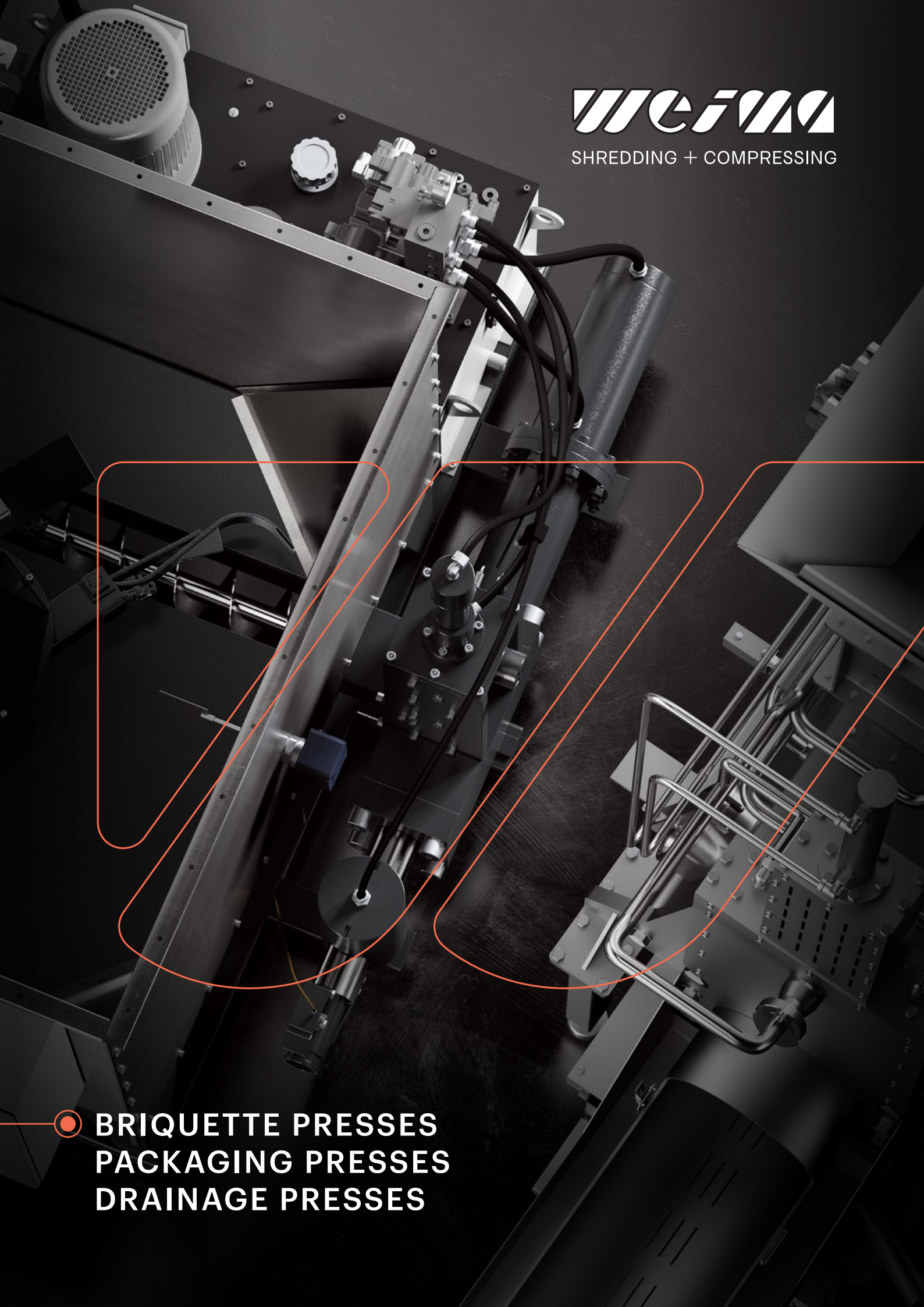
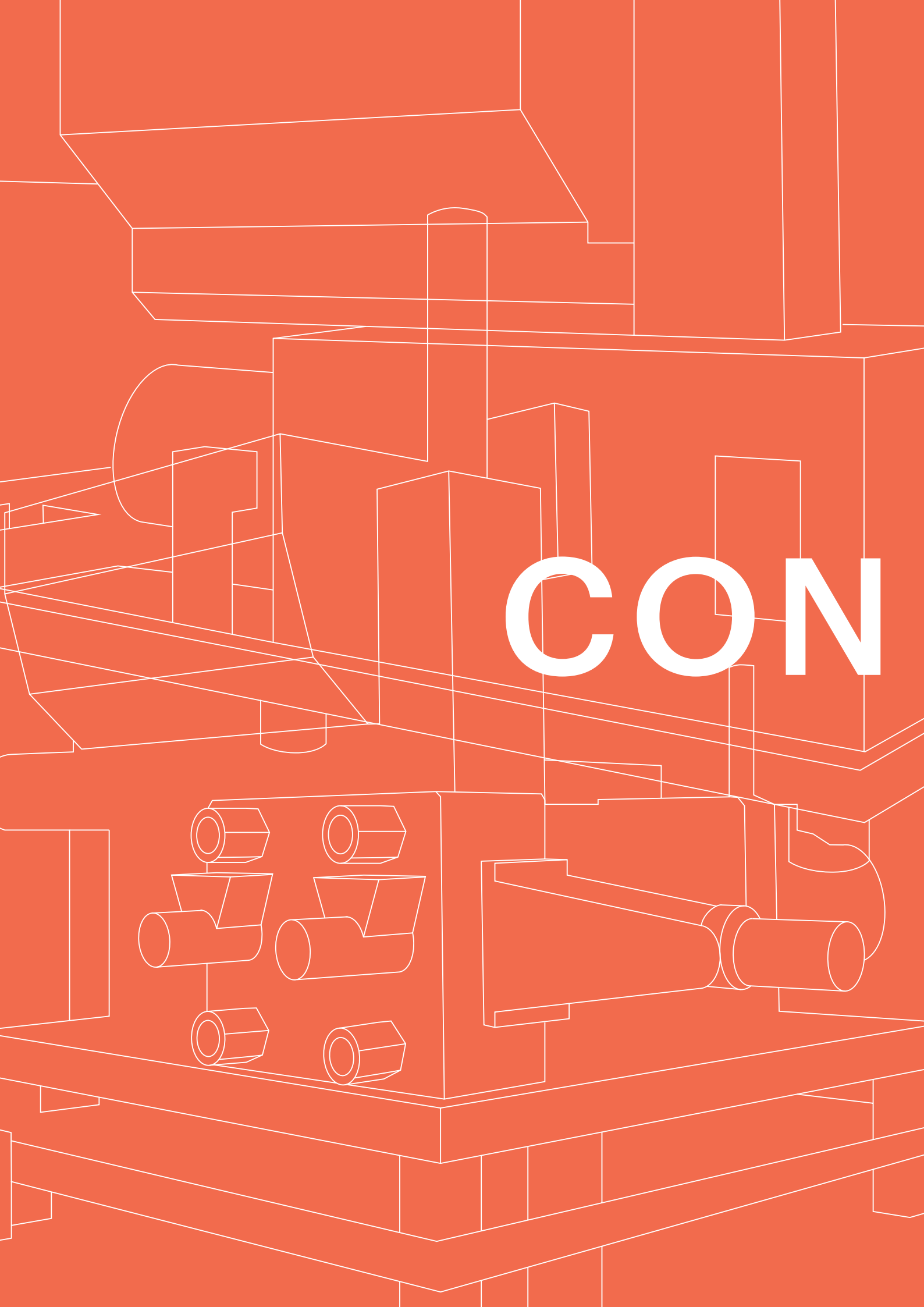
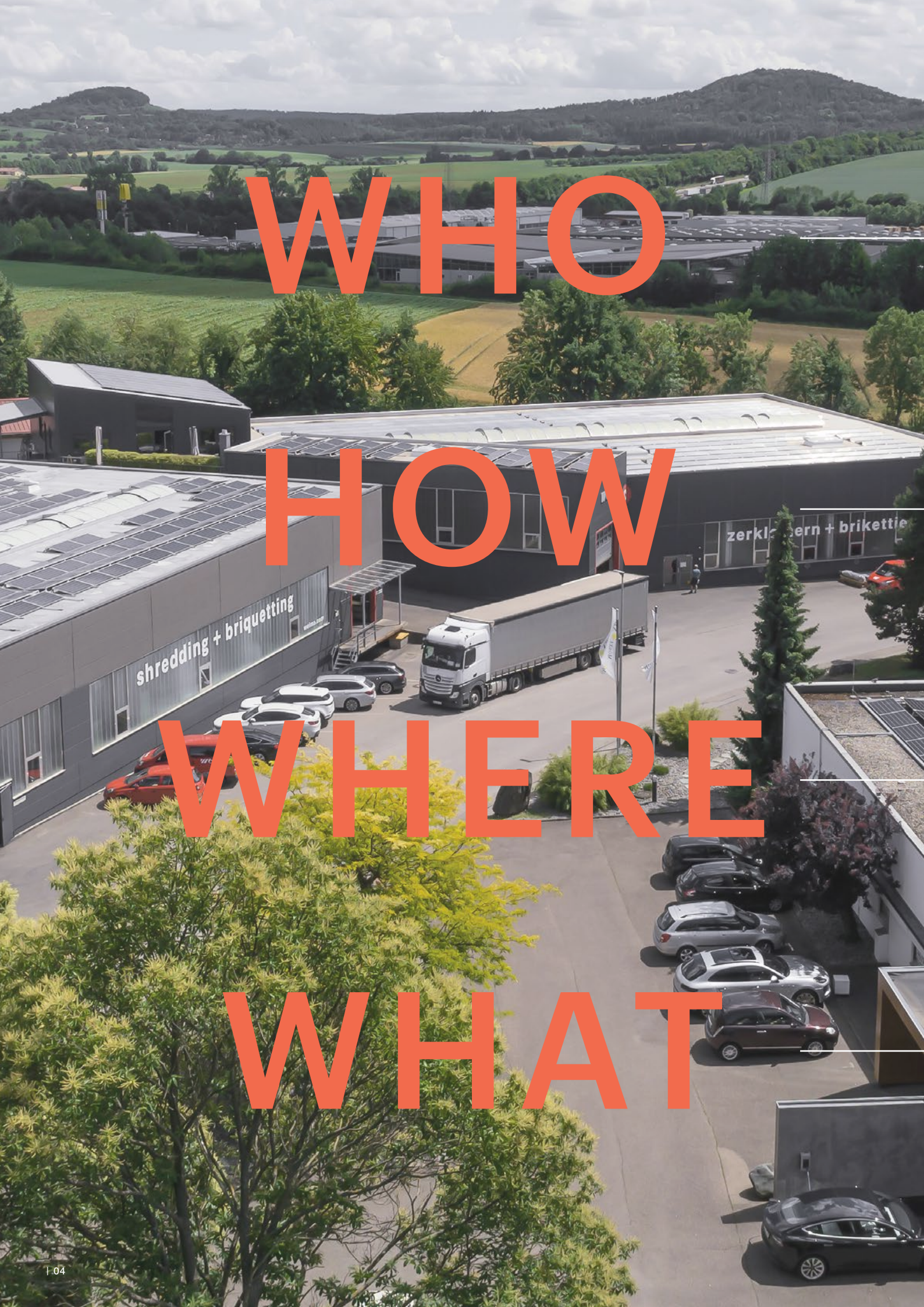


SHREDDING + COMPRESSING

BRIQUETTE PRESSES
PACKAGING PRESSES
DRAINAGE PRESSES


CON

TENT



WHO
HOW
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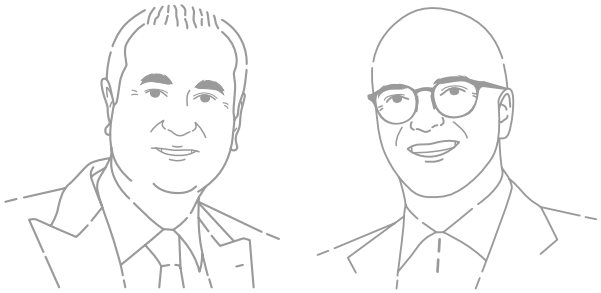
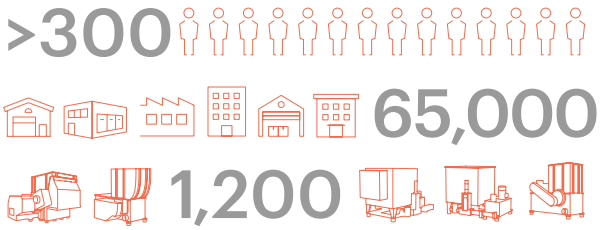


The family business.

The young entrepreneur and visionary, Peter Rössler, recognized the potential of waste recycling early on and founded Weinsberg Maschinenfabrik – or WEIMA for short – in 1980. After the turn of the millennium, Martin Friz succeeded in bringing about the generation shift and has now been running the business since 2003.



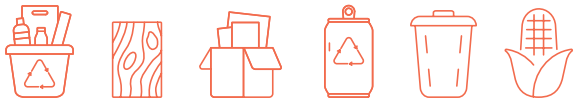
Global leader.

WEIMA produces more than 1,200 shredders, briquetters and drainage presses per year on a production area of approx. 65,000 sqm with more than 300 employees worldwide. Since its foundation, about 40,000 machines have been delivered worldwide.

Built in Germany, made for the world.

Thanks to the early international orientation, WEIMA is represented in all important markets. Sales and service locations are located in Europe, the USA, China and India.

1. Ilsfeld | HQ (DE)
2. Annaburg | Production (DE)
3. Abstatt | Production (DE)
4. Fort Mill | Sales & Service (US)
5. Yantai | Sales & Service (CN)
6. Ahmedabad | Sales & Service (IN)



From trash to treasure.

With WEIMA machines there are (almost) no limits. For over 40 years, we have been shredding and compressing production waste from a variety of industries, including plastics, wood, paper, metal, packaging, waste and biomass.

WE COMPRESS WASTE MATERIALS.

WITH WEIMA BRIQUETTE, DRAINAGE AND PACKAGING PRESSES YOU CAN TURN YOUR WASTE MATERIALS INTO VALUABLE RAW MATERIALS. WHETHER FOR VOLUME REDUCTION OR TO ACHIEVE A HIGHER SALES VALUE – THIS IS WHERE YOUR ADVANTAGES ADD UP.

REDUCE. REUSE. RECYCLE.

WEIMA stands for active environmental protection and for robust shredding technology that's "Made in Germany". Our machines lay the foundation for a resource-saving future and are at the beginning of many recycling processes.

AN APPRECIATION FOR WASTE MATERIALS

As a recycling specialist, we see it as our duty to contribute to a clean planet. WEIMA shredders, granulators, briquetting and drainage presses are thus becoming ever more sophisticated, productive, and above all – energy-efficient.

SUSTAINABLE FOR INDUSTRY AND TRADE

The wide selection of machines and options gives WEIMA a decisive advantage: instead of one-size-fits-all solutions, we work with our customers to develop the right machine or system solution for each waste task.

