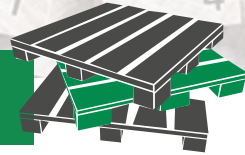


# SPECIAL Plant Technology



## Always your partner!

If you are faced with the challenge of having to shred, sort and recycle thousands of tonnes of material every year, the first thing you need is the best possible advice and a custom-fit concept!

With a team of highly qualified specialists, and over 30 years of experience, we are at your disposal for exactly this purpose.

The following pages provide a detailed presentation of the customer project with CUP Recycling GmbH. We present the highlights of this plant and give you insights from the customer's point of view. CUP Recycling GmbH in Goldbach is part of the WERNER Group. This year, the new plant for 30,000 - 60,000 tonnes of waste wood per year was commissioned.

We hope you enjoy reading this brochure and look forward to inspiring you. Our team will be happy to answer any questions you may have or to provide you with a quotation.

Yours Volker Haas & Sascha Kloft



Available also as a video  
incl. customer interview!





Since 1997, CUP Recycling GmbH in Goldbach has been part of the WERNER group of companies (WERNER RC GmbH), a powerful family-run business in the waste disposal industry.

CUP operates a processing plant for C&D waste, waste wood and green waste. These materials are professionally cleaned of impurities and shredded into all standard grain sizes. Valuable raw materials are returned into the economic cycle.

A new waste wood processing plant was needed for an annual volume of 30,000 - 60,000 tonnes of waste wood of all grades A to C.

## The challenge

Ralf Berninger, Technical Operations Manager at WERNER RC GmbH /CUP Recycling GmbH about the challenge

*„Our end product specifications were, firstly, a high-quality chip 0 - 100 mm for reuse (chipboard industry), and secondly, a pre-shred 0 - 300 mm for thermal recovery (generation of process steam and electricity). However, the challenge was that the processing building had already been built and the available space had therefore already been determined.*

*The system was designed by HAAS in a way that we can process pre-shredded material separately. Which means that the remaining part of the plant (almost 70 %) is not in operation during this time. This guarantees a minimisation of costs in terms of wear, maintenance and energy consumption!”*





## Planned, designed and installed by HAAS

Several people and departments at HAAS are always involved in the planning of a technical concept. Taking the specific requirements

into account, Sascha Kloft and Patrick Szubrin designed an individual layout. A technical design engineer then drew up the final drawing, which was presented and optimised in further meetings with CUP.

Our experienced mechanical engineers manufactured the individual plant elements from

high-quality materials and components. All electrical and hydraulic installations are also completed inhouse at HAAS. Special paintwork, as in this case, is provided free of charge.

All the system elements were delivered on time to CUP on 20 trucks.

## Maik Fischer, service engineer at HAAS, and his team installed the system within a couple of weeks:

*„Every HAAS system is custom-made, adapted to the process specifications and the available space. All components fit precisely, subsequent welding or flexing on site is eliminated! In this plant, for example, we have integrated a large number of solid maintenance platforms so that access is possible to all relevant points. The construction on high platform pillars also ensures ground floor accessibility where needed, even with forklifts and lifting platforms.*

*Approx. 120 tons of steel and 100,000 screws are installed in this system. The heaviest single piece, beside the*

*21-tonnes pre-shredder, weighs about 12 tonnes, so the availability of crane support during assembly is essential.“*



## System components

1. TYRON 2000-E XL 2.0
2. Electro overband magnet
3. Belt conveyor (bi-directional)
4. ARTHOS 1600-E Hammermill
5. Heavy chain conveyor
6. Non-ferrous separator with integrated magnetic drum
7. Screw conveyor (bi-directional)
8. Box filling conveyor belt(s)

**30.000 - 60.000 †**  
waste wood per year

## Overview of the plant process:

The TYRON 2000-E XL 2.0, equipped with fine tools 9/9-4, pre-shreds the waste wood. The following electric overband magnet separates the exposed coarse iron parts. A bi-directional conveyor transports the pre-shredded waste wood (0 - 300 mm) either to the storage bay outside the building or to the ARTHOS 1600-E hammermill for secondary shredding.



The ARTHOS shreds up to 40 tonnes of pre-shredded waste wood per hour to a size < 100 mm. The ballistic chute guarantees trouble-free operation and therefore protects the hammermill, downtimes are minimised!

A heavy chain conveyor equipped with an automatic chain tensioning and chain lubrication system transports the material to the non-ferrous separator. The reversible screw conveyor underneath the non-ferrous separator enables a special fraction to be discharged directly into processing building or, alternatively, the end product to be transported onwards to the fully automatic storage bay filling. Finally the end product is transported with a movable conveyor belt to the selected storage bay (in total 5 bays).

The entire plant is equipped with a dust suppression system. State-of-the-art misting technology binds the existing dust.





## Conclusion of CUP Recycling GmbH:

*„It was perfect timing from HAAS. We at CUP were just starting the project planning for the new waste wood recycling plant when HAAS introduced itself to us. At that time we were already in contact with other companies. We had already received various plant concepts.*

*Patrick Szubrin (Sales Manager Plant Technology) and Sascha Kloft (Managing Director) finally convinced us with the individual plant layout as well as various planning details.*

*In advance, we visited a couple of already installed HAAS systems and were able to personally convince ourselves of the performance of the systems. Already at that time, we have been impressed by the compact design and the construction of the conveyor belts and chain conveyors. The performance of the systems was outstanding. The overall package from HAAS convinced us!*

*We feel very comfortable with HAAS and maintain a cooperative business relationship.”*

*Michael Völker (Organisation WERNER Entsorgungsgemeinschaft) and Ralf Berninger (Technical Operations Manager at WERNER RC GmbH & Co. Recycling Centrum KG)*



## Optimally controlled

The control room is located in a container in the processing building, from there the plant is controlled. In addition, two mobile tablets enable flexible control and operation of the plant. During commissioning, the CUP Recycling team received comprehensive training in operation and maintenance of the system.

## The key to a long life-time

The longevity of a recycling plant is the result of the interaction of high-quality components and regular service & maintenance.

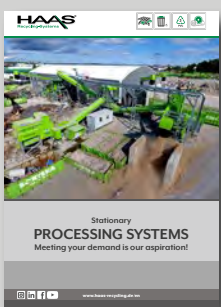
The 24/7 on-site service provided by HAAS service technicians is highly appreciated. It essentially comprises professional inspection and maintenance, including service reports and repairs.

Original HAAS spare parts guarantee the reliability and performance of the machinery and equipment.



### HAAS Services - Operator training for your staff

**Our customised training content is tailored** to your staff and the requirements of your day-to-day business. This ensures higher efficiency of your system, as well as reduced downtime and the possibility of quick self-help.



## Turnkey HAAS Systems NEW brochure

Major projects and tasks require well thought through planning. Right from the start, we are at your disposal with fixed contact persons for your project. For the applications waste wood & biomass, waste & substitute fuels, PVC & plastics, sawmill & residual wood and special applications, we offer you tailor-made solutions!

We introduce you to numerous projects to you in our new brochure.

[www.haas-recycling.de/en](http://www.haas-recycling.de/en)



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