



Energy from waste wood

NATURAL CYCLE

When burning wood only so much CO₂ is released into the atmosphere as the wood has extracted from the atmosphere during the course of its growth!



Shredding



Extraction



Briquetting



Heating

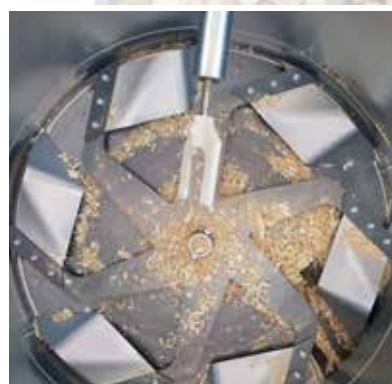
Briquetting press - MFP series



Transportation line



Control



Auger



Square Briquettes

Cost-effective briquetting

The briquetting presses of the MFP series are extremely cost-effective and are characterized by their clever technology, their compact and sophisticated design as well as a solid construction. The machines can work in continuous operation and transform residual woodworking materials such as sawdust, wood shavings, milling chips and grinding dust into dimensionally stable, rectangular briquettes with the dimensions of 30x30 mm and 35x35 mm. Depending on the starting raw material, the length of the briquettes is up to a maximum of 40 mm. The machines work very quietly. The sound pressure level is below 62 decibels!

Machine features

The MFP briquetting presses are ready to plug in, including an hydraulic tank, drive unit and control system. The material silo has a filling capacity of approx. 0.4 cubic meters. The control system is equipped as standard with a motor protection switch and an on / off button. A semi-automatic time control or a fully automatic control with level indicator is available on request.

Technical Data

MODEL	OUTPUT kg / h up to max.	DIMENSIONS OF BRIQUETTE mm	ELECTRICAL CONNECTION kW	DIMENSIONS L x W x H mm	WEIGHT kg
MFP 30	20	30 x 30	2,2	1370 x 740 x 1480	250
MFP 35	25	35 x 35	2,2	1370 x 740 x 1480	250

Quality features

- Square Briquettes
- Low wear and tear costs
- High compression



Optional accessories

- Briquette line for transporting the briquettes
- Available in 230 V, 50 Hz, 3 kW
- Time control system with built-in timer
- Automatic operation with level indicator
- Drive system

Briquetting press – MPP series



Material silo



Hydraulic pre-compressor



Option: coolable sleeve



Cylindrical briquettes

Clever Briquetting

The high-quality briquetting presses of the MPP series process materials such as wood shavings, sawdust, small wood chips, as well as grinding dust and other residues into dimensionally stable cylindrical briquettes. The pressing process is carried out without the addition of binders, alone by the hydraulic pressure.

Functioning of the machine

At the bottom of the silo runs a stirrer, which transports the material into the pre-compressor unit. In this chamber runs a hydraulic slide, which pre-compresses the material and pushes it into the pressing block. The punch presses the material into the closed crimping pliers until the set pressing power is reached. The pliers open and the briquette is ejected.

Technical Data

MODEL	THROUGHPUT kg/h up to max.	BRIQUETTE Ø mm	MOTOR kW	DIMENSIONS L x H x W mm	WEIGHT kg
MPP 60	60	50	5,5	1680 x 1100 x 1500	680
MPP 80	80	60	5,5	1680 x 1100 x 1500	700
MPP 110	110	65	5,5	1925 x 1100 x 1500	800
MPP 180	180	70	9,2	2095 x 1300 x 1700	1250
MPP 280	280	80	9,2	2095 x 1300 x 1700	1250
MPP 450	450	80	15	2500 x 1500 x 1730	2300
MPP 550	550	80	27,5	2500 x 1500 x 1730	2400

Quality features

- Low wear and tear costs
- Large tank for the hydraulic oil
- Option: endless, continuous briquettes



Reasons for Briquetting

- High volume reduction (up to 90%)
- Production of a high quality fuel
- Profitable sale of briquettes
- Reduction of storage and transport costs
- Reduction of dust emission
- Increased safety through dust binding

► Briquetting press for square briquettes



Siemens PLC Control



Rectangular briquettes



Manual packaging



Automatic packaging

Commercial Briquetting

Hydraulic briquetting presses press various materials such as wood shavings, sawdust, fine wood chips as well as grinding dust and other residues into dimensionally stable, rectangular briquettes. The machine is characterized by a very robust construction, which guarantees a consistent briquette quality in continuous operation.

