



**BrikStar iSwarf** 50/440/550/800

BrikStar M/MD

Hydraulic
Briquetting presses
for metal briquetting





In metal processing, often large quantities of waste products are incurred, such as grinding sludge and metal shavings, whose value is not recognised or remains unexploited. As a rule, these waste products are cost intensive to dispose of due to their high proportion of cooling lubricants, or they obtain only negligible revenue as scrap metal.

As a result of the "Ordinance on Facilities for Handling Substances Hazardous to Water" (AwSV), which came into force on 01.08.2017, the classification and handling of substances which are hazardous to water has changed significantly. However, these waste products can be used in an optimum way by means of a high performance briquetting press from HÖCKER POLYTECHNIK.

In addition to the significant volume reduction and the resulting minimised transport routes, the adhering cooling lubricants are pressed out to such an extent that the briquettes may be stored and transported in accordance with the new AwSV Ordinance. The BrikStar iSwarf and BrikStar M/MD series briquetting presses are ideally suited to the processing of predominantly short, loose metal shavings from the mechanical processing of non-ferrous metals, steel and cast parts or other metals such as aluminium and magnesium.

Another good reason to decide on a briquetting press from Höcker Polytechnik is, in addition to the volume reduction, the recovery of cooling lubricants, the environmental protection and the higher revenue that is achieved with briquettes compared to chips.

- Reduce oil and lubricant costs
- Lower logistics costs
- Environmental protection thanks to briquetting
- More revenue by briquettes
- = Fast payback period (ROI)



### All advantages of the BrikStar iSwarf and M/MD at a glance:

- Compact and space-saving design
- Variable adjustable press pressure
- Easily adjustable briquette density
- Easy installation
- Savings of up to 95% of fresh oil or emulsion quantities
- Fewer storage, transport and disposal resources
- Added value through the sale of metal briquettes
- Sustainable and environmentally friendly operation
- A PLC controlled briquette length automatic system
- · A large touch panel allows easy operation





### **BrikStar iSwarf 50**

## The economic package for the decentralized metal briquetting.

With the newly developed BrikStar iSwarf 50 you can process even small quantities of metal chips into high-quality briquettes. Of course you profit from all the advantages of the BrikStar iSwarf series.

Due to the compact design, a space-saving installation as a decentralised "stand-alone solution" or as an integrated press behind a processing machine for automated operation is possible.

### **Properties**

- compact device design
- simple operation and maintenance
- easy installation and handling
- flexible use on different machines

View top:

BrikStar iSwarf 50 with briquette ejection on the left. Also available with pressing direction right (optional).

View right:

They work where they are needed. A BrikStar iSwarf 50 briquetting press in flexible use in mechanical engineering.

### **Technical data**

Hydraulic output: 4 kW
Briquette diameter: 60 mm

Throughput Aluminium: max. 50 kg/h\*
Throughput Steel: max. 90 kg/h\*
Throughput Cast iron: max. 90 kg/h\*

\* (test briquetting reserved)





**BrikStar iSwarf 50.** The smart choice!

View top: BrikStar iSwarf 50 in operation in mechanical engineering.

#### Benefit with the BrikStar iSwarf 50

- metal briquettes achieve higher recycling revenues
- recovers coolants and minimizes disposal costs
- reduces the volume of chips produced down to 1/10
- reduces handling costs for storage and transport
- quick to clean.
- therefore short downtimes for material changes
- creates clean working environments
- protects the environment through metal recycling and
- recovery of cooling liquids
- pays for itself even with smaller chip volumes

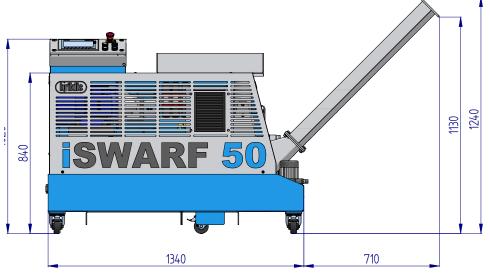
### Fields of application

- all metal cutting, metal processing companies
- suitable for aluminium, steel and grey cast iron