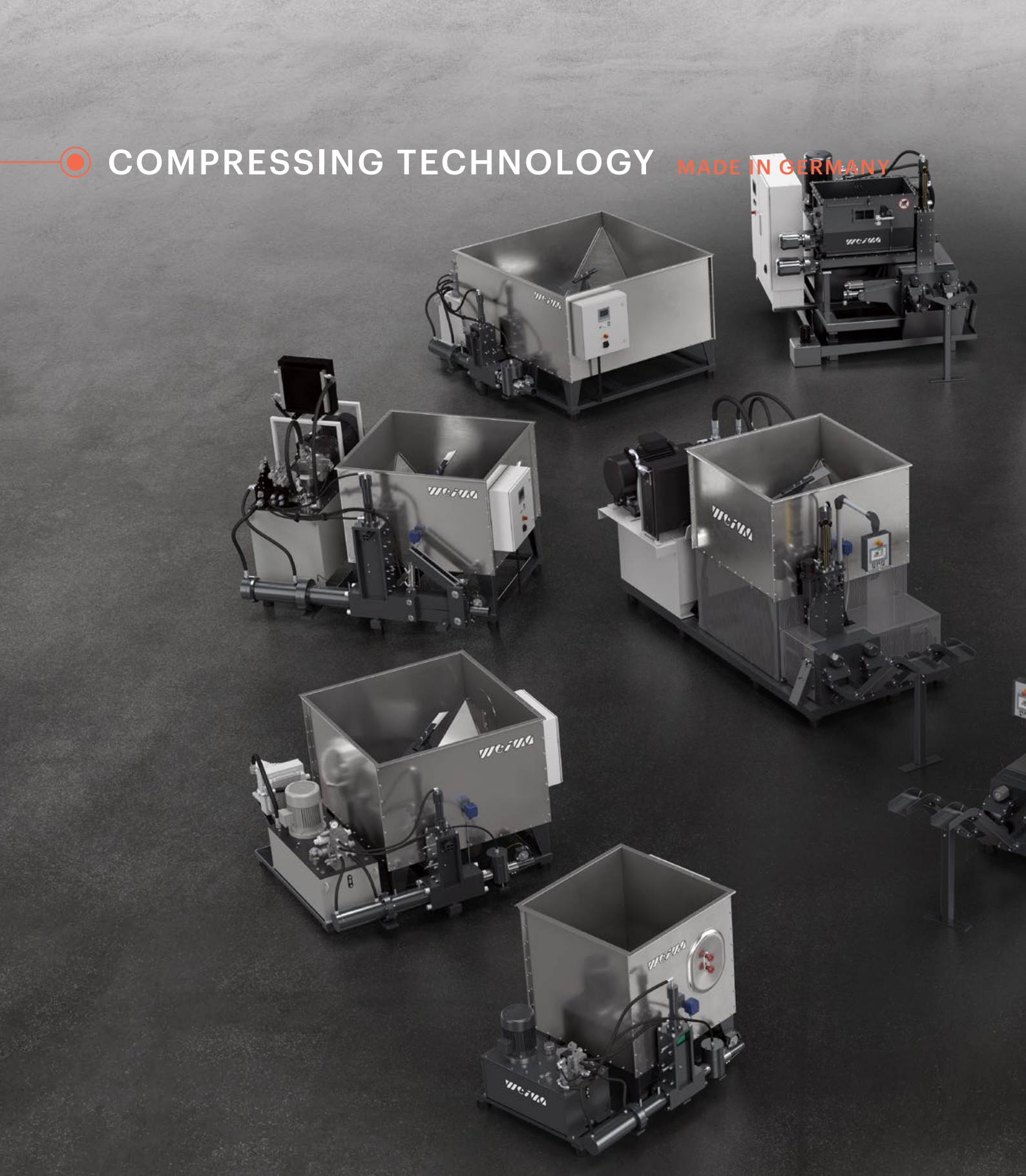
DID YOU KNOW?

The Destroy Responsibly™ program, active since 2009, makes trade shows and other events more environmentally friendly. A fully functional shredding line recycles waste where it is generated: directly on the event site.

Learn more

COMPRESSING TECHNOLOGY

MADE IN GERMANY



WE MAKE THE MOST OF YOUR WASTE.

In addition to the shredding of waste materials, compression has been an integral part of our range of services for many decades. WEIMA briquette presses, drainage presses and packaging presses are in proven use thousands of times around the world. Loose, voluminous wood and metal chips, or shredded paper, for example, are turned into handy briquettes that can be used for energy production where possible. Pressed packaging and their drained contents form the basis for a wide range of recycling processes.

GOOD REASONS FOR COMPACTION:

- Recovery of coolant, emulsion, or cutting fluid
- Reduced burn-off during the smelting process (e.g. with metal chips)
- Reduction of the explosion risk of loose dusts
- Increased cleanliness in the workplace
- Volume reduction of up to 95 %
- Reduction of disposal costs
- Minimized transport and logistics costs
- Use of briquettes for alternative fuel
- Additional revenue from the sale of briquettes or pressed discs, when possible

BRIQUETTING

APPLICATIONS BRIQUETTING

Wood

Wood waste briquetting is where it all began. Wood chips, shavings and even dust from chipboard, plywood, multiplex, OSB and MDF can be burned as a source of fuel or sold for profit. This is ideal for large producers of wood waste, including cabinetry, architectural millwork, rough mills, planing mills, flooring manufacturers, and the entire furniture industry. Briquetting also increases safety and cleanliness in wood shops nationwide.

8 - 14 %

is the ideal moisture content for material to be briquetted in wood applications.

APPLICATIONS BRIQUETTING

Paper

Confidential files and documents, labels, cardboard, filter dust and even banknotes – all these materials can be briquetted if they have been suitably shredded in advance. Briquetting increases operational safety by reducing the risk of explosions and dust emissions.

50,000 EURO briquettes

Did you know? Federal banks regularly shred and compress discarded banknotes into compact briquettes – with WEIMA machines. On average, the volume corresponds to about 50,000 EURO per briquette. Putting them back together? Impossible.

Metal

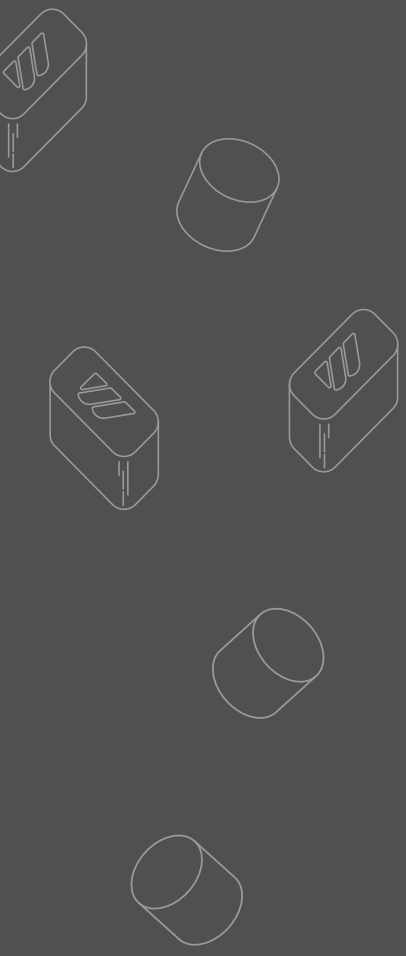
The briquetting of shredded metal chips and milling waste from aluminum, steel, copper, brass or titanium offers numerous advantages: Volume reduction, space savings, better smelting properties, recovery of expensive cooling lubricants and emulsions, and safer handling of sharp metal scrap.

Biomass

Use the energy contained in straw, hay, tobacco, hemp, cotton, flax or legumes! The BTU value of compressed briquettes is much higher than that of loose materials, and their combustion properties are ideal. Biomass has also become an indispensable, low-cost alternative for feed production in the agricultural industry.

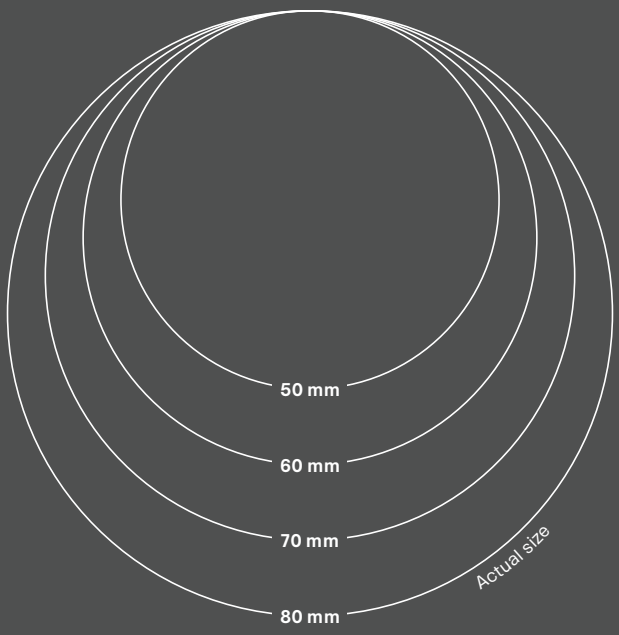
BRIQUETTE SHAPES AND SIZES

With us you can choose between round and rectangular briquettes in various dimensions. In this way, you produce the optimum briquette for every task and desired throughput rate.



ROUND

No two applications are alike. For this reason, we offer round briquettes in the diameters of 50, 60, 70 and 80 mm – depending on the required throughput. For example, wood briquettes of this size are ideal for use as fuel for heating systems in wood-processing plants.

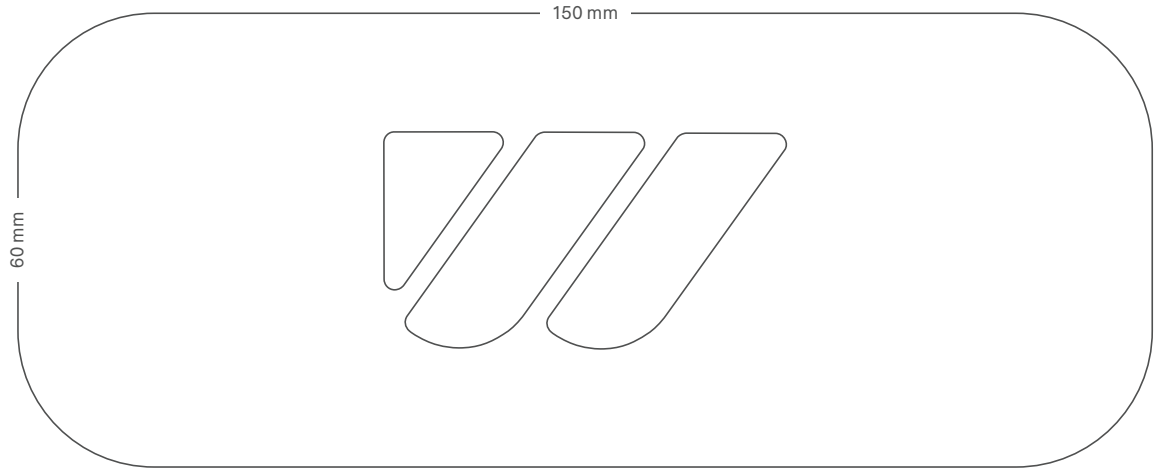


DID YOU KNOW?

WEIMA briquettes are free of additives such as adhesives or binders. Compaction is achieved by hydraulic pressure alone.

OR

RECTANGULAR



Actual size

For industrial requirements

The rectangular shape is reminiscent of bricks and measures 150 x 60 mm. The briquette length can be adjusted at WEIMA and is certainly one of the briquette classics worldwide.

While wood companies use briquettes for heating or volume reduction, producers of metal chips, paper scraps, or biomass waste are realizing their potential. The brick-like shape facilitates stacking and packaging. Material throughput and briquette density are particularly high thanks to the use of matrix technology.

TECHNOLOGIES BRIQUETTING

To produce a dense briquette, WEIMA gives you the choice between clamping presses or matrix presses. The technology that is the most suitable depends on your application and the goals you are pursuing. In both cases, you benefit from efficient volume reduction. Our machines, all of which are produced in Germany, are compact, durable, and easy to maintain.

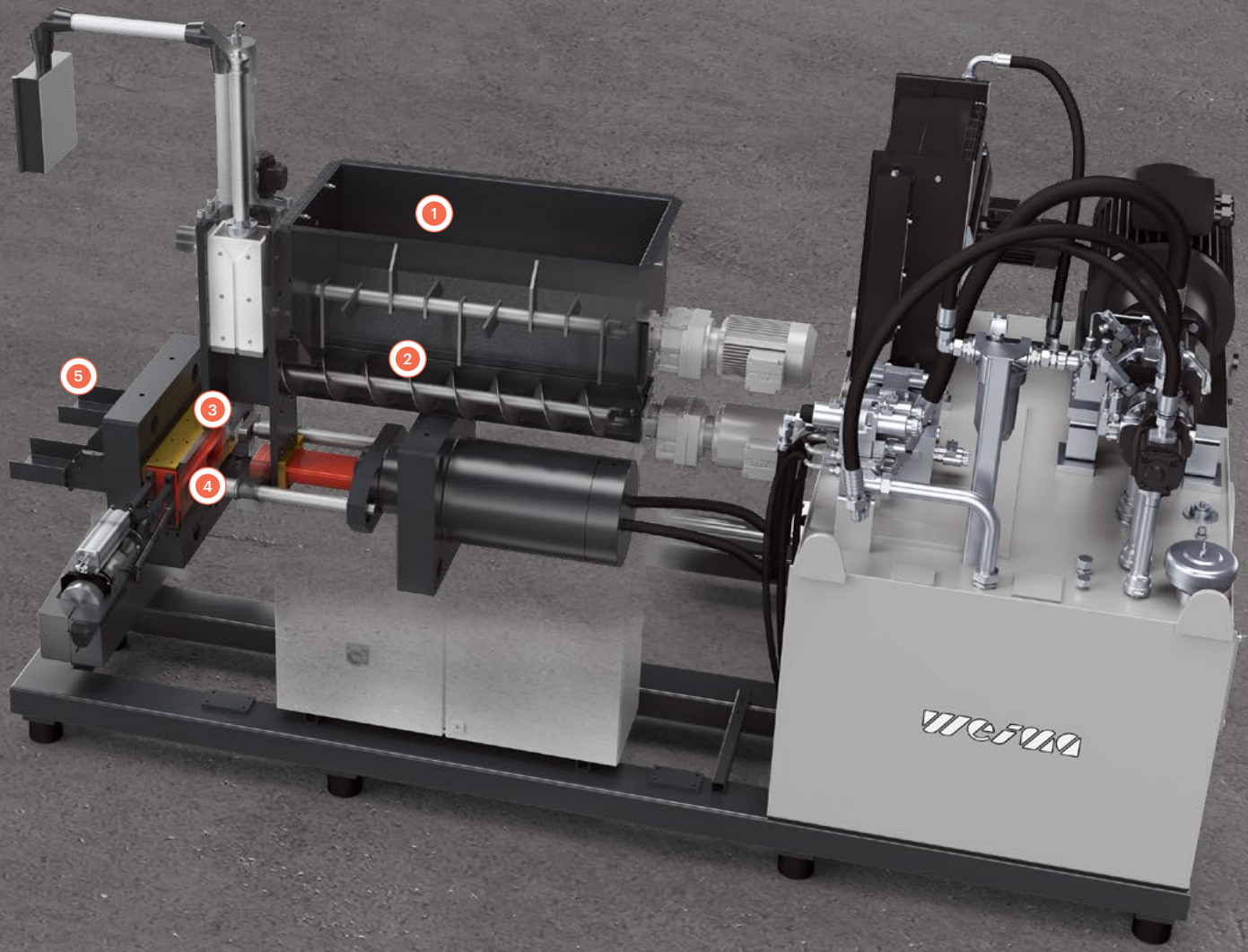
Clamping presses

For more than four decades, WEIMA has relied on briquette presses with proven clamp technology, and the company continues to develop them further. Thus, with these machines you get a robust compaction solution with low maintenance requirements.

1. Material feed via the chip hopper
2. Continuous filling of the auger channel by means of agitator
3. Conveying of the defined quantity of material into pressing chamber
4. Vertical pre-compaction into the pressing chamber
5. Compaction of the final briquette by pressing cylinder
6. Automatic briquette length measurement for optimal throughput

Matrix presses

Briquetting presses with matrix technology are characterized by particularly high throughput rates and are ideally suited for industrial operations. Compared to clamping presses, significantly higher face pressures are possible. This depends on the material and chip geometry.