Functioning of the machine

The starting raw material is filled from above into the silo. At the bottom of the silo, a screw conveyor transports the material into the pre-compressor unit. There the material gets compacted into the pressing chamber. The press plunger is activated, moves forward and presses the material with up to 300 bar into the matrix.

Technical Data

MODEL	OUTPUT kg / h up to	DIMENSIONS OF BRIQUETTE mm	ELECTRICAL CONNECTION kW	DIMENSIONS L x W x H mm	WEIGHT kg
200	200	150 x 60 x 40 – 105	11	1800 x 1600 x 2000	3200
Classic	410	150 x 60 x 40 – 105	30	2100 x 1900 x 2000	3300
R2	500	150 x 60 x 40 – 105	22	2900 x 2000 x 2100	3800
R4	590	150 x 60 x 40 – 105	30	2900 x 2100 x 2100	4100
R6	670	150 x 60 x 40 – 105	37	2900 x 2100 x 2100	4200

Quality features

- Rectangular briquettes
- Low wear and tear costs
- High pressing power (up to 300 bar)



The production of briquettes has the following advantages

- Profitable selling of wood briquettes
- Briquettes are easy to stack
- Savings on storage and transport costs
- Reduction of waste disposal costs
- Reduction of the risk of fire and explosion due to dust binding
- 2,1 kg briquettes correspond to a heating value of 1 liter fuel oil

Briquetting press – MAP series



PLC control system



Guillotine



Briquette tablets



Long briquettes

Industrial Briquetting

Our mechanical briquetting presses of the MAP series press a wide range of materials such as wood shavings, sawdust, fine wood chips, grinding dust and other residues into dimensionally stable cylindrical briquettes. The pressing process takes place without the addition of binders solely by the mechanical pressing power. Depending on the raw material, the volume of the starting material can be reduced by up to 90%.

Briquetting presses of our MAP series are optionally supplied with a suitable silo or attached to an existing silo. Our MAP presses are designed to meet the requirements of an industrial company with a 24-hour operation.

Quality features

- High throughput
- Robust construction
- Touchscreen control system



Functioning of the machine

The press is driven by an electric motor with V-belt drive. Flywheels drive the press plunger over the eccentric connecting rod. The material is fed to the press chamber. The press plunger continuously compacts the chips into an extremely hard briquette. Depending on the design of the press plunger, the same machine can be used to produce both an endless briquette to sell to customers and individual briquette tablets for automatic charging of an own heating system.

Technical Data

MODEL	THROUGHPUT kg/h up to max.	BRIQUETTE Ø mm	MOTOR kW	DIMENSIONS L x H x W mm	WEIGHT kg
MAP 180	180	45	11	2600 x 1250 x 3000	1600
MAP 350	350	55	37	2800 x 1250 x 3000	3500
MAP 750	750	65	37	3100 x 1250 x 3000	3500
MAP 1200	1200	75	47	3100 x 1250 x 3000	4000

Shredding machine – MRZ series



Rotor with double row of blades



V-belt drive



Screen of your choice (10-40mm)



Wood chips

Aggressive Shredding

The robust shredders of our MRZ series shred wood residues such as softwood, hardwood, chipboard, MDF boards, pallets, wooden crates and all other wood waste from the fields of woodworking.

With special parameters, our shredders with single-shaft technology are adapted specifically to our customer's material, the desired throughput, the required chip length and the spatial conditions. It's possible to choose between various machine widths, rotors (Ø 260 or 360 mm), drive variants and hopper sizes.

Quality features

- PLC control system
- Energy-efficient operation
- Fast hydraulics
- Made in Germany



Functioning of the machine

The material that needs to be shredded is supplied from above via the hopper. At the bottom of the hopper is a hydraulic slide which, depending on the load, presses the material against the rotor. The shredding of the material takes place between the cutting crowns and the counter knife. The raw material is shredded until it passes through the screen basket. The removal of the produced wood chips can be done via suction, conveyor belt or screw conveyor.