### Installation

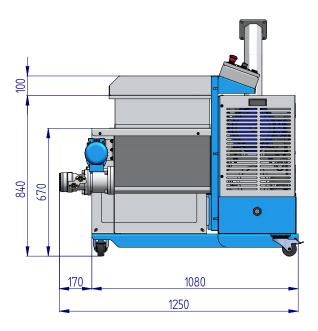
- directly under the conveyor of the machining centre
- energy efficient, automated operation through level sensors
- stand-alone operation. Material is added manually
- chip container/briquette ejector available on the left or right

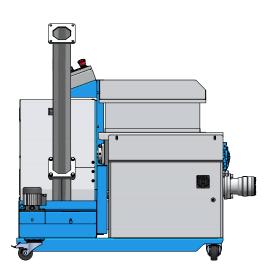
## BrikStar iSwarf 50 Only 1.5 m² floor space, mobile and with all the features of the larger briquetting presses.

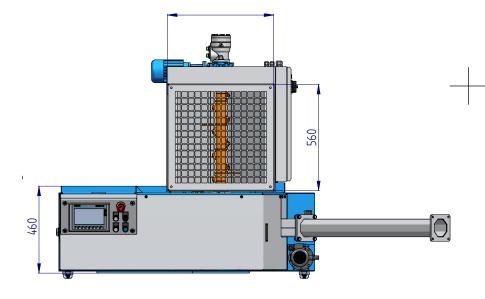


### The technique:

- complete press on base frame, with integr. hydraulic
- machine frame as trough pan, with manual drain valve
- pressing direction:R=right-hand side / L=left-hand side
- starting sensor for automatic start and stop
- stirring shaft to avoid material bridges
- oil cooling device for continuous operation
- sensor-controlled emulsion pump
- control cabinet with SPC-control (Siemens CPU)
- touch-display indicating the running states
- integr. temperature control with safety shut-down
- compact construction, ready for connection and movable without forklift, thanks to rollers







## More performance with options

- briquette ejection optionally R=right / L=left
- shredding attachment for long chips



### BrikStar iSwarf 440/550

This series combines a compact, space saving design with a high throughput. The machine equipment is individually configurable according to customer wishes and needs:

- Integrated emulsion drip tray
- Individually configurable according to customer needs
- Briquette diameter from 45 to 100 mm
- Throughputs from 50 to 600 kg/h
- Variably adjustable briquette density
- Optimum energy efficiency

The models of this series are delivered as a complete press in a frame construction with integrated hydraulics. Numerous options expand the intended purpose and complete the program.



View top:

BrikStar iSwarf with upstream 2 m³ hopper and twin screw for material transport.

View left:

A large touch panel allows easy operation.

## Our solutions increase your recycling revenue by up to 50 percent.





View top:

Spraying device to avoid cold welding of dry materials as an option.

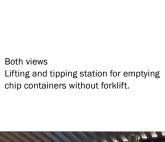
View centre

Integrated coolant lubricant pump with level sensor (option).

View bottom:

Storage tank with 4 screws and roller module (option).