1. Feeding of the shredded material into the hopper
2. Transport of a defined amount of material into the pressing chamber by means of auger
3. Vertical pre-compaction of the material
4. Compaction of the material in the matrix by means of a press stamp against a fixed solid metal block
5. Briquettes discharge by shifting the matrix and the pressed briquette by means of a slide cylinder during the subsequent pressing process

C SERIES

Economical and compact

C 150

TECHNICAL HIGHLIGHTS

Spacious feed hopper
as material buffer

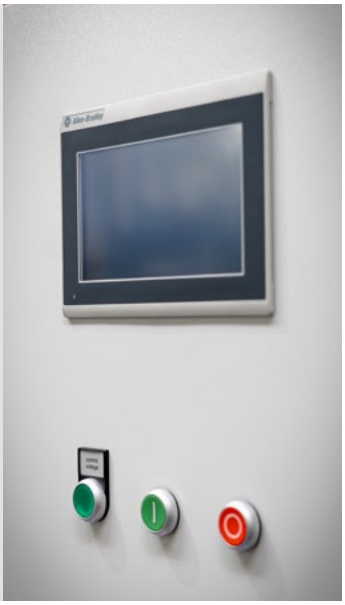
C Series briquetting presses offer a large hopper for material to be compressed. Depending on the space requirements, the press unit can be flexibly installed to the right or left of the hopper. The agitator and the auger are located at the bottom of the hopper. The hopper is equipped with a fill level monitoring system which automatically switches off the briquette press as soon as the material quantity falls below a defined level.

Vertical material pre-compaction
in the pressing chamber

The screw conveyor below the feed hopper transports a defined quantity of material into the pressing chamber. There, vertical pre-compaction takes place, with a slide pressing the material into the press sleeve below. The briquette is produced via a horizontal compaction cylinder.

Simple machine operation
with high-quality PLC control

No frills – the most important things at a glance. The built-in PLC control is optimally adapted to the briquetting process. Various settings can be conveniently adjusted to the desired application. All control cabinets are designed in-house and built in our German production facilities using readily available standard parts.



ROBUST HYDRAULICS
with separate oil tank

The compact hydraulic unit is located directly next to the feed hopper. Temperature is controlled via a heat exchanger. All components are designed for long service life.

Proven clamping technology
for round briquettes up to 70 mm Ø

The wear-resistant, chrome-plated pressing clamp is surrounded by a hydraulic clamp. It holds the briquette produced by the pressing cylinder during compaction. For discharge, the clamp is opened and then closed after ejection.

Consistent briquette lengths
thanks to electromechanical monitoring

To ensure that the briquette length remains constant even with changing materials, the C series briquette presses come standard with an electromechanical measuring device. This is located next to the clamp on the briquette discharge pipe.

Uniform material transport
into the auger channel

The agitator installed at the bottom of the feed hopper ensures a constant material feed to the auger channel. The continuous material circulation also prevents material bridging and breaks up lumps.

TECHNICAL HIGHLIGHTS

Minimal wear in the press chamber

due to wear sleeve

The standard wear sleeves are made from hardened steel. Optionally, they can be made of tool steel for applications containing abrasive materials like sand, soil, or metal chips. In both cases, wear is significantly reduced. When wear occurs, the less expensive wear sleeve must be replaced. This saves labor, time, and costs and simplifies the maintenance process.

LOW MAINTENANCE HYDRAULIC CYLINDER

for optimized operations

All installed cylinders have integrated cushioning and come equipped with a threaded cap. This guarantees easy access for maintenance or modifications.

Optimized material input

by means of an auger

The material is conveyed in metered quantities from the hopper to the pressing unit by means of an auger. The quantity required to produce a single briquette is defined via the screw speed and running time.

TECHNICAL DATA AND MACHINE CONFIGURATION

Technical data C series

	C 150	C 170
Briquette diameter [mm]	50	70
Throughput rate up to [kg/hr] 1)		
Hydraulic motor [kW]	5.5	5.5
Hydraulic oil volume [liter]	100	100
Weight [approx. kg]	800	900
Space requirement (L × W × H) [approx. mm] 2)	1,315 × 1,975 × 1,410	1,296 × 1,940 × 1,410

1) depending on material
2) detailed dimensions upon request

Machine configuration C series

● *Standard* ○ *Optional* – *Not available*

MECHANICS		
Press mechanics with hydraulic cylinder	●	●
Briquette length monitoring	●	●
Pressing chamber wear sleeve	●	●
Chrome plated clamp	●	●
HYDRAULICS		
Hydraulic power unit with tank	●	●
Hydraulic oil cooling	●	●
Safety switch for oil temperature	●	●
HOPPER		
Hopper size 1,040 x 1,040 mm	●	●
On-off automatic with level limit switch	●	●
Inspection cover with safety switch	○	○
Reinforced agitator gear motor	○	○
Sheet metal hopper cover	○	○
ELECTRICAL		
Control cabinet with PLC and HMI	●	●
OTHER FEATURES		
Stable base frame on rubber feet	●	●

Other options, special equipment and technical modifications are available upon request.

TH STANDARD

Reliable classics

TH 720

50 – 80 mm
briquette
diameter

TH 514

TECHNICAL HIGHLIGHTS

Low-wear pressing process

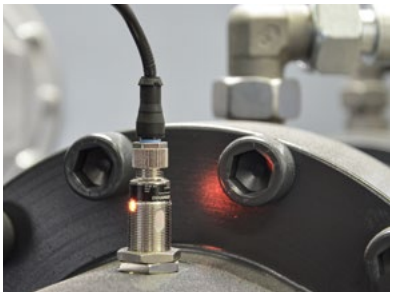
thanks to wear sleeve and plates

To minimize unavoidable wear during the briquetting process, WEIMA uses easy-to-change PU plates bolted to the filling cylinder for pre-compaction in the filling tower. In addition, a wear sleeve is used in the pressing chamber below, which can be easily replaced. Overall, this significantly reduces maintenance costs.

Precise cylinder control

thanks to contactless proximity switches

The cylinders are controlled electrically via a non-contact proximity switch. The limit switches are located at the front and rear positions to ensure consistent operation.



Auger with universal joint

increases resistance to foreign solids

The auger, which transports the material into the pressing chamber, is attached via a universal joint. This prevents foreign materials from causing damage to the auger. For metal applications, a rigid mount is often recommended.

Customized machine configuration

by means of modular design

Machine components (press unit, hydraulics, hopper, and accessories) can be customized to meet your individual needs. Duo, Trio or Quattro versions are also available to increase throughput.

Different hopper sizes

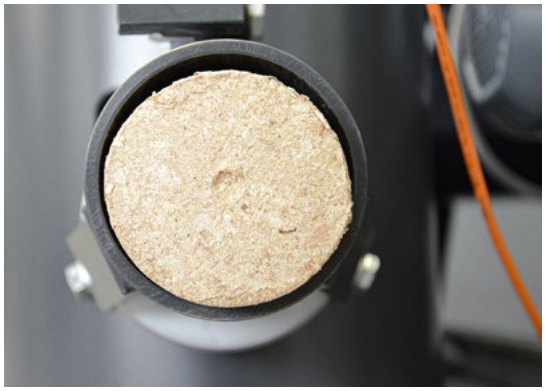
for every application

For the TH series, you have the choice between two hopper sizes: 1,400 x 1,400 mm or 2,000 x 2,000 mm. The pressing unit can be installed on the left or right side of the machine, depending on requirements. To produce briquettes in automatic mode, the feed hopper is equipped with a fill level monitoring system. With its help, the machine switches off automatically when the filling level falls below a certain level.

READY FOR MULTI-SHIFT OPERATION

thanks to oil cooling

To compensate for temperature differences in the hydraulic oil, the briquetting presses are equipped with a hydraulic oil cooling system. This ensures that the maximum operating temperature of the oil is not exceeded even during uninterrupted three-shift operation. A safety switch automatically switches off the hydraulic systems in the event of overheating to prevent damage.

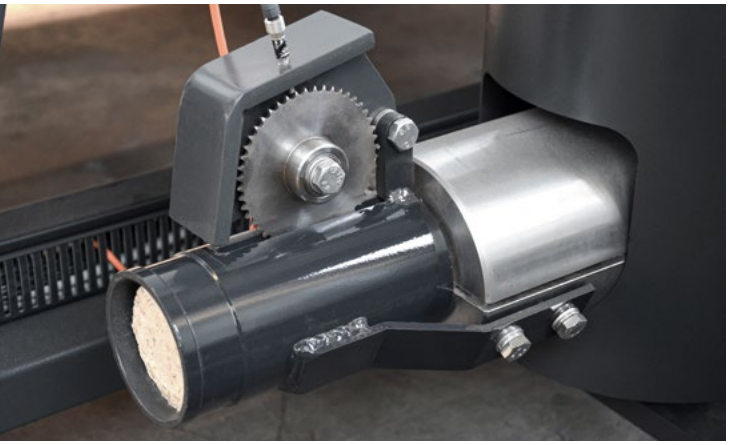


Compact briquettes up to Ø 80 mm

with low-maintenance clamping technology

The hydraulic clamp, with its hardened pressing jaws, ensures consistent briquettes with a diameter up to 80 mm. This proven system has been used by thousands of customers worldwide for decades. WEIMA is constantly improving upon current designs.

TECHNICAL HIGHLIGHTS



Uniform, high-quality briquettes

due to automatic length monitoring

Due to variation in the material stream, the briquette length is continuously measured and adjustments are made in real time for optimized throughput.

Enclosed pressing cylinder

For dust containment

The loose material is pre-compacted in the filling tower, which results in an initial volume reduction. Since it is a closed system, the escape of dust is minimized.

LOW-IMPACT OPERATION

thanks to internally dampened hydraulic cylinders

Fast backward movements of the cylinders are cushioned by internal dampeners. This has a positive effect on the service life of the components.

Temperature monitored hydraulic unit

for long service life

The hydraulic unit has a separate oil tank with pump, motor, and complete valve stack. Sharing the same base as the material hopper makes the entire briquette press an efficient, space saving design.

User-friendly operation

thanks to touch screen HMI

To live up to our performance promise, we design and produce all control cabinets ourselves at our Ilsfeld site and equip them with brand name components. This guarantees the highest quality with a compact design. The PLC control is perfectly adapted to the requirements of the briquetting process.

Safe, anti-vibration footing

due to robust machine frames and rubber feet

All WEIMA briquetting presses are supplied with vibration-dampening machine feet made of hard rubber. They ensure a safe footing without the machine having to be anchored to the floor. This makes the entire installation extremely flexible and convenient.

TECHNICAL DATA AND MACHINE CONFIGURATION

Technical data TH Standard series

	TH 514 / TH 520	TH 614 / TH 620	TH 714 / TH 720	TH 814 / TH 820
Briquette diameter [mm]	50	60	70	80
Throughput rate up to [kg/hr] *1)*	80	100	150	180
Hydraulic motor [kW]	7.5	7.5	11	11
Hydraulic oil charge [liter]	160	160	250	250
Weight [approx. kg] *2)*	1,000 – 1,100	1,000 – 1,100	1,200 – 1,300	1,200 – 1,300
Space requirement (L × W × H) [approx. mm] *3)*	1,735 × 2,266 × 1,405	1,735 × 2,266 × 1,405	1,735 × 2,316 × 1,405	1,735 × 2,316 × 1,405

1) depending on material
2) depending on hopper size
3) detailed dimensions upon request

Machine configuration TH Standard series

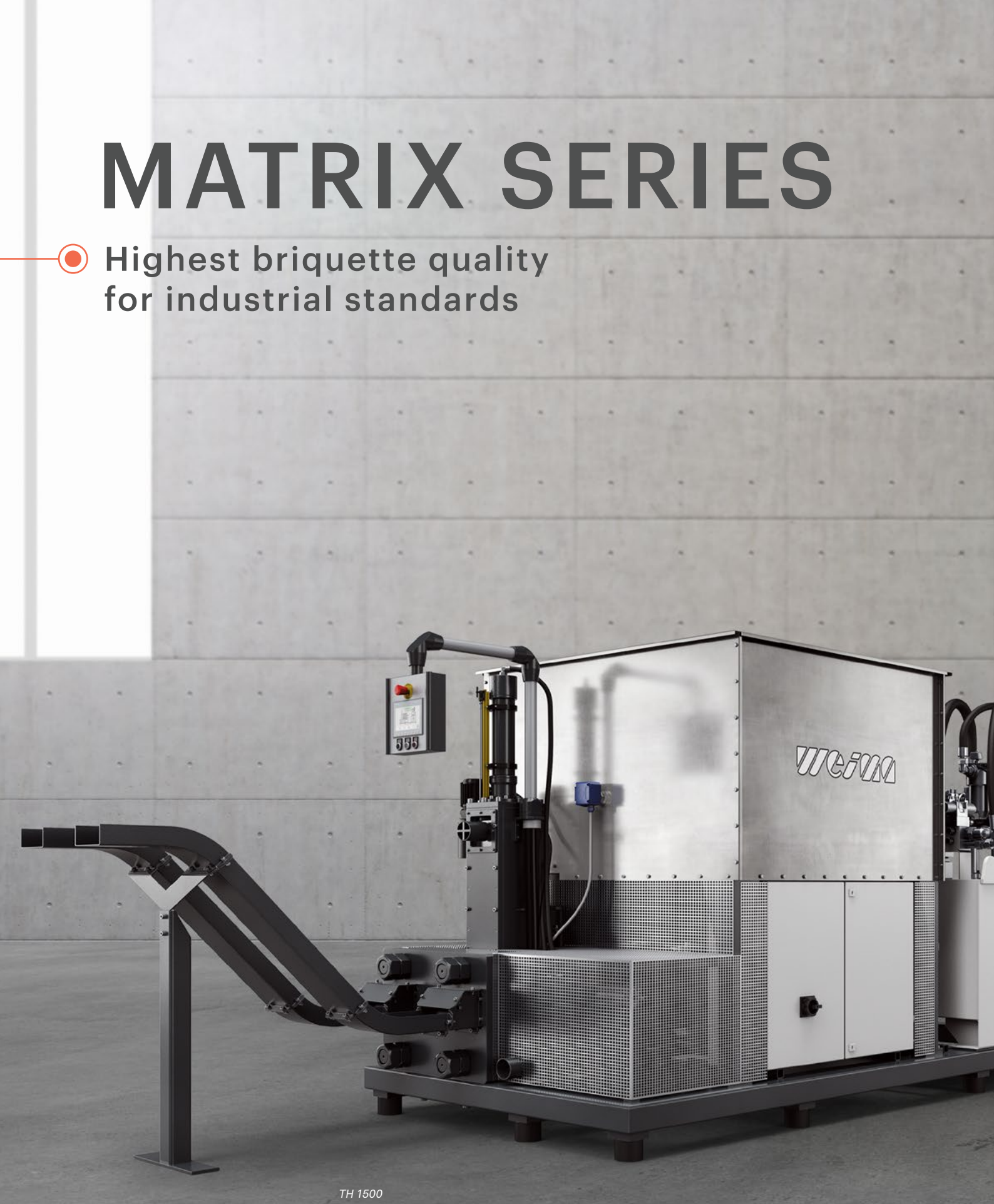
● *Standard* ○ *Optional* – *Not available*

	TH 514 / TH 520	TH 614 / TH 620	TH 714 / TH 720	TH 814 / TH 820
MECHANICS				
Press mechanics with hydraulic cylinder	●	●	●	●
Briquette length monitoring	●	●	●	●
Dust port on filling cylinder	●	●	●	●
Central lubrication system	○	○	○	○
Pressing chamber wear sleeve	●	●	●	●
Chrome plated clamp	●	●	●	●
HYDRAULICS				
Hydraulic power unit with tank	●	●	●	●
Hydraulic oil cooling	●	●	●	●
Safety switch for oil temperature	●	●	●	●
HOPPER				
Hopper size 1,400 x 1,400 mm	●	●	●	●
Hopper size 2,000 x 2,000 mm	○	○	○	○
On-off automatic switch with level limit	●	●	●	●
Inspection cover with safety switch	○	○	○	○
Reinforced agitator gear motor	○	○	○	○
Sheet metal hopper cover	○	○	○	○
ELECTRICAL				
Control cabinet with PLC and HMI	●	●	●	●
OTHER FEATURES				
Stable base frame on rubber feet	●	●	●	●

Other variations, special equipment and technical modifications are available upon request.

