

# UNTHA

shredding technology

The reliable brand!



## REFERENCEBOOKWOOD

# QUALITY SHREDDERS WITH A BITE!



**3-YEARS**  
no-worries  
warranty!\*

Dear reader,

Wood shredders are always the first choice when it comes to the shredding of residual timber! Thanks to our high quality standards, our shredders feature particularly high reliability and longevity. We are 100% confident in the quality of our products and thus offer our customer a 3-year carefree warranty for all our wood shredders!

Many satisfied customers from the wood processing industry already put their trust in UNTHA's solution competence. In this reference magazine, we give you a short overview of our realised projects and overall solutions.

We wish you a pleasant and informative reading!  
Your UNTHA team



**LR520**

Ideal for up to 3 m<sup>3</sup>  
of waste per week



**LR630**

Ideal for up to 1-7 m<sup>3</sup>  
of waste per week



**LR700**

Ideal for up to 4-12 m<sup>3</sup>  
of waste per week



**LR1000/LR1400**

Ideal for more than 12 m<sup>3</sup> of  
waste per week



**RS30/RS40**

Ideal for long solid wood parts





## BRITISH MECHANICAL ENGINEERING FIRM USES WASTE WOOD FOR HEAT GENERATION

XYZ Machine Tools is one of the largest British manufacturers of CNC-controlled machines for metal processing. The company's headquarters including its production facilities are located in the South of England.

All purchased parts for the production of the milling and turning centres are supplied on pallets or in wooden crates. The accumulated transport material took up a lot of storage area on the premises and impaired the operation. The residual timber was thus regularly disposed of on a landfill site, which also entailed high costs for the company.

To counteract the continuously increasing costs from disposal of the wood, the company decided to use all wood waste for heat generation for heating the company's facilities. For this purpose, the company invested in a heating plant and an LR1400 shredder. The company received government funding for the entire project.

The residual timber is fed into the funnel of the machine with 30 kW drive power by means of a lift truck and shredded to a transportable granulate size of 30 mm. Afterwards, the wood chips are transported via the discharge screw conveyor and an inclined belt conveyor into the chip bunker. The additional funnel attachment increases the filling volume of the machine so that more material can be fed in at a time. A "cold package" ensures that the machine remains operational on each and every single working day, even at temperatures below zero.

The purchase decision of XYZ Machine Tools in favour of an LR1400 shredder was on the one hand taken due to the possibility of a live presentation and on the other hand due to the fact that included metal parts such as nails or screws can also be processed by the cutting system without any problems. The purchase costs for the entire system, boiler and LR1400 wood shredder will pay off for the company within less than two years.

## „BEST OF HOLZ“

**Whoever proclaims this slogan does not make any compromises in the selection of the shredder either.**

Weinberger is the market leader in the fields of Bilam, Trilam and laminated timber and blockhouse plank when it comes to quality and service. Numerous renowned European purchasers from the prefabricated house industry and quality-conscious wood construction companies and carpentries of all sizes have been putting their faith in Weinberger's products for many years.

Weinberger has been a satisfied UNTHA customer for a number of years. The Reichenfels and Abtenau plants are already equipped with one RS40 each.

In the autumn of 2014, Weinberger put Austria's most modern glue-laminated wood works into operation in Abtenau. There, glue-laminated wood is, for example, cut to a specified length in a fully automatic process. For the shredding of the residues, the company has once again decided to make use of a UNTHA shredder.

A 4-shaft shredder of the RS30 series now shreds approx. 250 kg cut pieces per hour to a granulate size of 15 mm. As Weinberger works in 3-shift operation, the

shredder also works 24 h a day. So the reliability of the UNTHA wood shredder was a deciding factor for the purchase.

The RS30 has been equipped with a special, low funnel and could thus be directly integrated into the mitre saw line. The installation in a secured, cordoned off area prevents anyone from reaching into the shredder. If the door to this area is opened, the shredder is automatically switched off.