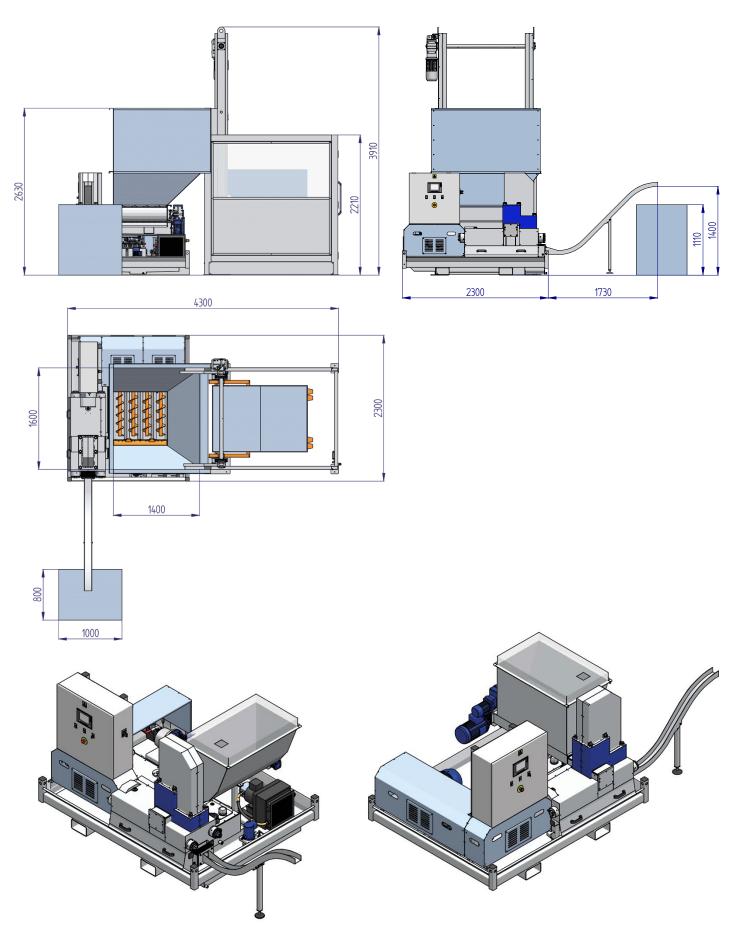


### **Technical data**

|                              |                   | BrikStar<br>iSwarf 440     | BrikStar<br>iSwarf 550 |
|------------------------------|-------------------|----------------------------|------------------------|
| Briquette diameter           |                   | 45 to 70 mm                | 60 to 100 mm           |
| Briquette length             |                   | 40 to 80 mm                | 50 to 110 mm           |
| Hydraulic output             |                   | 4 / 5,5 / 7,5 / 11 kW      | 5,5 / 7,5 / 11 / 15 kW |
| Throughput                   | Aluminium         | 60 to 230 kg/h             | 120 to 450 kg/h        |
|                              | Steel + cast iron | 120 to 330 kg/h            | 150 to 650 kg/h        |
|                              | Non-ferrous metal | 150 to 400 kg/h            | 180 to 700 kg/h        |
| Basic dimensions (L x W x H) |                   | max. 2250 x 2050 x 1590 mm | 2300 x 2160 x 1630 mm  |
| plus briquette trough        |                   | 1230 mm                    | 1290 mm                |

<sup>\*</sup> The throughput of a briquetting machine is greatly dependent on the material properties and bulk material weight. The values indicated are average values for free flowing grey cast iron chips.

## BrikStar iSwarf with lifting-tilting station for forklift-free filling of the briquetting press



View top: BrikStar iSwarf with 4 screw bed, roller module for processing woolly chips and lifting-tilting station.

View bottom: BrikStar iSwarf with agitator shaft container for filling via a conveyor belt.



### **Technical data**

|                    | Unit | BrikStar<br>MD 15/55 | BrikStar<br>MD 15/60 | BrikStar<br>MD 22/70 | BrikStar<br>MD 30/80 | BrikStar<br>MD 45/85 | BrikStar<br>MD 45/90 |
|--------------------|------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Throughput         | kg/h | 400                  | 470                  | 650                  | 850                  | 1000                 | 1200                 |
| Briquette diameter | mm   | 55                   | 60                   | 70                   | 80                   | 85                   | 90                   |
| Power consumption  | kW   | 15                   | 15                   | 22                   | 30                   | 45                   | 45                   |

|                    | Unit | BrikStar<br>M 15/60 | BrikStar<br>M 22/70 | BrikStar<br>M 30/80 | BrikStar<br>M 40/85 | BrikStar<br>M 50/90 |
|--------------------|------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Throughput         | kg/h | 200                 | 350                 | 500                 | 800                 | 1000                |
| Briquette diameter | mm   | 60                  | 70                  | 80                  | 85                  | 90                  |
| Power consumption  | kW   | 15                  | 22                  | 30                  | 37,5                | 47,5                |

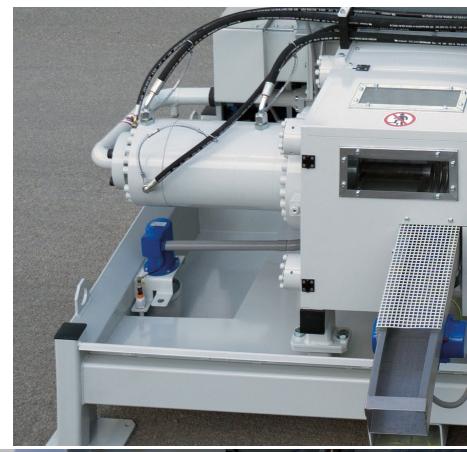
<sup>\*</sup> The throughput of a briquetting machine is greatly dependent on the material properties and bulk material weight. The values indicated are average values for free flowing grey cast iron chips.