MATRIX SERIES

Highest briquette quality for industrial standards



TH 1500

60|80 mm
briquette
diameter

TH 600 M, TH 800 M

150x60 mm
briquette size

TH 1500

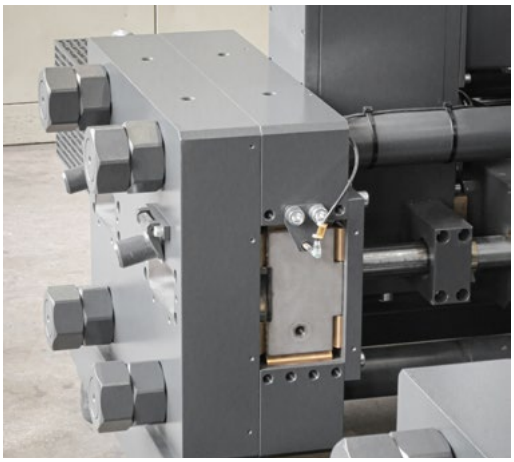
TH 800 M

TECHNICAL HIGHLIGHTS

Low wear, easy maintenance

due to chrome-plated and hardened matrix as well as exchangeable press plates

The sliding matrix in which the final briquette is formed is subject to increased wear. For this reason, it is made of hardened steel and is also chrome plated. The press plate can be replaced in just a few steps.



Intuitive operation

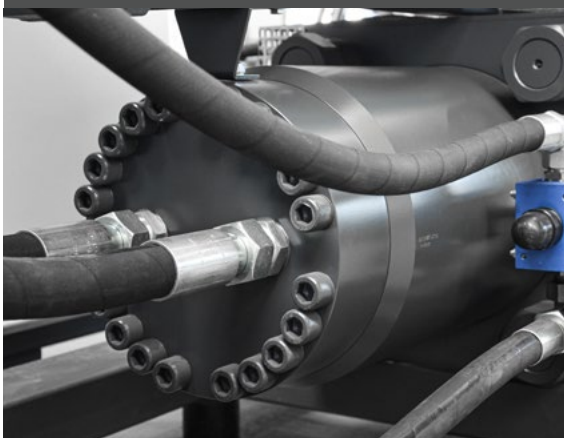
with swivel-mounted touch panel

Maximum flexibility for quick parameter adjustments (i.e. briquette length or compaction pressure) due to material changes. The large touch screen HMI can be swiveled for ergonomic operation. It also provides visualization of the machine's current status. To ensure that the electronics are optimally matched to the machine, we design and assemble our control cabinets in house. We only use high-quality name brand components – for example from Siemens, Allen Bradley or Rittal.

MAXIMUM PRESSING POWER

up to approx. 3,900 kg/cm²

The powerful axial piston pump of the hydraulic unit delivers an output of up to 37 kW. This allows the buildup of particularly high face pressures of up to 3,900 kg/cm² (TH 800 M), resulting in extreme compaction of the briquettes. The remaining hydraulic components are also reinforced. The result: a longer service life and decreased maintenance costs. However, for applications requiring less power, motors starting at 5.5 kW are also available.



Reliable multi-shift operation

thanks to a large Bosch Rexroth hydraulic oil tank with heat exchanger

The separate oil tank of the Bosch Rexroth hydraulic unit has a capacity of approx. 1,000 liters (TH 1500) and is equipped with efficient oil cooling. Due to this large volume, the quality of the hydraulic oil can be maintained for a long time - this is ideal for use in multi-shift operations.

Precise feeding of material

via auger with universal joint

To avoid mechanical damage, the auger, located at the bottom of the feed hopper, is suspended on a robust universal joint. It transports a defined quantity of material into the pressing chamber, where pre-compaction takes place. This reduces the pressing time, resulting in a higher briquetting output.

TECHNICAL HIGHLIGHTS

High density briquettes of the best quality

for industrial requirements

All WEIMA briquettes are characterized by their dimensionally stable form. By using matrix technology, even better compaction and volume reduction can be achieved. Depending on the application, the briquettes are then so dense that they even sink in water. Therefore, briquettes of matrix series are ideal for resale. The rectangular shape also makes them easy to handle, as they can be stacked for transport.

Easy integration into production lines

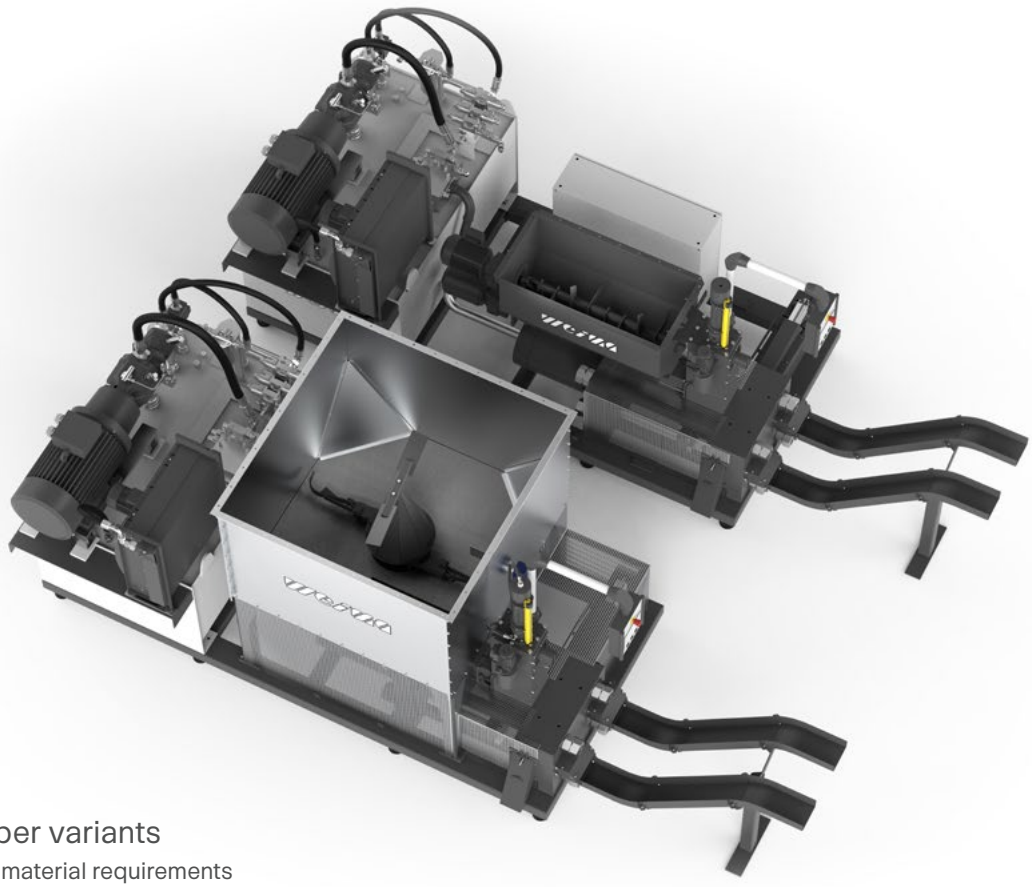
or as a stand-alone solution

Optimally connected: WEIMA briquetting presses have interfaces to ensure easy integration into new or existing production lines. Machines of the matrix series can be operated across multiple shifts without operator intervention. Production parameters can be easily adjusted as the materials change.

Modern machine design with matrix technology

for the highest throughput rates

The use of a closed matrix for compacting loose chips, dust, or shredded materials, combined with a powerful hydraulic unit, results in extremely high briquette densities. The matrix series machines are state-of-the-art and extremely robust in design. Depending on the specific material, the throughput capacity is up to 700 kg/hr (TH 1500).



Two hopper variants

for different material requirements

Depending on your needs, you can choose between a large-volume feed hopper for filling by means of a forklift, tipping device, or infeed conveyor. This is suited for automatic filling where the material falls directly into the auger channel. Both hopper systems can be equipped with a level sensor that safely switches the machine into standby mode when no material is present. As new material enters the hopper, the machine automatically resumes processing.

ROUND OR RECTANGULAR BRIQUETTES

for sale or personal use

While the TH 1500 produces rectangular briquettes in the 150 x 60 mm format, the TH 600 M and TH 800 M press loose materials into dimensionally stable round briquettes with diameters of 60 and 80 mm, respectively. The briquette length can be adjusted on all machines. No binders or adhesives are used during compaction, only hydraulic pressure.

TECHNICAL DATA AND MACHINE CONFIGURATION

Technical data matrix series

	TH 600 M	TH 800 M	TH 1500
Briquette diameter [mm]	60	80	-
Briquette format and size [mm]	-	-	150 x 60
Throughput rate up to [kg/hr] [1)]	220	300	400
Hydraulic motor [kW]	15	15	37
Hydraulic oil volume [liter]	600	600	1,000
Weight [approx. kg]	2,900	3,000	4,500
Space requirement (L × W × H) [approx. mm] [2)]	2,055 × 2,285 × 2,089	1,995 × 2,259 × 1,861	3,357 × 1,802 × 1,971

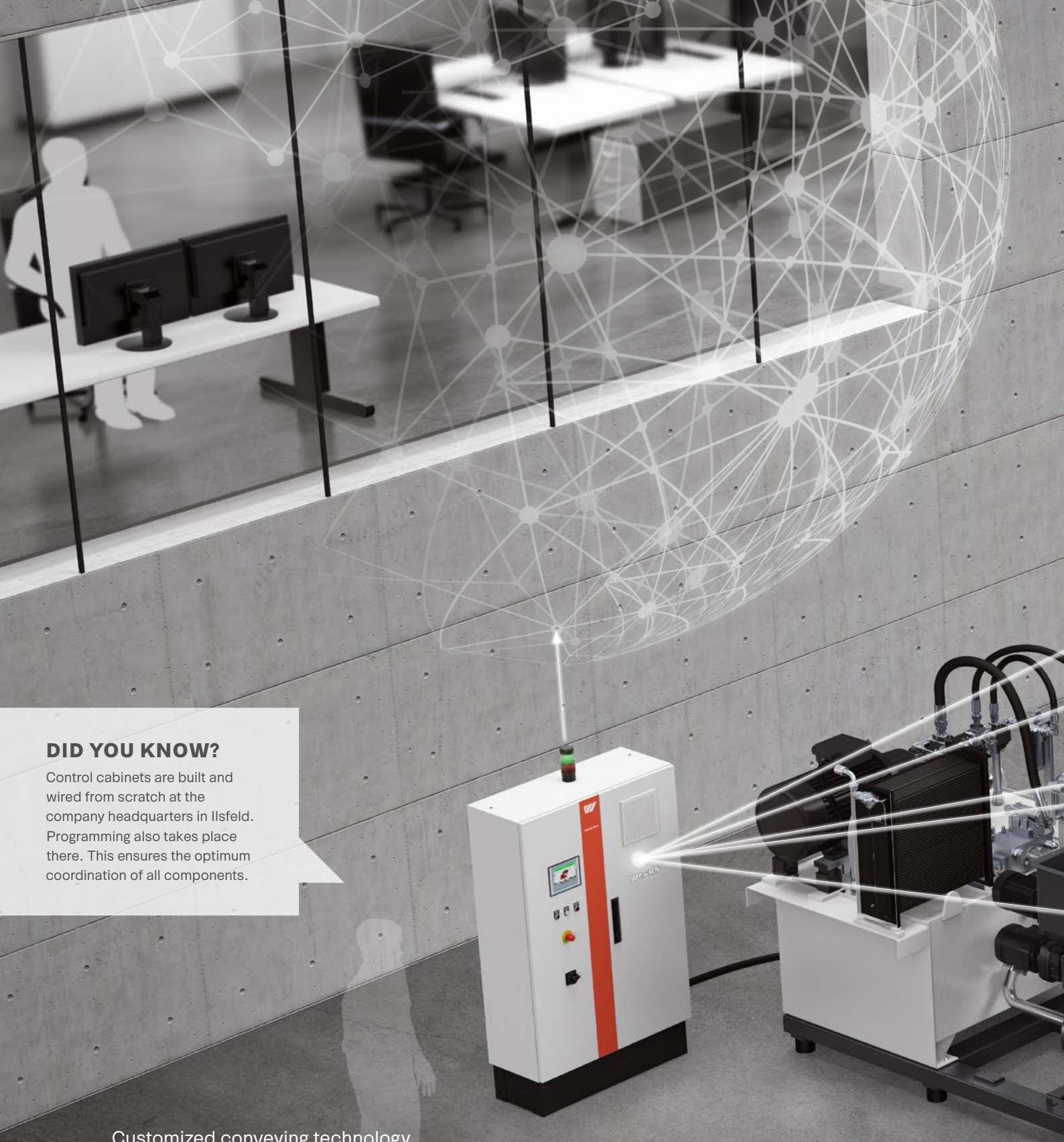
1) depending on material
2) detailed dimensions upon request

Machine configuration matrix series

● *Standard* ○ *Optional* – *Not available*

	TH 600 M	TH 800 M	TH 1500
MECHANICS			
Press mechanics with hydraulic cylinder and matrix	●	●	●
Briquette length monitoring	●	●	●
Central lubrication system	○	○	○
Metals package: matrix, guides, and pressing rod from tool steel	○	○	○
HYDRAULICS			
Hydraulic oil cooling	●	●	●
Safety switch for oil temperature	●	●	●
HOPPER			
Hopper size 1,040 x 600 mm	●	●	●
Hopper size 1,400 x 1,400 mm	○	○	○
Light barrier for automatic start/stop	●	●	●
Level switch for automatic start/stop	○	○	○
Inspection window with safety switch	●	●	●
Sheet metal hopper cover	○	○	○
ELECTRICAL			
Control cabinet with PLC and HMI	●	●	●
Swiveling control panel	–	–	●
OTHER FEATURES			
Stable base frame on rubber feet	●	●	●
Fluid injection for dry metals	○	○	○
Catch pan with pump	○	○	○

Other variations, special equipment and technical modifications are available upon request.



DID YOU KNOW?

Control cabinets are built and wired from scratch at the company headquarters in Ilsfeld. Programming also takes place there. This ensures the optimum coordination of all components.

Customized conveying technology

To make the material flow as efficient and convenient as possible, we have been working together with our partners to develop the optimum conveying solution for every application. In doing so, we can draw on a wide range of technologies and a great deal of practical experience. WEIMA briquetting presses can be controlled depending on the fill level. When incoming material flows are paused, the press automatically switches to standby mode. As soon as the feed hopper has a sufficient amount of material, the machine leaves standby mode and briquette production is resumed.