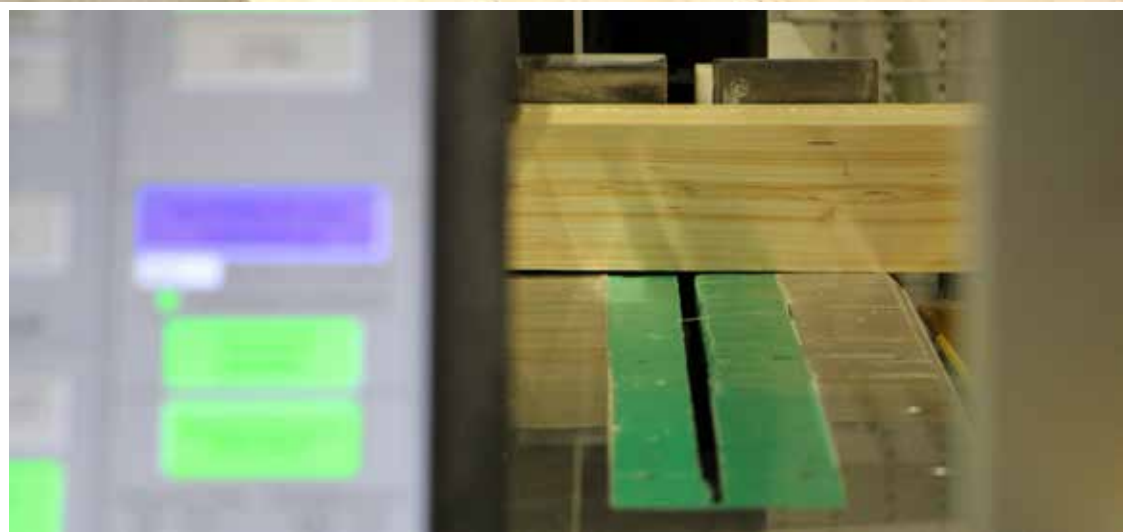
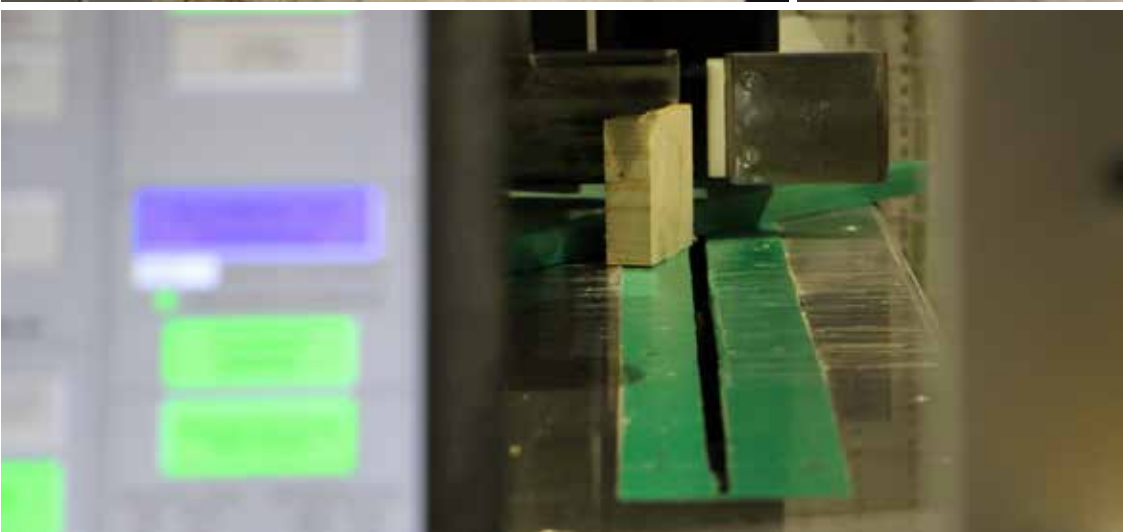
The machine base is designed with rollers. This allows for easy movement of the shredder in case of service at the mitre saw. The electric cabling between the chipper and the control cabinet was laid in an energy chain. Thus, the machine can be moved by about 1.5 m.

The homogeneous final granulate is removed via a suction device and afterwards stored in a silo. It will later be used for the pellet production.

