest exhaust emission technology, EU Stufe V / EPA Tier 4 final
- HES- HAAS Energy Saving

HAAS recycling plants

ARTHOS Stationary



Waste wood recycling plant In Cologne the high capacity processing plant for the treatment of approx. 120,000 tons of waste wood per year includes the stationary ARTHOS 1600 to produce a high-quality 80 mm biofuel.



Compact system This installation can be used to process all types of waste wood and biomass. The TYRON pre-shreds the material, while the ARTHOS takes care of the secondary shredding (< 80 mm).



Shredding and sorting plant: In Sweden the ARTHOS „works“ in a combined waste wood and commercial waste recycling plant.

HAAS Machine Combinations

HAAS Mobile



TYRON & ARTHOS The mobile hammermill shreds pre-shredded waste wood, green waste, RDF - Refuse Derived Fuel and PVC waste thoroughly and quickly.



TYRON & ALVA The mobile HAAS starscreen is the perfect screening system for green waste, roots or waste wood. A defined particle size is separated and the oversize is returned to the pre-shredder.



TYRON & HEXTRA Ecostar's patented „dynamic“ screen guarantees maximum performance even with materials that are difficult to separate. With this screening machine you can produce either 2 or alternatively 3 fractions.

HAAS Machine Service



Original HAAS Spare Parts

Only with the original, you are on the safe side. Experts choose HAAS because performance and costs are their main concern. HAAS spare parts are high-quality parts from state-of-the-art production and are subject to rigorous testing and continuous quality control.



Customised Service Packages

We provide you with spare and wear parts tailored to your specific needs. Packages at fair prices guarantee you foreseeable machine costs and, additionally, minimum downtime.



HAAS Tracking Portal

The HAAS tracking platform allows both you and us to check the operating status of HAAS machines and plants. In the event of a malfunction, we can help you by remote diagnosis in a cost-effective, fast and uncomplicated way! No inspection or maintenance is forgotten.



Economical. Reliable. Value stable.

Wear parts of shredders are exposed to enormous loads - therefore, when you purchase your shredder, decide for best quality and thus for the success of your company! Your satisfaction is our greatest asset, HAAS machines are therefore designed for highest quality!



Contact us:
+49 2661 9865-0

Your advantages with HAAS:

- spare parts shipment on request within 24 hours
- high availability
- qualified, solution-oriented consulting
- highly skilled spare parts experts
- quick help in identifying the required spare part



Powerful 2nd hand machines and demo units

Strong design, heavy-duty construction, and durability - HAAS machines convince with their long-term value and are highly sought-after even as used machines.



The „Young Vikings“ are strictly tested HAAS demo machines in top condition, with very low operating hours and include a comprehensive warranty package.

The „Skilled Vikings“ are HAAS pre-owned machines that have already proven themselves extensively in the field. HAAS machines are known for their extreme durability and quality. These very experienced Vikings pass an extensive quality check and a complete overhaul. During this process, all technical and mechanical components are checked, replaced if necessary and, as a rule, body parts are repainted. You will receive a detailed list of the renewed spare and wear parts.

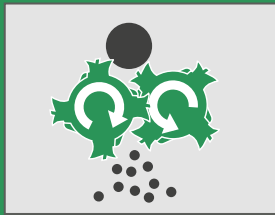


HAAS Machine Refurbishment



Photo comparison: HAAS TYRON with 15.000 operating hours before and after refurbishment.

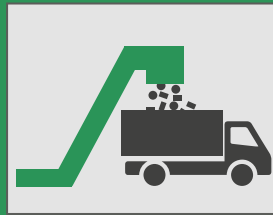
If required, we can offer you a reconditioning of the shafts or even a complete reconditioning of your HAAS machine. All technical and mechanical components are checked, replaced if necessary and body parts are repainted.



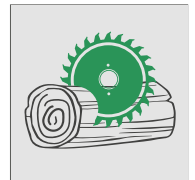
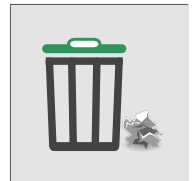
Shredder



**Screening & Separating
Technology**



**Loading & Unloading
Systems**



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