Technical Data

MODEL	HOPPER mm	HOPPER CAPACITY m ³	MOTOR kW	DIMENSIONS L x H x W mm	WEIGHT kg
MRZ 530	510 x 810	0,4	15	1750 x 1100 x 1640	1000
MRZ 630	630 x 810	0,5	18,5	1750 x 1200 x 1640	1200 - 1400
MRZ 830	820 x 1150	0,9	22 - 37	2290 x 1600 x 1730	1600 - 2000
MRZ 1030	1020 x 1235	1,3	22 - 45	2510 x 1980 x 1730	2000 - 3000
MRZ 1230	1220 x 1235	1,5	22 - 55	2510 x 2175 x 1730	2500 - 3500
MRZ 1530	1520 x 1235	1,8	37 - 75	2510 x 2575 x 1730	3000 - 4000

Shredding machine - MGZ series



Rotor



V-belt drive with gearbox limit switch



Screen at your choice (10 – 40mm)



Shredded material

Universal Shredding

The robust shredders of our MGZ series shred wood residues of all kinds and are specifically designed for hardwoods. With individual parameters, our shredders with single-shaft technology are adapted specifically to customer's material, the desired throughput, the required chip length and the spatial conditions. It's possible to choose between various machine widths, rotors (Ø 260 or 360 mm), drive variants and hopper sizes.

Functioning of the machine

The material that needs to be shredded is supplied from above via the hopper. At the bottom of the hopper is a hydraulic slide

Quality features

- PLC control system
- Energy-efficient operation
- Gearbox limit switch
- Made in Germany



which, depending on the load, presses the material against the rotor. The shredding of the material takes place between the cutting crowns and the counter knife. The raw material is shredded until it passes through the screen basket. The removal of the produced wood chips can be done via suction, conveyor belt or screw conveyor.

Technical Data

MODEL	HOPPER mm	HOPPER CAPACITY m ³	MOTOR kW	DIMENSIONS L x H x W mm	WEIGHT kg
MGZ 630	620 x 810	0,5	18,5	1820 x 1200 x 1640	1200 - 1400
MGZ 830	820 x 1000	0,9	18,5 - 22	2020 x 1400 x 1640	1800 - 2000
MGZ 1030	1020 x 1000	1,3	18,5 - 22	2020 x 1800 x 1640	1900 - 2100
MGZ 1330	1320 x 1235	1,5	22 - 45	2500 x 2200 x 1730	3500 - 4200
MGZ 1530	1520 x 1500	1,8	37 - 75	2710 x 2500 x 1730	4200 - 4700
MGZ 1830	1820 x 1500	2,0	55 - 90	3000 x 2620 x 1880	5700 - 6200
MGZ 2030	2020 x 1500	2,2	75 - 90	3000 x 3020 x 1880	6300 - 6700

Mobile and stationary extraction systems



Option: Automatic, compressed air cleaning system



Extraction unit MMJet 300 with briquetting press



Extraction unit MMJet 160 with mobile container



Extraction unit MMJet 300 with rotary valve

Powerful Extracting

Mobile mütek industrial dust extractors with an air output of 1.850 to 10.000 m³ / h are approved for indoor installation and are BG tested. They are suitable for extracting dust, shavings or chips from wood (other materials on request).

Thanks to the innovative filtration technology, the residual dust content in the return air is less than 0.1 mg / m³. During filtration, the filter material lies in a star shape around the support basket. When cleaning the jet, every single filter hose is returned to its original shape with the help of a blast of compressed air. The particles are repelled from the filter surface and sent for disposal.

Optionally, an automatic start-up and discharge for several processing machines as well as an automatic, differential pressure-dependent filter cleaning can be installed.