*“We work in three-shift operation, 24 hours a day, and thus need a reliable wood shredder that is up to these challenges. With this RS30, we have made the right decision.”*

Weinberger Johann jun. (Managing Director)





## WHERE WOOD IS CHOPPED, SPLINTERS MUST FALL

*“Easy blade exchange, fast exchange of the blade holders in case of damage caused by contaminants and the efficient shredding of a wide variety of wood types clearly speak in favour of the LR1000. The homogeneous final granulate is perfectly suitable for heating. In this way, we can easily cover our energy requirement”, adds Mr. Feuerstein.*

In the wood processing industry, the idea of a closed-loop economy including recycling has already been anchored in the production process for a very long time. Wood waste is an important secondary material. It can be utilised very well in both ways, energetically and materially.

The Alfred Feuerstein GmbH & Co KG joinery in Bludenz is one of the few companies in Vorarlberg providing complete joinery services from window and door construction to kitchen and furniture construction. It ensures individualised and demand-oriented production in all divisions. Given so much service and creativity, there is, of course, also a lot of “waste”. The disposal of solid wood, chipboards, veneers, MDF boards, pallets and hardwood components calls for machine solutions that bring economical and ecological benefits.

Having been recommended by our sales partner, Hopfner Maschinen GmbH – specialised in the commissioning and ser-

ving of wood processing machines – only a UNTHA wood shredder was a real candidate for Feuerstein in this case.

“We have relied on Hopfner’s recommendations for decades when it comes to the selection of our machines. And we have not been given bad advice yet”, emphasises Thomas Feuerstein answering the question why the company specifically chose the UNTHA LR1000 shredding solution.

Reliability, efficiency and high safety standards were the basic requirements.

The value-added process in the Feuerstein joinery is characterised by treating both employees and resources with respect. It is not without reason that the company has been awarded the title “family-friendly company” several times. And this premise also seems to apply to the selection of the machinery.







## FRUHEN MESSEBAU GAINS VALUABLE WOOD CHIPS WITH UNTHA SHREDDERS

Fruhen Messebau GmbH & Co. KG from Viersen in Germany was founded in 1926 as a joinery. Since the beginning of the sixties, Fruhen has been active in domestic and international fair construction. A team of about 50 permanent specialists and another 40 freelancers works on trade fair and shop fitting projects up to extensive system roofing projects for a variety of organisers.