Material feed >

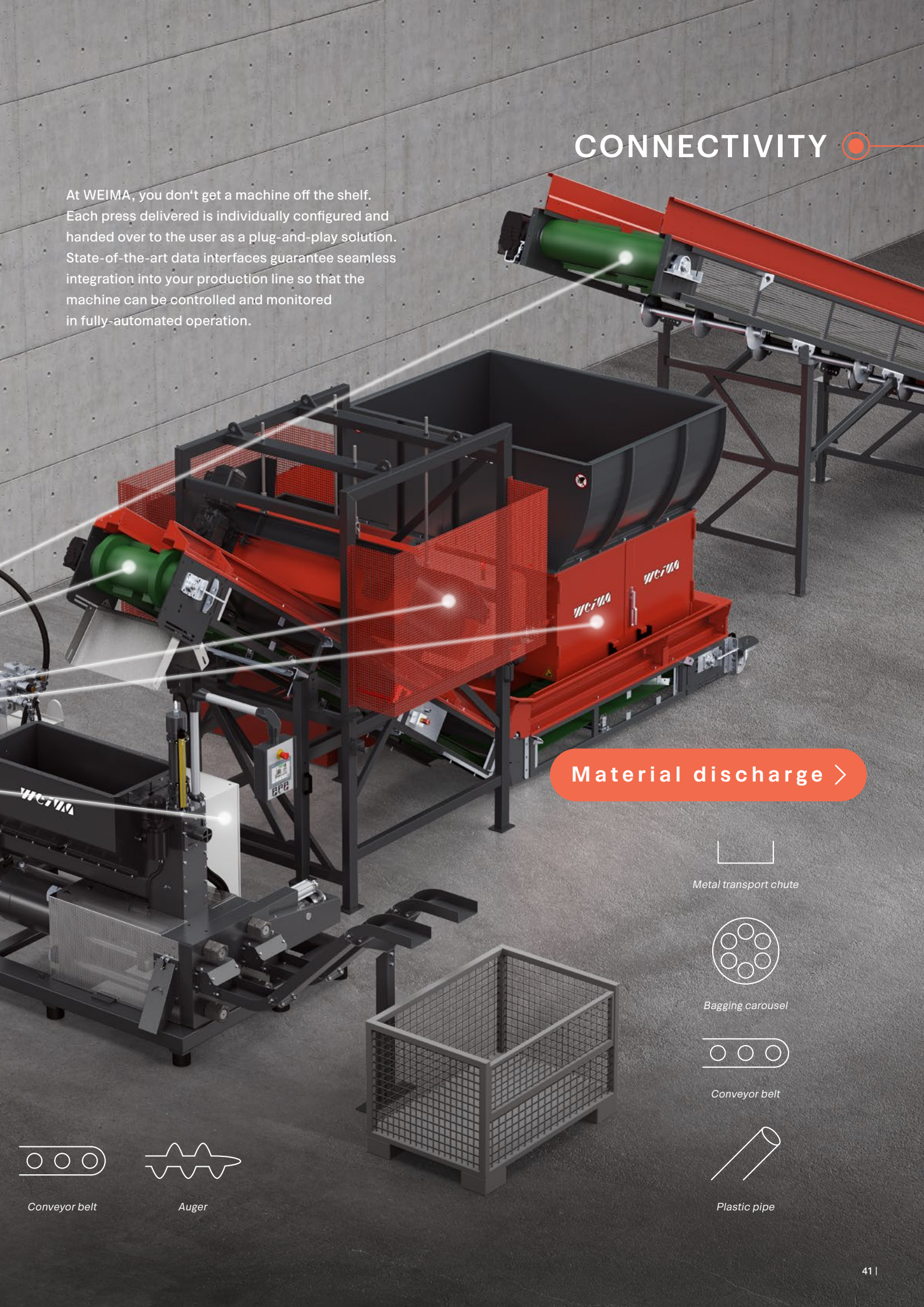
Forklift | wheel loader

Lift and tilt device

Manual

CONNECTIVITY

At WEIMA, you don‘t get a machine off the shelf. Each press delivered is individually configured and handed over to the user as a plug-and-play solution. State-of-the-art data interfaces guarantee seamless integration into your production line so that the machine can be controlled and monitored in fully-automated operation.



Material discharge

Metal transport chute

Bagging carousel

Conveyor belt

Plastic pipe

Conveyor belt

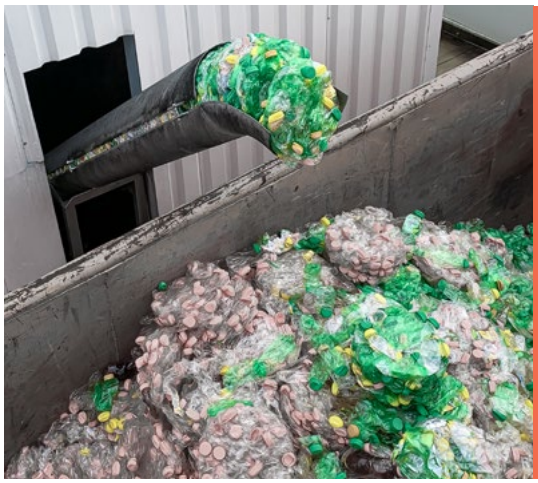
Auger


PÖHLER
DRAI
NING

APPLICATIONS DRAINING

Packaging | filled

Beverage containers, PET bottles, milk cartons, cans and many other packages can be emptied and compacted quickly, efficiently, cleanly, and automatically with WEIMA drainage presses. Contaminants are simply compacted as well. The packaging that is compressed into discs can be easily recycled. The drained liquid can be reused or properly disposed.



WEIMA packaging presses can fully realize the recycling potential of various products, especially in the case of plastic bottles and cans. Companies save on expensive disposal costs and can also recover and recycle material.

95 %

volume reduction can be achieved when cans are drained and then compacted.

APPLICATIONS COMPRESSING

Packaging | empty

Production waste, as well as empty packaging, takes up valuable storage space. Compressing PET bottles, yogurt cups, canisters, and tin cans, as well as aluminum packaging, such as beverage cans, spray cans, and other canned goods simplifies waste handling. Single-use items such as coffee cups, disposable cutlery or plates can also be compacted without any problems using packaging presses from WEIMA.

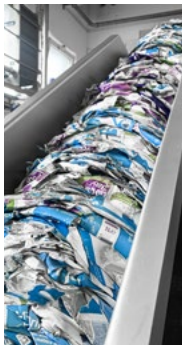
10 to 1

The volume of PET bottles can be reduced by 90% using WEIMA packaging presses.

REWORK APPLICATIONS

What is ReWork?

ReWork is a clean food product that is separated from the production process. It is hygienically safe and unadulterated. After successful processing, it is returned to production.



ReWork is used in many industries. For example, mislabeled milk can easily be returned to production. In addition to the dairy industry, ReWork is also used in the beverage industry, in the food industry and even in the chemical industry. The ReWork sector requires a special machine design.

3 in 1

WEIMA drainage presses empty, separate and compress beverage cans, PET bottles, milk cartons, beverage cartons, plastic containers and many other types of packaging in a single step.

Rejects ≠ waste

If the scrap material is not suitable for further processing as ReWork, it does not necessarily have to end up unused in the waste. Rejects are often suitable as an energy source or even as fertilizer on farms.

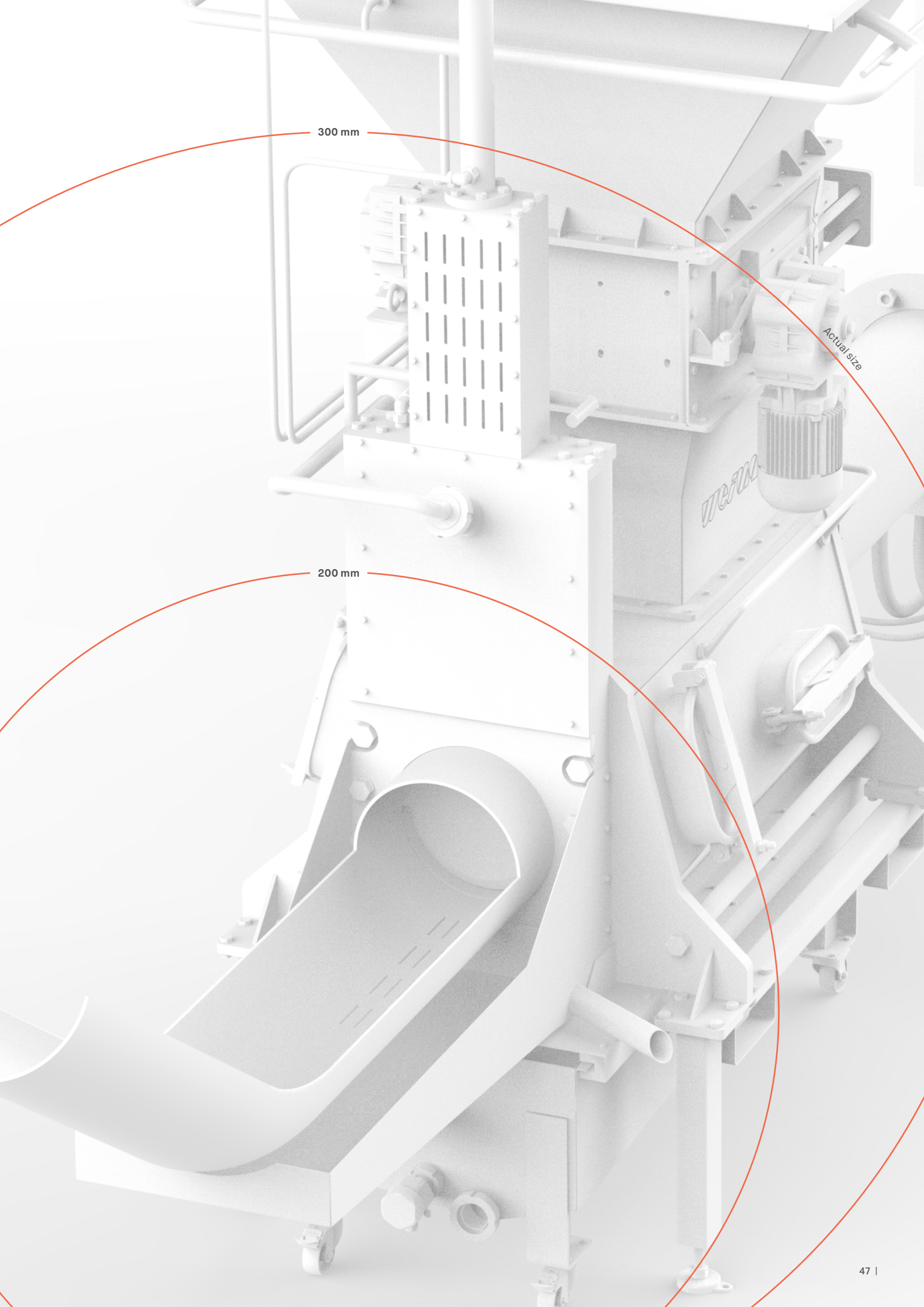
DISC SIZES

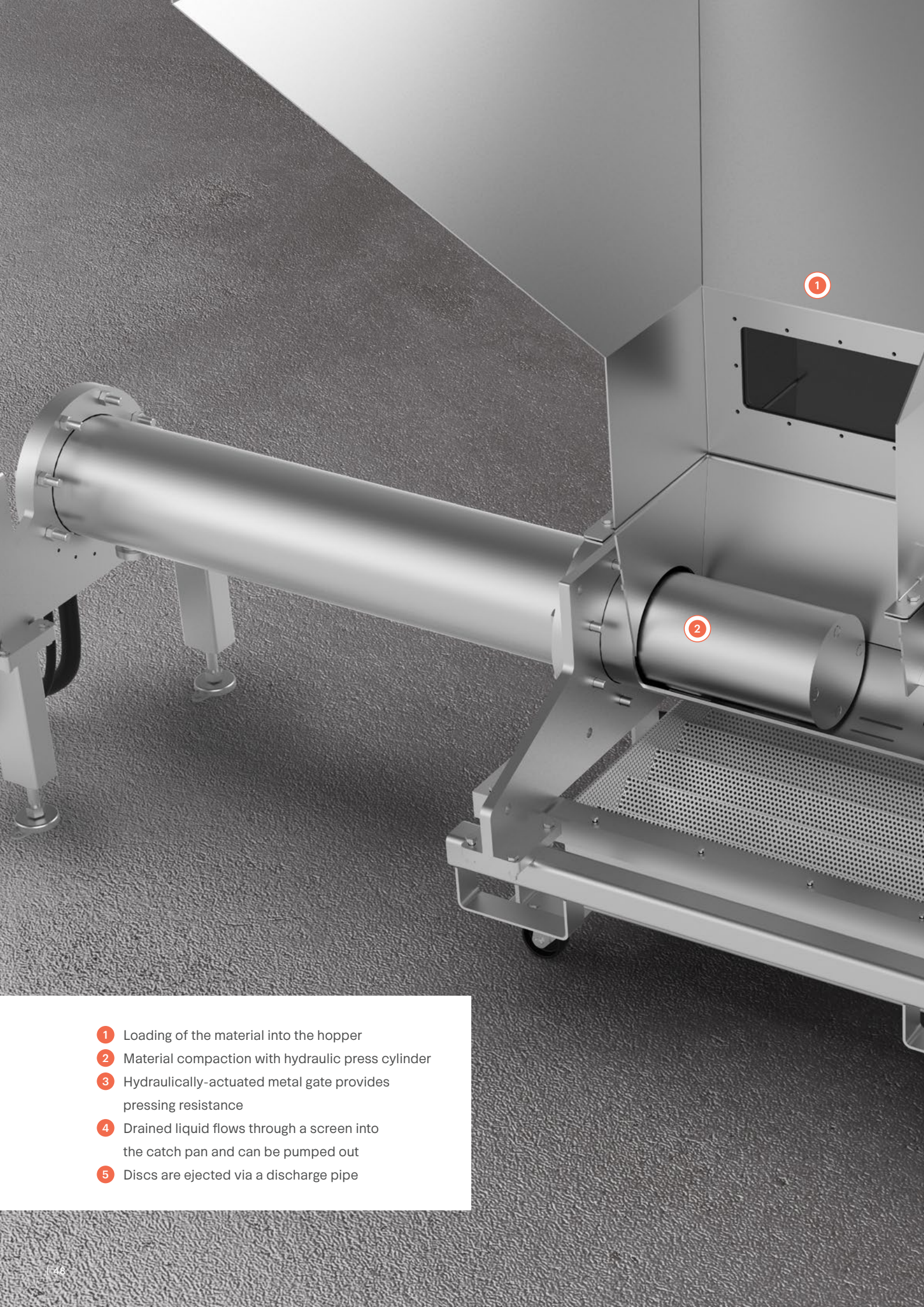
WEIMA packaging and drainage presses of the PUEHLER series compact production waste and scrap material into handy discs with diameters of 200 mm or 300 mm.

The round discs offer easy transport options. In addition, the round shape ensures that the compaction force acts uniformly on the disc. This means that – unlike with angular compactors – the maximum pressing force is also transferred to the material at the edge. Depending on the requirements and material, the number of pressing strokes and the dwell time of the pressing cylinder can be individually adjusted.