# Our briquetting presses reduce your cooling lubricant requirement by up to 95 percent.

View top right
Basic frame designed as a collecting trough for the pressed-out cooling lubricants in the standard version.

View centre right One of the two horizontal press punches and briquette ejection.

View bottom right: Oil cooler included in the scope of delivery.



### **BrikStar M/MD**

Both model series are characterised by the briquettes being produced with double-sided pressing cylinders. Two horizontally arranged cylinders simultaneously press the material from both sides into briquette form.

- Compact, space saving and mobile construction
- Integrated emulsion drip tray
- Individually configurable according to customer needs
- Briquette diameter from 55 to 90 mm
- Throughputs up to 1200 kg/h
- Variably adjustable briquette density
- Optimum energy efficiency
- Also ideal for grinding sludge

Through the use of a second main press cylinder, a counter pressure is achieved and hardly any friction is generated, so that wear is reduced to a minimum. Regardless of the required throughput or briquette diameter, the pressure on the material remains almost identical for all machines.







### **BrikStar iSwarf 800**

Metal briquetting for extremely high chip throughput. Powerful yet compact.

The BrikStar iSwarf 800 metal briquetting plant was specially developed for industrial use. It processes up to 1200 kg of aluminium chips per hour into high-quality briquettes and works autonomously. The compact design of the BrikStar iSwarf 800 reduces the required floor space to a minimum. This means that it can often be installed close to the production line.

### **Properties**

- compact device design
- high chip throughput
   (aluminium, steel, grey cast iron and others)
- easy operation and maintenance
- different briquette diameters (90 mm 130 mm) available

View top: BrikStar iSwarf 800. Compact design, but maximum productivity.

#### View right:

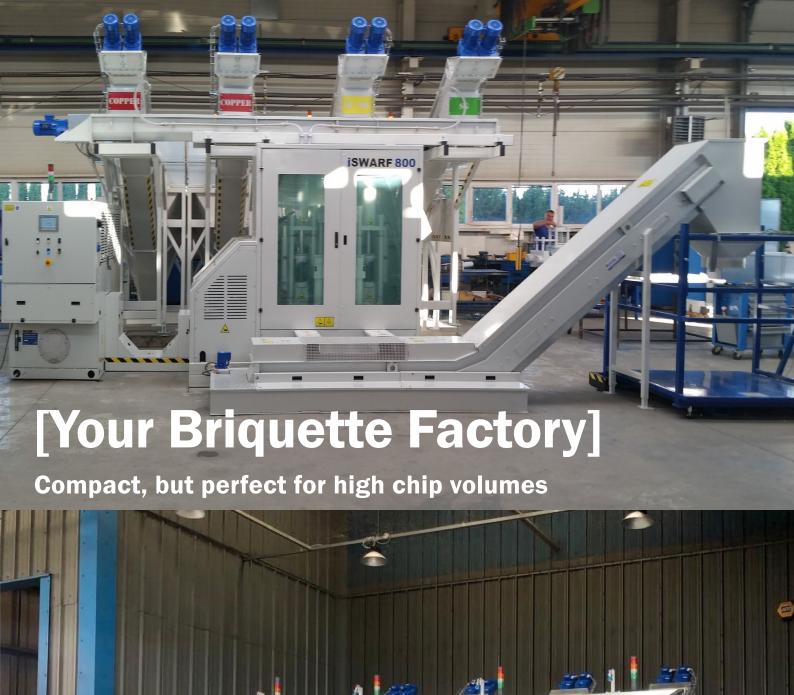
BriKStar iSwarf 800 with briquette weigher for different types of grey cast iron chips. The material is preselected directly at the container and the respective material is pressed according to type.

Used in the automotive industry.

### **Technical data**

Hydraulic output: 30 kW
Briquette diameter: 90 - 130 mm
Throughput Aluminium: max. 1.200 kg/h\*
Throughput Steel: max. 1.500 kg/h\*
Throughput Cast iron: max. 1.500 kg/h\*

<sup>\* (</sup>test briquetting reserved)





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Always one idea ahead