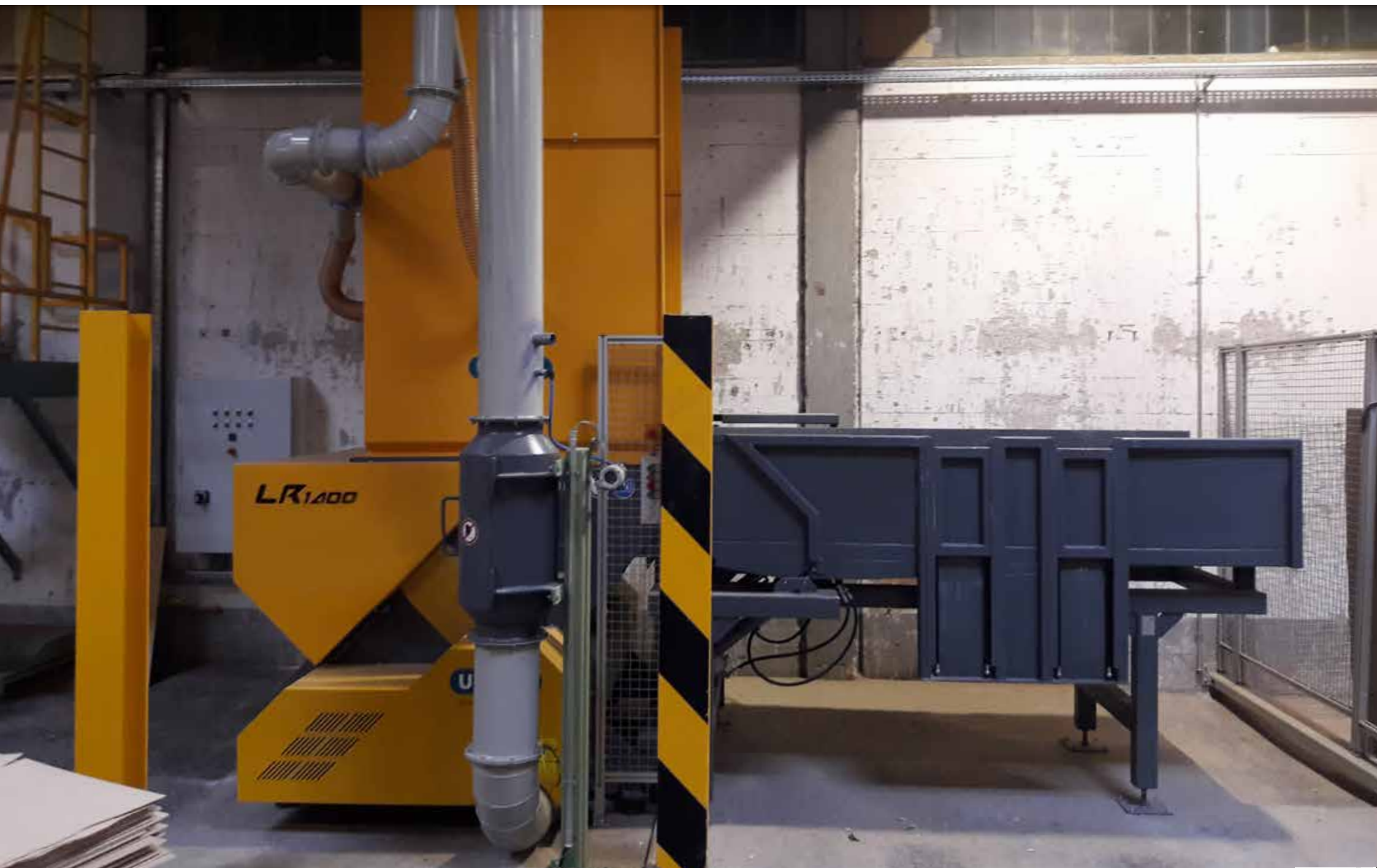
Within the course of exchanging the existing oil heating from the 60s, the company decided to change over to a wood chip heating system due to the increasing prices of heating oil. This on the one hand saves the costs for the disposal of the chip and MDF boards produced in fair construction and, on the other hand, the costs for about 50,000 litres of heating oil per year.

The suitable solution for shredding the produced chipboard residues was found to be a UNTHA shredder. An LR1400 with 30 kW drive power and a filling opening of 1400 mm x 1050 mm now ensures reliable shredding of the produced material.

The machine is fed by means of a lift truck which dumps the material into the steel funnel constructed on site. The shredded material is removed by means of an extraction system with cyclone separator into a 350 m<sup>3</sup> silo. The machine output is approx. 600 - 700 m<sup>3</sup> of wood chips per year. These chips are used to supply the entire production premises with heat.

*“The energy-efficient UNTHA shredder is an important component on our way to a climate-neutral production of our trade fair stands”,*

says Mr. Braun, authorised signatory of Fruhen Messebau GmbH & Co. KG.





## “WE MAKE MORE OUT OF WOOD”

This high aspiration was the motivation for Fritz Egger sen. to open the first chipboard factory in St. Johann in Tirol in 1961 and thus lay the foundation for the EG-GER success story. Today, 17 factories in 7 countries produce 15 m<sup>3</sup> wood-based materials per minute.

*“Wood is too precious  
to just throw away”*

That was already the motto of Fritz Egger sen., founder of the EGGER company (died in 1982). Thus, all the recycling wood consisting of waste wood from goods that have been disposed of as well as goods that cannot be sold is prepared and used for the chipboard production.

For the post-shredding of the waste wood from the screen overflow, the company invested in a new shredder for the main plant in Tirol in 2015. An LR1400 with

2x22 kW drive power and special ram has been shredding between 1000 and 2000 kg/day since that time, depending on the fed material. The input material is a mixture of hard and soft wood, chipboards, pallets and MDF.