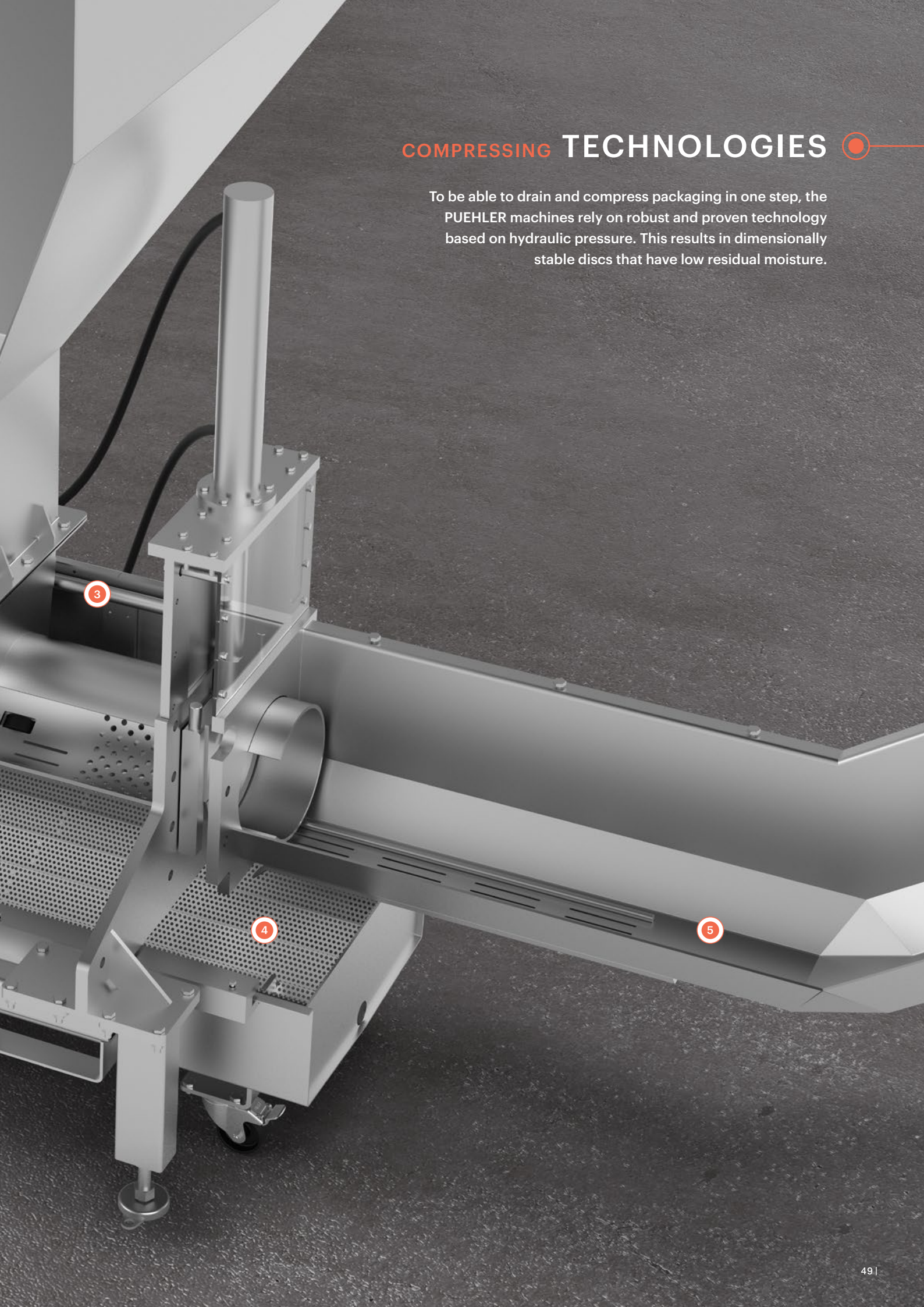
> "Discs with diameters of up to 300 mm are not only optimal for scrap material handling, but also ensure that the presses achieve large throughputs."
>
> *Tobias Flaig,*
> *Product Manager at WEIMA | PUEHLER division*

200 mm disc | aluminum beverage cans


300 mm
200 mm
Actual size



1. Loading of the material into the hopper
2. Material compaction with hydraulic press cylinder
3. Hydraulically-actuated metal gate provides pressing resistance
4. Drained liquid flows through a screen into the catch pan and can be pumped out
5. Discs are ejected via a discharge pipe

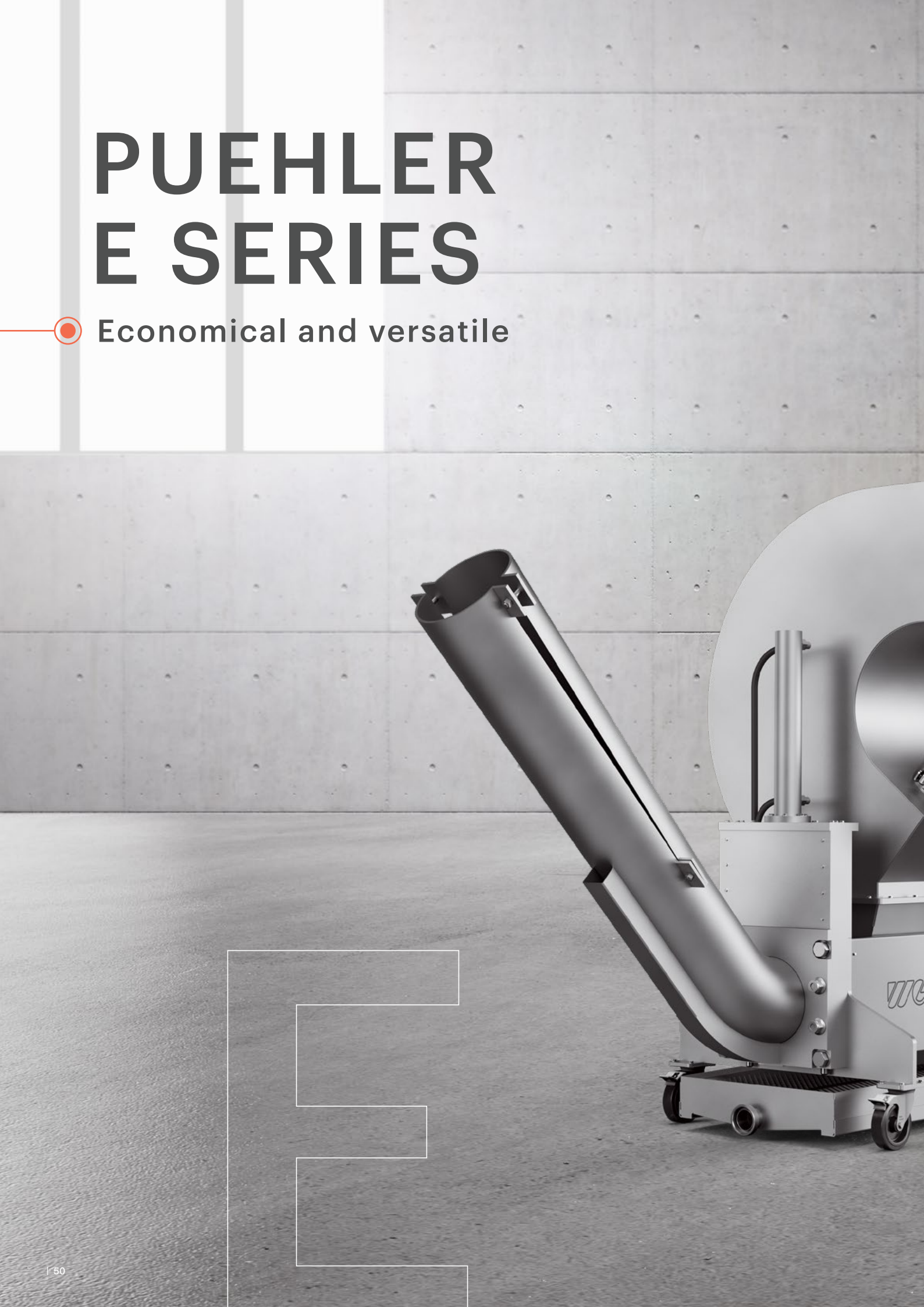


COMPRESSING TECHNOLOGIES

To be able to drain and compress packaging in one step, the PUEHLER machines rely on robust and proven technology based on hydraulic pressure. This results in dimensionally stable discs that have low residual moisture.

PUEHLER E SERIES

Economical and versatile



PUEHLER E.200

TECHNICAL HIGHLIGHTS

Easy installation and commissioning

thanks to Plug-and-Play solution

To make the start as efficient as possible, all presses of the PUEHLER E series are delivered pre-programmed and ready for operation as a plug-and-play solution. For the installation, only a power and water connection are required. On request, we also offer the setup and commissioning of the machine (including training) via digital channels.

DID YOU KNOW?

By default, only food grade hydraulic oil is used in PUEHLER machines. If required, a customer-specific hydraulic oil can also be used.

Flexible set up

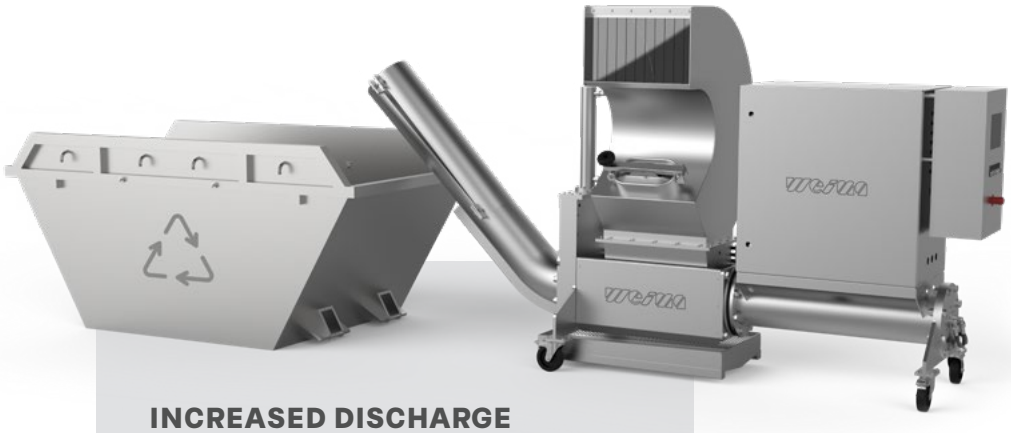
thanks to lockable casters

For highly flexible use in your plant, the compact presses of the PUEHLER E series can be moved on lockable casters to the respective point of use. Temporary use outdoors is also possible, as the machine has been designed to IP 65 standards.

Simple operation and fast parameter adjustment

via PLC control

Parameters (e.g. pressing time, pressing force) can be quickly adjusted via the color display of the built-in PLC control. The re-pressing function can also be set in a user-friendly way via the PLC control. This programmable holding time is particularly necessary for pressing absorbent materials. This is the only way to produce dimensionally stable discs.



INCREASED DISCHARGE HEIGHT OF DISCS

for flexible discharge into containers

The inclined discharge pipe allows the formed discs to be discharged at an elevated level - directly into a large bin. This saves the use of a conveyor belt. Depending on requirements, the discharge pipe can be configured straight, to the left or to the right.

Automatic operation without worries

thanks to sensors in the feed hopper

Thanks to level sensors in the feed hopper, the press can be used automatically. The machine switches on automatically when a certain filling level is reached in the hopper. To prevent wear on machine components, the machine automatically switches to standby as soon as the filling level falls below a certain level.

Ready for multi-shift operation

due to oil cooling with heat exchanger

To compensate for temperature differences in the hydraulic oil, PUEHLER machines of the E series have a water-cooled heat exchanger. This ensures long operating times without downtime. The heat exchanger is installed in the hydraulic enclosure and thus is protected against contamination.

TECHNICAL HIGHLIGHTS

Good accessibility for cleaning and maintenance

due to flexible installation and maintenance hatch

Thanks to integrated casters, the E series machines can be used flexibly during operation. This ensures optimum access to the machine during cleaning and maintenance. A maintenance and cleaning hatch on the hopper facilitates access to the inside of the machine.

ROBUST HYDRAULIC CONSTRUCTION

against foreign materials

The most important components of the hydraulic unit have been designed to always have a buffer to fall back on, even under full load. Among other things, this results in lower heat generation and makes the machine significantly less susceptible to foreign matter.

DID YOU KNOW?

We believe in longevity. All PUEHLER machines are made of high-quality stainless steel. In turn, you get a robust, maintenance-friendly, and hygienic machine.

Collection and targeted discharge of liquids

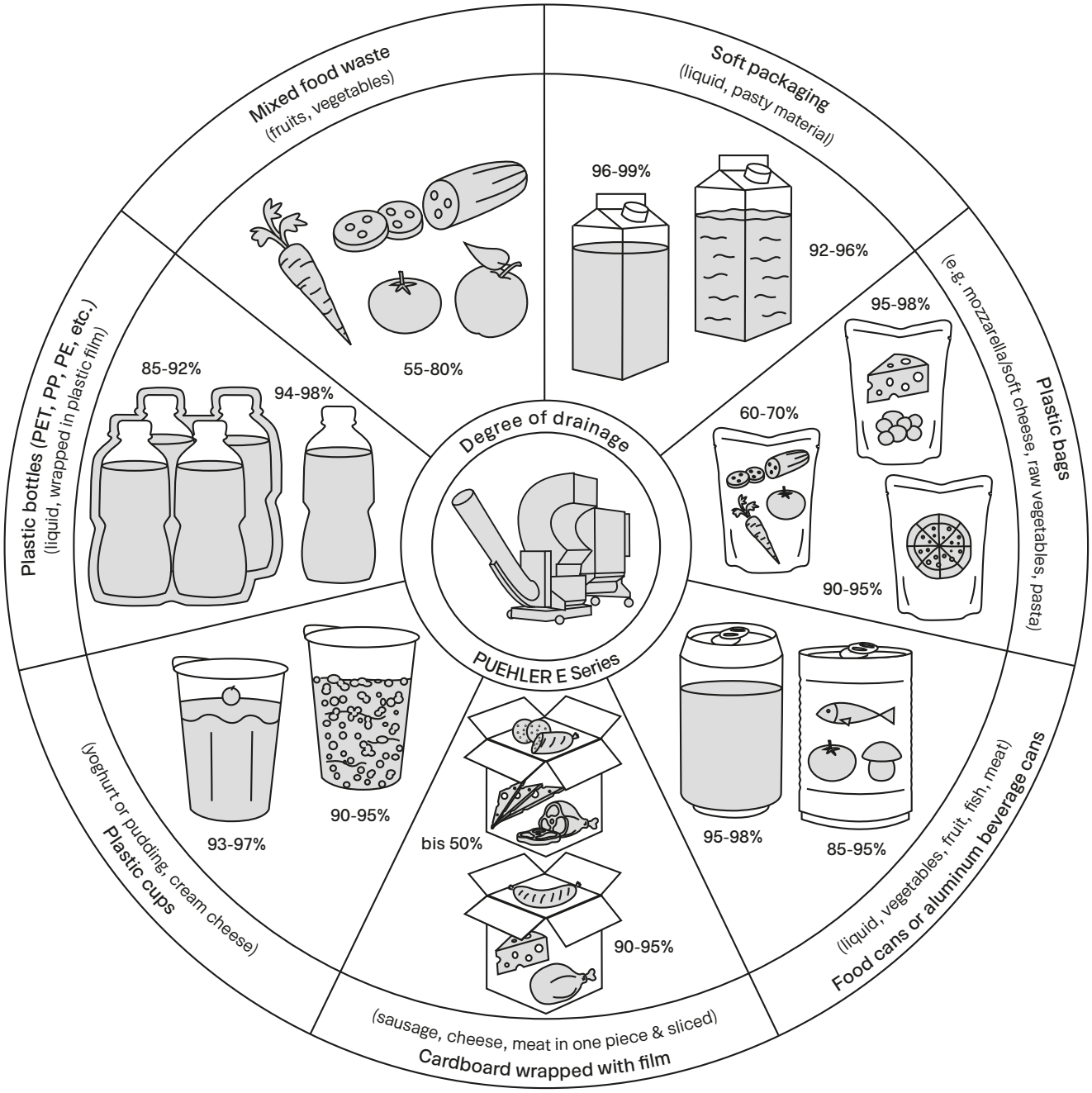
via the catch pan

The catch pan, which is located under the press, collects the drained liquids. Depending on the installation of the machine, these run off directly into a drain or can be pumped away via the milk pipe fitting.

Maximum safety during loading

due to curved hopper design

The curved hopper prevents cans or other materials from escaping from the machine during the pressing process due to the enormous pressing force.
In addition, the curved shape facilitates cleaning and prevents uncontrolled spraying of pressed-out liquid from the filling opening.