Quality features

- Automatic cleaning
- BIA tested filter bags
- High suction power
- H3 and BG tested



The mütek MMJet offers versatile combination options (see pictures above) :

• MMJet with mobile container

Cost-effective, manual disposal of the chips via a chip container

• MMJet with rotary valve

Pressure-free filling of silo, conveyor unit or container

• MMJet with briquetting press

Automatic removal of chips and production of solid briquettes

Technical Data

MODEL	EXTRACTION CONNECTION	AIR PERFORMANCE m ³ / h	MOTOR kW	FILTER m ²	DIMENSIONS L x H x W m	WEIGHT kg
MMJet 160	ø 160 mm	up to 2.000	3	8,25	1,7 x 0,7 x 2,2	320
MMJet 200	ø 200 mm	up to 3.200	3/4	14	2,5 x 0,84 x 2,2	385
MMJet 250	ø 250 mm	up to 5.000	4	50	2,65 x 1,15 x 2,3	775
MMJet 300	ø 300 mm	up to 6.000	8,2	50	2,65 x 1,15 x 2,3	790
MMJet 350	ø 350 mm	up to 10.000	11/15	71	3,5 x 1,1 x 2,4	830/980

References



RIWAG Türen AG | 6415 Arth, Switzerland

Shredding and briquetting of wood waste and pallets

Machines: Shredding machine MRZ 1530 | Mechanical briquetting presses MAP 750 Tandem

Final product: G30 wood chips | Wood briquettes for automatic heating systems



Dehner Bienen | 74572 Blaufelden, Germany

Shredding and briquetting of production waste from bee houses

Machines: Dust extraction system with 30,000 m³/h | Shredding machine MGZ 630 | Briquetting press Classic

Final product: Saleable rectangular wood briquettes (150 x 60 mm) and wood chips for automatic heating systems



References



Research vessels
Maria S. Merian, Meteor IV, MS Sonne

Shredding and briquetting of cardboard waste and fruit crates

Machines: Shredding machine MRZ 630 | Hydraulic briquetting press

Final product: Briquettes for later disposal to maintain the German ecolabel Blue Angel.



Holz Pur Meisterbetrieb |
34549 Edertal-Gifflitz, Germany

Extraction and briquetting of wood residues from a construction and furniture carpentry

Machines: Briquetting press MPP 60 | Mobile dust extractor RL 300

Final product: Cylindrical wood briquettes (Ø 50 mm)



References



Deutsches Rotes Kreuz |
21682 Stade, Germany

Shredding and briquetting of
A1 residual wood and pallets

Machines: Shredding machine MRZ 1530 |
Briquetting presses Classic tandem |
Conveyor belt and overbelt magnet
for separating metal parts

Final product: Saleable rectangular wood
briquettes (150 x 60 mm)



Biomasse Wärmeversorgung Rankweil |
6830 Rankweil, Austria

Shredding and briquetting of residual wood and pallets

Machines: Shredding machine MRZ 1530 | Briquetting press R2
conveyor belt with overbelt magnet for separating metal parts

Final product: Saleable rectangular wood briquettes (150 x 60 mm)

References



Kiehn Holz GmbH | 19300 Grabow, Germany

Shredding and briquetting of wood residues and pallets

Machines: Wood shredder MRZ 1530 | Briquetting press R2
conveyor belt and overbelt magnet for separating metal parts

Final product: Saleable rectangular wood briquettes (150 x 60 mm)



**EGGER | 3105 Unterradlberg,
6380 St. Johann, Austria**

Briquetting of dust and recycled wood

Machines: Mechanical briquetting presses MAP 1200,
capacity up to 1,200 kilograms per hour per machine

Final product: Briquette biscuits for automatic
heating systems



Inclusion project



SCHWABENGLUT

Shredding and briquetting of production residues

Machines: Shredder MRZ 630 | Conveyor belt with overbelt magnet | Briquetting press MPP 280

Final product: Saleable cylindrical briquettes (Ø 80 mm)

Since 2015, we have been cooperating with the Karl Schubert Gemeinschaft. As part of this collaboration, we have set up an external workspace in our premises. Employees from Karl Schubert regularly pack wood briquettes into marketable units. This cooperation provides people with disabilities a professional perspective and creates significant added values for all involved parties.



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