Due to the high throughput required, the machine has been equipped with two blade rows (76 blades). A 12 mm perforated screen ensures a homogeneous, small granulate. For the shredding of long board parts, the LR1400 was equipped with a tilting table. By means of a lifting truck, the chipboards are put onto the feed table and then hydraulically tilted into the shredder. The Screw conveyor and base frame have been adjusted to the on-site conveyor technology. The latter transports the final granulate into a bunker from which it is then re-supplied into the chipboard production process. In the meantime, the LR1400 in Wörgl has been installed and commissioned by UNTHA. All relevant tests have been completed. The throughput performance tests in particular complied with the specified values. EGGER accepted the machine in 2018, being completely satisfied. For UNTHA, it is a matter of course that the order does not end with the acceptance.

*“We like the great service of the UNTHA advisers and customer support staff. They were helpful and forthcoming, not only in the preliminary stage and convinced us in the decision-making phase on the basis of extensive requirement discussions and test possibilities but the realisation and the service competence in the aftersale support are excellent, as well.”,*

Martin Berger, factory manager production/engineering, Wörgl.





## RELIABLE SHREDDING SOLUTION FOR TROUBLE-FREE OPERATION

The family-run company Holzcenter Weiss has guaranteed top quality and top service when it comes to wood since 1965. Thanks to their versatile range, there is hardly any customer request that is left unsatisfied by Weiss GmbH when it comes to anything revolving around wood.

In the production facility in Flachau/Reitdorf, the employees handle the selection and refinement of the raw materials. Residual timber pieces from the sorting plant as well as packaging material resulting from this are shredded in-house and subsequently thermally recovered. As the company was no longer satisfied with the performance of the previous shredder and the latter was no longer able to handle the increasing throughput quantities, they decided in favour of a replacement investment.

The suitable solution was a UNTHA shredder. An LR1400 with 44 kW drive power and a filling opening of 1,400 mm x 1,050 mm now ensures reliable shredding of the material. Weiss works in two-shift operation. The shredder is in operation approx. four to five hours per day and during that time, processes a residual timber quantity of approx. five tonnes. The machine is fed by means of a conveyor belt and also by lifting trucks and wheel loaders. A light barrier in the upper funnel area provides for the automatic start of the machine as soon as a defined filling height has been reached. An industrial horn serves as start-up warning upon automatic start.

The shredded material is removed by means of an extraction system transporting the homogeneous end product into a silo. From there, the wood chips are thermally recovered.

At Weiss, the business premises and the drying chamber are supplied with heat by means of a 2.6 MW biomass heating system.



## LR1400 WOOD SHREDDER IN CONTINUOUS USE AT S.C. PLIMOB S.A.

Shredding hard wood is a hard task. This is why the large Romanian company S.C. Plimob S.A. decided in favour of a UNTHA shredder for the third time.

S.C. Plimob S.A. has specialised in the production of chairs made of solid wood and supplies major furniture stores. For the recycling of the wood waste, the company now put its trust in UNTHA's reliable shredding technology for the third time. They once again use an LR1400 shredder.

The LR1400 has been developed especially for the tough requirements of the furniture industry. The sophisticated shredder, which has been tried and tested under very demanding operating conditions, distinguishes itself through high reliability and at the same time high throughput rates. Multi-shift operation is possible without problems. In the case of Plimob, the shredder is in operation 16 hours per day. A fully automatic central lubrication system considerably reduces the maintenance efforts. Despite the very fine perforated screen diameter of 15 mm, the machine shreds about one tonne of wood waste per hour.

In addition to the tried and tested UNTHA cutting system with exchangeable blade holders and reusable blades, the LR1400 also scores thanks to its powerful double-sided drive (2x30 kW).

The homogeneous end product is perfectly suited for heat generation and the production of wood briquettes. Plimob sells them as heating material.









## FRENCH CAR MANUFACTURER TRUSTS IN TWO UNTHA COMPLETE SOLUTIONS

One French car manufacturer in Morocco sees their piles of used pallets grow higher and higher. They result from the delivery of the purchased parts and cannot be reused. Instead of throwing them away, the company now uses this waste wood as an energy source for their own drying chamber.