TECHNICAL DATA AND MACHINE CONFIGURATION

Technical data PUEHLER E series

	E.200
Disc diameter [mm]	200
Throughput rate [m³/h] [1)]	up to 2.5
Residual moisture	3 - 30%
Space requirement (L × W × H) [approx. mm] [2)]	3,000 × 820 × 1,650

1) depending on material
2) detailed dimensions upon request

Machine configuration PUEHLER E series

● *Standard* ○ *Optional* – *Not available*

	E.200
MATERIAL FEED	
Hopper 220 l	●
MATERIAL DISCHARGE	
Drain pan (35 l)	●
Drain pan (120 l)	○
Level sensors	○
Quick couplings	○
HYDRAULICS	
Hydraulic press stamp	●
Cutting plate on press stamp	○
Aluminum hydraulic tank (40 l)	●
ELECTRICAL	
Control cabinet with PLC and HMI	●
Electrical connection for accessories	○

Other variations, special equipment and technical modifications are available upon request.

PUEHLER G RECYCLING SERIES

High performance presses

PUEHLER G.200 Recycling

TECHNICAL HIGHLIGHTS

Flexible discharge

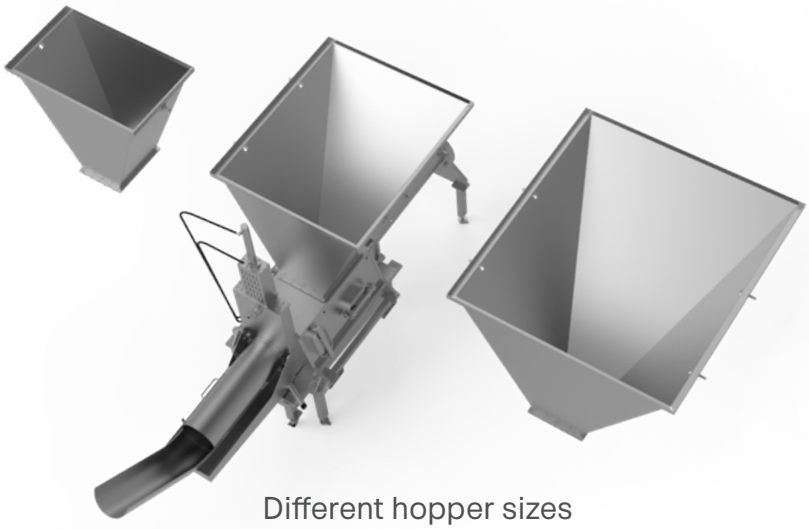
due to increased discharge height
and individual discharge length

The length of the discharge pipe can be extended up to five meters. In contrast to a screw press, no conveyor belt is necessary for the discharge into a container or a tipping trough due to the increased discharge of the PUEHLER presses. Thus, the press can be optimally placed according to your spatial requirements.

Automated operation

in your production line

In order to be able to use the press in fully automated operation, the feed hopper can be equipped with a filling level sensor. With its help, upstream systems (conveyor belt) can be stopped/started automatically as soon as the maximum filling quantity of the hopper is reached. A continuous material flow prevents overfilling of the hopper.



Different hopper sizes

for every application

You have the choice between different hopper volumes: 220 l, 600 l, 800 l, 1,200 l or 2,000 l. In addition, a manual or automatic hopper lid can be fitted for safety or hygienic protection.

DID YOU KNOW?

In the PUEHLER G Recycling presses, food safe hydraulic oil is used as standard. If required, we replace this with a customer-specific hydraulic oil.

Pre-opening of packages

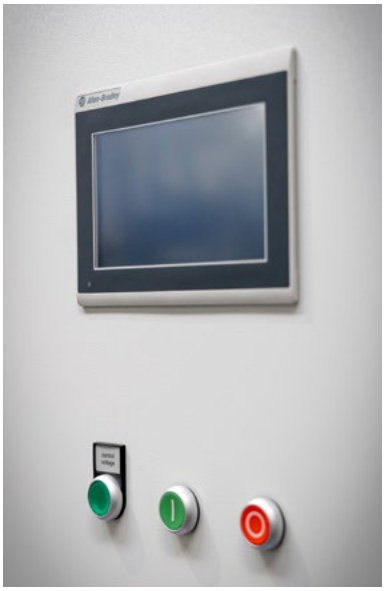
with individually adjustable perforating rollers

The presses can be optionally equipped with perforating rollers. This allows packages to be opened gently before they are completely emptied by the press cylinder in the next step and then pressed into discs.

User-friendly touch display

for fast parameter changes and diagnostics

The control system with touch display allows intuitive setting of parameters such as the press force and time or the repress function. Precise diagnostic messages ensure minimal downtime. In addition, upstream and downstream systems such as conveyor belts or a lifting and tilting station can be controlled in a user-friendly manner.



MULTI-SHIFT OPERATION POSSIBLE

through hydraulic oil cooling

The use in automated multi-shift operation is possible without any problems. Thanks to oil cooling via a water-cooled heat exchanger, the hydraulic oil can be kept at a constant operating temperature without overheating.

TECHNICAL HIGHLIGHTS

DID YOU KNOW?

To ensure the long-term use of the PUEHLER G Recycling series, we use high-quality stainless steel. This protects the machine body and the control cabinet from wear and corrosion while simultaneously remaining low-maintenance and hygienic.

EASY CLEANING AND MAINTENANCE

thanks to optional CIP system and maintenance hatches

If required, the machines of the G Recycling series can be equipped with a CIP system. Nozzles mounted inside the press pre-clean critical areas of material residues. This simplifies subsequent manual cleaning. Five maintenance hatches facilitate access to the machine for cleaning as well as any maintenance work.

Automated liquid discharge

thanks to level detection in the catch pan

If required, liquid discharge can be automated with the aid of level sensors in the catch pan. The level sensors control the pumping out of the pressed material and automatically switch off the recycling press when downstream processes come to a standstill.

Increased throughput

due to double-pump hydraulics

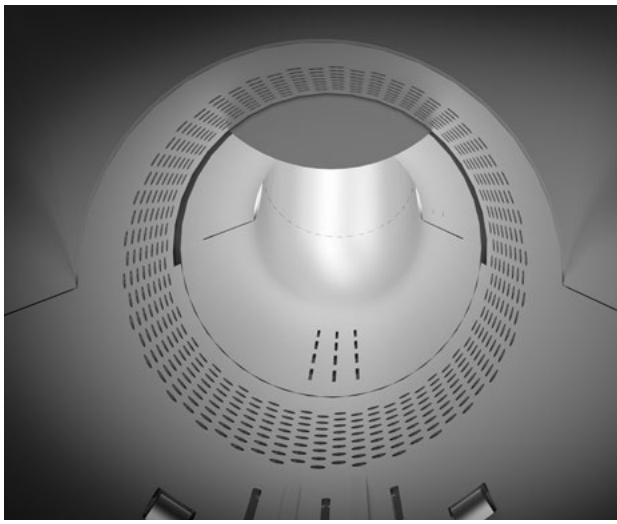
The G.300 Recycling press can be optionally equipped with double-pump hydraulics. This makes it possible to double the return speed of the press ram and increase throughput.

References

Clean discs

thanks to post-pressing washing nozzles

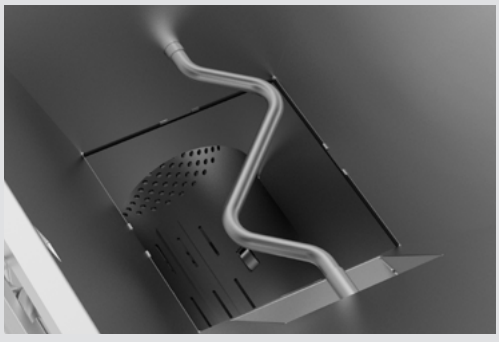
In order to rinse off any remaining product buildup (e.g. yogurt residues) from the discs, a post-cleaning unit in the form of spray nozzles can be fitted to the discharge tube. The cooling water from the oil cooling system can be used for this purpose.



Individual screen sizes

for all types of packaging

The wall of the pressing chamber is perforated to allow the emptied liquid to drain off. The screen size can be individually adapted to your material properties. For thicker materials such as yogurt or sour cream, round holes up to 12 mm are selected. For liquids, on the other hand, screen holes as small as 4 mm are possible. In any case, it is important that fine particles from the packaging do not get into the catch pan together with the liquid.



No material bridges

thanks to horizontal agitator

A horizontal agitator in the feed hopper can be selected as an option. Continuous material circulation prevents bridging in the hopper and thus ensures constant material feed.

TECHNICAL DATA AND MACHINE CONFIGURATION

Technical data PUEHLER G Recycling series

	G.200 Recycling	G.300 Recycling	G.300 Duo Recycling
Disc diameter [mm]	200	300	2 × 300
Throughput rate [m³/h] [1)]	up to 6	up to 12	up to 22
Residual moisture	3 – 30%	3 – 30%	3 – 30%
Space requirement (L × W × H) [approx. mm] [2)]	3,900 × 1,200 × 2,200	4,400 × 1,300 × 2,400	4,400 × 2,000 × 2,400

1) depending on material
2) detailed dimensions upon request

Machine configuration PUEHLER G Recycling series

● *Standard* ○ *Optional* – *Not available*

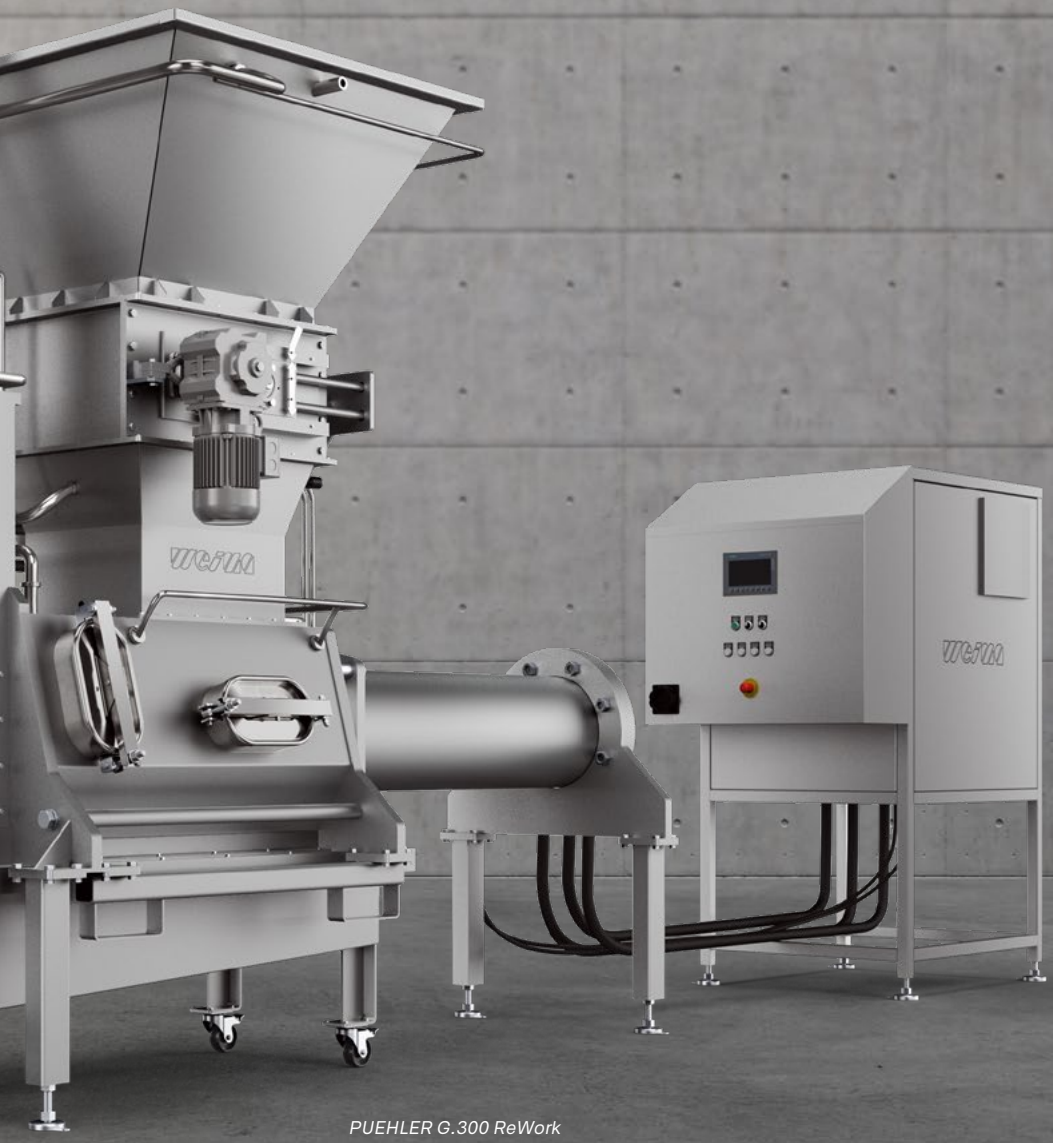
	G.200 Recycling	G.300 Recycling	G.300 Duo Recycling
MATERIAL FEED			
Hopper 220 l	○	–	–
Hopper 600 l	●	●	○
Hopper 800 l	○	○	○
Hopper 1,200 l	○	○	●
Hopper 2,000 l	–	–	○
Hopper extension	○	○	○
Lid	Grid	○	○	○
Agitator	○	○	○
MATERIAL DISCHARGE			
Catch pan (120 l)	●	–	–
Catch pan (200 l)	○	●	●
Level sensors	○	○	○
Quick couplings	○	○	○
HYDRAULICS			
Hydraulic press stamp	●	●	●
Cutting plate on press stamp	○	○	○
Aluminum hydraulic tank (100 l)	●	●	–
Aluminum hydraulic tank (200 l)	–	–	●
Pre-cleaning system	CIP piping	○	○	○
ELECTRICAL			
Control cabinet with PLC and HMI	●	●	●
Electrical connection for accessories	●	●	●

Other variations, special equipment and technical modifications are available upon request.

PUEHLER G REWORK SERIES

High-end presses for production waste

300 mm
disc diameter



PUEHLER G.300 ReWork

TECHNICAL HIGHLIGHTS

Easy control of your ReWork line

with PLC Control

The high-quality PLC control can be operated intuitively via the touch display. Parameters such as the pressing time, pressing force or the re-pressing function can be adjusted quickly and flexibly. Upstream and downstream processes can also be conveniently controlled. This means that you always have your entire ReWork process safely and efficiently under control.

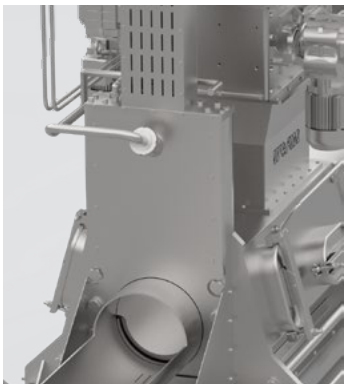
DID YOU KNOW?

PUEHLER machines are operated with food safe hydraulic oil as standard. If required, the ReWork press can also be filled for operation with a hydraulic oil of your choice.

Clean, dimensionally stable discs

through slide plate

To produce highly compacted, almost dry discs, the material is pressed between the press ram and a slide plate. This is moved up and down hydraulically. As soon as the disc is produced, the slide plate moves upwards and exposes the discharge pipe. Consequently, a high degree of compaction is achieved at maximum throughput. The solid mechanical design is maintenance-friendly and resistant to foreign contaminants as well as wear.



Discharge into container or tipping trough

without the use of a conveyor belt

ReWork presses achieve increased discharge height due to the curved discharge tube. Depending on requirements, the discharge tube can be extended up to five meters. This allows the material to be discharged directly into a container or tipping trough without the use of a conveyor belt.

