

TH INDUSTRIAL SERIES BRIQUETTE PRESSES

### TECHNICAL HIGHLIGHTS

Low wear, easy maintenance due to chrome-plated and hardened matrix as well as exchangeable press plates

The movable 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 next to it can be replaced in just a few steps after wear. This ensures a smooth process.





Intuitive operation with swivel-mounted touch panel

Maximum flexibility. For quick parameter adjustments (e.g. briquette length, number of briquettes per minute, density, etc.) during material changes, the large TP 600 touch panel with Siemens S7 PLC control can be swiveled in many directions and operated ergonomically. It also visualizes various processes in the machine. To ensure that the electronics are optimally matched to the machine, we design, build, and wire our control cabinets completely ourselves. We only use high-quality brand components – for example from Siemens, Allen Bradley or Rittal.

#### MAXIMUM PRESSING POWER

up to approx. 3,900 kg/cm<sup>2</sup>

The powerful axial piston pump of the hydraulic unit delivers an output of up to 37 kW. This allows the buildup of particularly high press pressures of up to 3,900 kg/cm<sup>2</sup> (TH 800 M), resulting in extreme compaction of the briquettes produced. The remaining hydraulic components are also reinforced. The result: a longer service life and decreased maintenance costs. However, for those who require significantly less power depending on the application, motors starting at 5.5 kW are also available.





#### Reliable multi-shift operation thanks to large Bosch Rexroth Hydraulic oil tank including cooling

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 quantity, the quality of the hydraulic oil can be maintained at a very high level for a long time this is ideal for use in multi-shift operations.

#### Avoid material bridging with gimbal-mounted screw conveyor

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



### **TECHNICAL HIGHLIGHTS**



Highly compressed 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 compared to pressing clamps. Depending on the application, the briquettes are then so dense that they even sink in water. They therefore have a density >1 (e.g. for aluminum a density of approx. 2.3, for other metals considerably more). Therefore, briquettes of TH Industrial series are ideal for subsequent selling. Their 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 all common interfaces to ensure fast integration into new or existing production lines. Machines of the TH Industrial series can be operated autonomously and in multiple shifts in automatic mode. Production parameters can be flexibly adjusted, for example in case of material changes.





## 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. TH Industrial 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).



Depending on your needs, you can choose between a large-volume feed hopper for flexible filling by means of a forklift truck or lifting and tipping device, or compact material buffers (chip agitator) for continuous, mostly automated filling, where the material falls directly into the screw conveyor channel. Both hopper systems can be equipped with a practical level gauge that safely switches the machine into standby mode when idle until new loose material is fed in again.



### ROUND OR RECTANGULAR BRIQUETTES

for sale or own 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 variably adjusted on all machines. No binders or adhesives are used for compaction, only hydraulic pressing pressure.

### TECHNICAL DATA AND **MACHINE CONFIGURATION**

Technical data TH Industrial series				
	TH 600 M	TH 800 M	ТН 1500	
Briquette diameter [mm]	60	80	-	
Briquette format and size [mm]	-	-	150 x 60	
Throughput rate up to [kg/h] $^{1)}$	220	300	400	
Hydraulic motor [kW]	5.5/15	5.5/15	30/37	
Hydraulic oil volume [liter]	250	250	630	
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

	TH 600 M	TH 800 M	TH 1500
MECHANICS			
Press mechanics with hydraulic cylinder and matrix	•	•	٠
Briquette length monitoring	•	•	•
Central lubrication system	0	0	0
Wear package: matrix, pre-compressor and press bar made of tool steel	0	0	0
HYDRAULICS			
Hydraulic power unit with 600 I tank	•	•	-
Hydraulic power unit with 1,000 I tank	-	-	•
Hydraulic oil cooling	٠	•	•
Safety switch for oil temperature	•	•	•
HOPPER			
Chip agitator	•	•	•
Chip agitator On-off automatic with level limit switch	•	•	•
	-	•	•
On-off automatic with level limit switch	0	0	0
On-off automatic with level limit switch On-off automatic via light barrier	0	0	0
On-off automatic with level limit switch On-off automatic via light barrier Inspection cover with limit switch	0 0 0	0 0 0	0 0 0
On-off automatic with level limit switch On-off automatic via light barrier Inspection cover with limit switch Sheet metal hopper cover	0 0 0 0	0 0 0 0	0 0 0 0
On-off automatic with level limit switch On-off automatic via light barrier Inspection cover with limit switch Sheet metal hopper cover Level indication	0 0 0 0	0 0 0 0	0 0 0 0
On-off automatic with level limit switch On-off automatic via light barrier Inspection cover with limit switch Sheet metal hopper cover Level indication ELECTRICAL		0 0 0 0 0	
On-off automatic with level limit switch On-off automatic via light barrier Inspection cover with limit switch Sheet metal hopper cover Level indication ELECTRICAL Control cabinet with Siemens PLC control		0 0 0 0 0	0 0 0 0 0
On-off automatic with level limit switch On-off automatic via light barrier Inspection cover with limit switch Sheet metal hopper cover Level indication ELECTRICAL Control cabinet with Siemens PLC control Swiveling control console with touch panel		0 0 0 0 0	0 0 0 0 0
On-off automatic with level limit switchOn-off automatic via light barrierInspection cover with limit switchSheet metal hopper coverLevel indicationELECTRICALControl cabinet with Siemens PLC controlSwiveling control console with touch panelOTHER FEATURES	0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0

Machine configuration TH Industrial series

• Standard • Optional • Not available

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



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