In order to prepare the old pallets as transportable granulate for an existing heating system, the company invested in an LR1400 shredder. Equipped with a 45° machine housing – for a high filling volume – and a drive power of 2 x 22 kW as well as discharge screw conveyor and inclined belt conveyor, this machine is perfectly designed for this application. Using a forklift truck, 3-5 pallets can be fed into the filling funnel of the machine at a time. In this way, approx. 30 pallets are shredded per hour to a size of 40 mm and transported into a container.

Due to the considerable increase in the waste wood at the location within 2 years, the company decided in favour of a second shredding line. They opted for the QR1400 with service flap and a discharge conveyor belt with magnetic separator. By using a 60 mm screen, the new wood shredder achieves a throughput rate of up to 1.5 t/h.

Fastening material such as clamps, nails or screws are no problem for the two cutting systems and are sorted out at the end of the two inclined belt conveyors by a magnetic drum. Afterwards, the granulate is thermally recovered in an oven and the resulting heat is used for the dry room.

By investing in the shredder, the company considerably reduces its disposal and energy costs. The customer is very satisfied with the investment made and praises the good cooperation with the on-site dealer and also the very good contact to the UNTHA headquarters in Kuchl.

# GREATER SELECTION OF REALISED PROJECTS



**AREA OF USE**  
Wood waste from the window production

**SOLUTION**  
LR1000

**ACCESSORIES**  
Special funnel

**LOCATION**  
Italy

**AREA OF USE**  
Joinery waste

**SOLUTION**  
LR700

**LOCATION**  
Germany



**AREA OF USE**  
Carpentry waste

**SOLUTION**  
LR700

**ACCESSORIES**  
Screw conveyor

**LOCATION**  
Germany







AREA OF USE  
Carpentry waste

SOLUTION  
LR630

LOCATION  
Germany

LR630

AREA OF USE  
Joinery waste

SOLUTION  
LR520

LOCATION  
Denmark

LR520



AREA OF USE  
Joinery waste

SOLUTION  
LR520

LOCATION  
Austria

LR520



AREA OF USE  
Joinery waste

SOLUTION  
LR630

ACCESSORIES  
Magnetic separator

LOCATION  
Germany

LR630

# GREATER SELECTION OF REALISED PROJECTS



AREA OF USE  
Sawmill waste

SOLUTION  
RS30

ACCESSORIES  
Screw conveyor

LOCATION  
Austria



AREA OF USE  
Carpentry waste

SOLUTION  
LR700

LOCATION  
Italy

AREA OF USE  
Joinery waste

SOLUTION  
LR630

ACCESSORIES  
Spiral screw conveyor

LOCATION  
Austria







AREA OF USE  
Wood from pallet  
production

SOLUTION  
LR1000

ACCESSORIES  
Base frame,  
special funnel

LOCATION  
Austria

AREA OF USE  
Joinery waste

SOLUTION  
RS30

ACCESSORIES  
Extraction hood

LOCATION  
Austria



AREA OF USE  
Wood from pallet  
production

SOLUTION  
LR1400

ACCESSORIES  
Special funnel,  
screw conveyor

LOCATION  
Germany

# GREATER SELECTION OF REALISED PROJECTS



AREA OF USE  
Carpentry waste

SOLUTION  
LR1400

ACCESSORIES  
Special funnel

LOCATION  
Italy

AREA OF USE  
Wood waste

SOLUTION  
LR1400

ACCESSORIES  
Special funnel,  
conveyor belt

LOCATION  
Croatia



AREA OF USE  
Pallets and wood  
from pallet  
production

SOLUTION  
LR1400

ACCESSORIES  
Base frame

LOCATION  
Spain





**AREA OF USE**  
Chipboards, pallets

**SOLUTION**  
LR1400

**ACCESSORIES**  
Tilting table

**LOCATION**  
France

LR1400



**AREA OF USE**  
Sawmill waste

**SOLUTION**  
LR1400

**ACCESSORIES**  
Special funnel,  
screw conveyor

**LOCATION**  
Austria

LR1400

**AREA OF USE**  
Joinery waste

**SOLUTION**  
LR700

**LOCATION**  
Italy

LR700





# UNTHA

shredding technology

The reliable brand!



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