LARGE HOPPER
for more buffer volume

The hopper, which can be fed manually, via a conveyor belt, or with a lifting and tipping device, is available in various sizes. Depending on the required buffer volume, you have the choice between 600 l, 800 l or 1,200 l. For the G.300 Duo ReWork we also offer a hopper with 2,000 l volume.

Easy post-cleaning
for clean discs

The discharge tube can be equipped with a post-cleaning device to produce cleaner discs. This rinses off any remaining product buildup from the discs. The cooling water from the oil cooling system can be used for this process.

Highest throughputs
thanks to double return speed

If required, the ReWork presses can be equipped with double-pump hydraulics. This enables an increase in throughput due to the double return speed of the press stamp.

Designed for continuous operation
thanks to hydraulic oil cooling

These machines are real long-distance specialists thanks to the water-cooled heat exchanger. All that is needed is a water connection. Unlike conventional cooling fins, the heat exchanger is more hygienic and easier to maintain. In addition, it does not have to be cleaned. The water used can then be used to dilute the extruded material to counteract unwanted foam development.

Prevent contamination
by means of a second catch pan on the discharge pipe

During re-pressing, product residues can escape from the packaging. To prevent these residues from contaminating the ReWork material, a second collecting tray is fitted under the discharge pipe. From there, the pressed-out material is drained off to the side and can then be disposed of effectively.

TECHNICAL HIGHLIGHTS

MINIMIZED DOWNTIME
due to fully automatic cleaning system

The integrated cleaning system cleans the drainage press automatically. Nozzles inside the machine clean the ReWork press at a rate of up to 20,000 l/h. The integrated software controls the process.

Constant material feed
through horizontal agitator

If required, the feed hopper can be equipped with a horizontal agitator. This prevents material bridges from forming in the hopper – a constant material feed to the pressing process is ensured.

Safe and clean
thanks to hygienic design

Thanks to the cleanable design, WEIMA drainage presses maintain food safety, meet hygiene standards, and simplify cleaning procedures. This means that down time can be minimized.

Fluid removal optimized for ReWork
thanks to level-controlled pump

The sensors in the drain pan provide information on the fill level and regulate the pumping out of the drained material. If the catch pan or connected containers are full, not only does the ReWork press switch off automatically, but the upstream processes (conveyor belt or lifting and tipping device) are also stopped. Depending on the material requirements, a screw or radial pump discharges the drained liquid directly from the drain pan. This can then be used for ReWork purposes.

Optimum adaptation to material properties

through individual screen size

The screen that separates the ReWork material from the packaging is configured to suit your application. The size of the outlet holes can be between 4 – 12 mm. Selecting the smallest possible screen size ensures that no fines from the packaging get into your ReWork material.

User-friendly maintenance and cleaning

thanks to CIP system and maintenance hatches

The pre-cleaning system with special Cleaning-in-Place (CIP) piping provides reliable cleaning without having to dismantle the system or components. The press is cleaned via nozzles attached to the areas in contact with the product. The ReWork press can be optimally maintained and cleaned via five maintenance hatches.

References

Durable machine design

made of high-quality stainless steel

For a long service life, machines of the G ReWork series are made of stainless steel. The machine body and the control cabinet are thus protected against heavy wear and corrosion.

TECHNICAL DATA AND MACHINE CONFIGURATION

Technical data PUEHLER G ReWork series

	G.300 ReWork	G.300 Duo ReWork
Disc diameter [mm]	300	2 × 300
Throughput rate [m³/h] [1)]	up to 12	up to 22
Residual moisture	3 – 30%	3 – 30%
Space requirement (L × W × H) [approx. mm] [2)]	4,400 × 1,450 × 2,700	4,400 × 2,000 × 2,700

1) depending on material
2) detailed dimensions upon request

Machine configuration PUEHLER G ReWork series

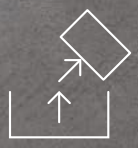
● *Standard* ○ *Optional* – *Not available*

	G.300 ReWork	G.300 Duo ReWork
MATERIAL FEED		
Hopper 600 l	●	○
Hopper 800 l	○	○
Hopper 1,200 l	○	●
Hopper 2,000 l	–	○
Hopper extension	○	○
Lid | Grid	○	○
Agitator	○	○
MATERIAL DISCHARGE		
Catch pan (200 l)	●	●
Level sensors	○	○
Quick couplings	○	○
HYDRAULICS		
Hydraulic press stamp	●	●
Cutting plate on press stamp	○	○
Aluminum hydraulic tank (100 l)	●	–
Aluminum hydraulic tank (200 l)	–	●
Hygienic design	●	●
Pre-cleaning system | CIP piping	○	○
ELECTRICAL		
Control cabinet with PLC and HMI	●	●
Electrical connection for accessories	●	●

Other variations, special equipment and technical modifications are available upon request.

Material feed >

Forklift | wheel loader



Lift and tilt device

Manual

Conveyor belt

DID YOU KNOW?

Control cabinets are built and wired from scratch at the company headquarters in Ilsfeld. Programming also takes place there. This ensures optimal coordination of all components.

CONNECTIVITY

At WEIMA, you don‘t get a machine off the shelf. Each press delivered is individually configured and handed over to the user as a plug-and-play solution. State-of-the-art data interfaces guarantee seamless integration into your production line so that the machine can be controlled and monitored in a fully automated operation. Another advantage that is only available from WEIMA: As a full-range supplier in the recycling world, we also offer upstream and downstream system solutions if required. In addition to drainage technology, these include single-shaft and four-shaft shredders, granulators, and briquetting presses.

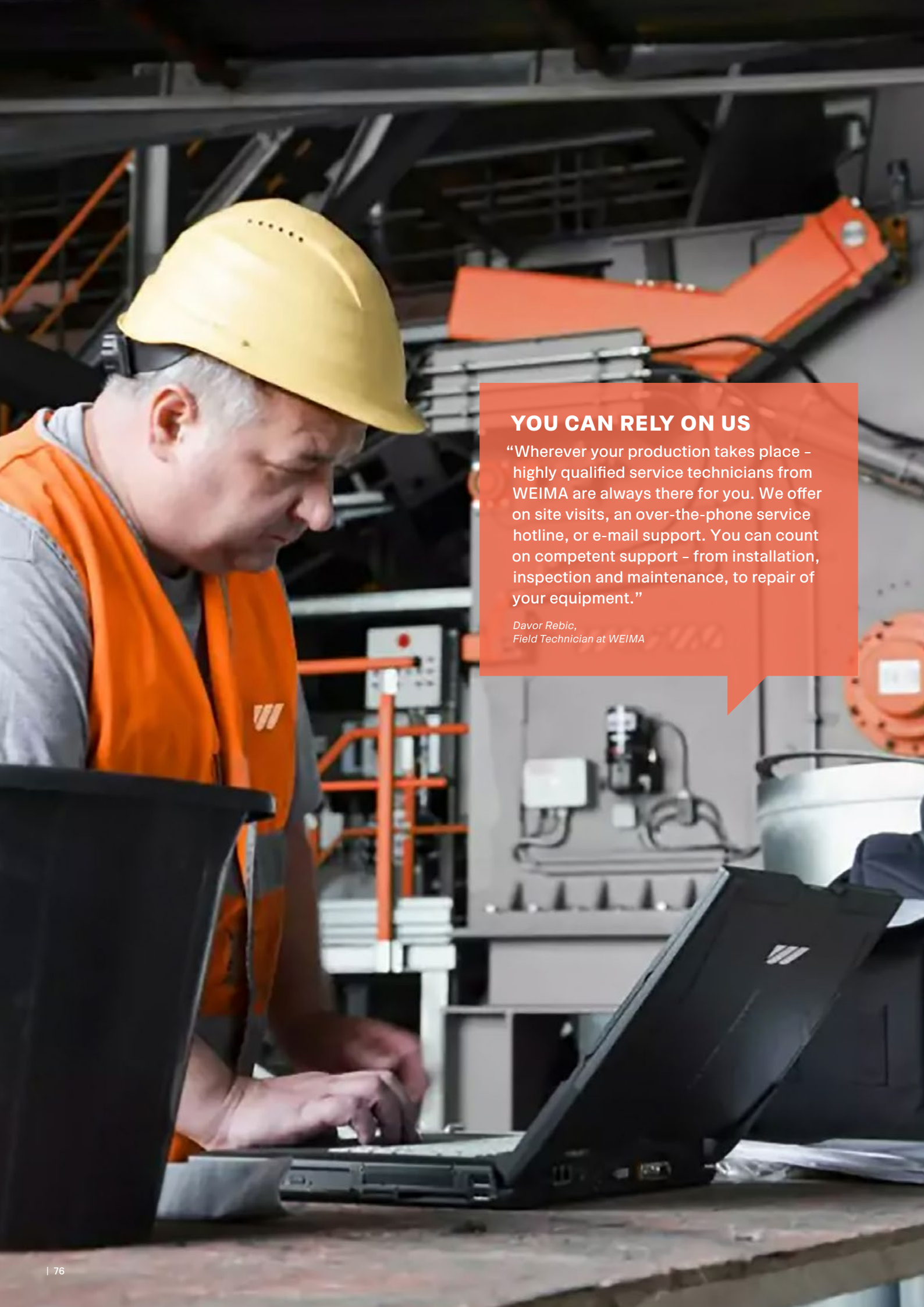
Pump

Conveyor belt

Discharge pipe

Customized conveying technology

To make the material flow as efficiently and conveniently as possible, we have been developing the optimum conveying solution for every application together with our partners. In doing so, we can draw on a wide range of technologies and plenty of practical experience. When incoming material flows pause, the press also automatically switches to standby mode. When containers or bins are full, the feed of material into the press is automatically stopped.



YOU CAN RELY ON US

“Wherever your production takes place – highly qualified service technicians from WEIMA are always there for you. We offer on site visits, an over-the-phone service hotline, or e-mail support. You can count on competent support – from installation, inspection and maintenance, to repair of your equipment.”

Davor Rebic,
Field Technician at WEIMA

WEIMA CUSTOMER SUPPORT AND SERVICES

Customer proximity is the decisive factor for successful cooperation. For this reason, WEIMA invests in regional service centers. Just recently, two new locations were opened in India and China.

DID YOU KNOW?

More than **70 employees** worldwide take care of service matters. Of these, over 25 technicians are constantly on the road to commission or service the next machine.

Trainings

When you're well trained, you can maximize the full potential of your machine. We would like to pass on this knowledge to you and your employees. We set up the machine and commission the system together.

Our wide range of training courses is aimed at both beginners and experts. WEIMA is able to impart product know-how in a sustainable and professional manner thanks to experienced instructors, optimally equipped conference rooms, and hands-on training directly at the shredding or compacting plant.

WEIMA's training centers at the main location in Ilsfeld, and at our subsidiary WEIMA America in the USA, allow you to get to know your machine under optimal conditions and to further supplement your expertise.

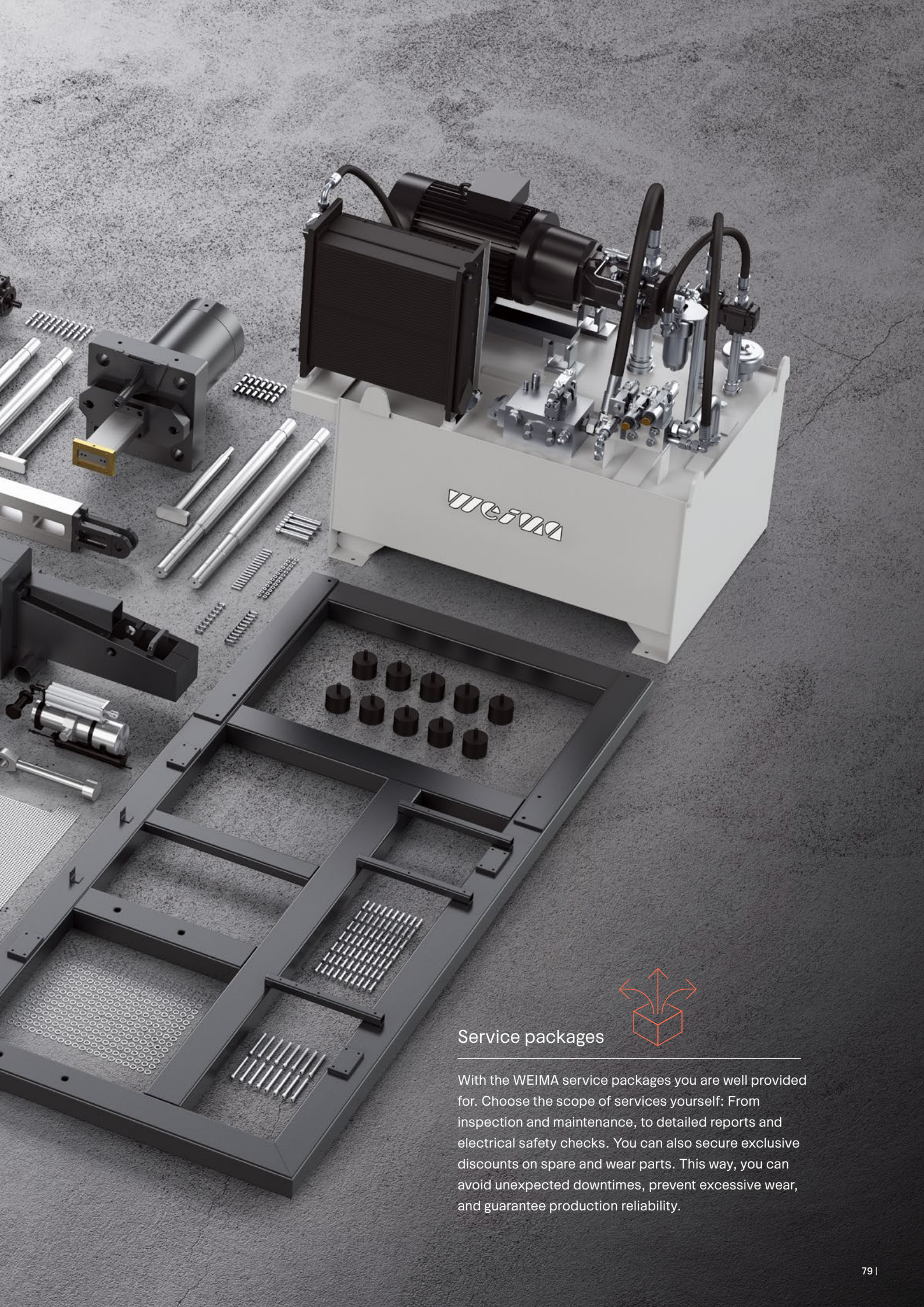
FIRST-CLASS QUALITY FROM SECOND-HAND MACHINERY

With used shredders, briquette presses, and drainage presses from WEIMA, you play it safe. Second-hand machinery is refurbished and comes with original WEIMA parts. The special thing about it: As with the purchase of a new machine, the extensive range of training courses, function upgrades and services is available to you. You can also rely on our team of experts to answer all your questions when selling your used WEIMA.

SERVICE WE'VE GOT YOUR BACK

MAINTENANCE AND REPAIR

There's no such thing as can't. WEIMA service technicians are guaranteed to get everything running again professionally. They know WEIMA machines like no one else. Due to low turnover and their tenure with the company, they have an irreplaceable wealth of experience and expertise. Regular maintenance ensures safe and reliable production, saving time and money. Documenting maintenance according to manufacturer specifications also increases the resale value and service life of your plant. You can also plan your expenses and save operating costs thanks to optimally adjusted components.



Service packages

With the WEIMA service packages you are well provided for. Choose the scope of services yourself: From inspection and maintenance, to detailed reports and electrical safety checks. You can also secure exclusive discounts on spare and wear parts. This way, you can avoid unexpected downtimes, prevent excessive wear, and guarantee production reliability.

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Subject to technical changes | 01012023