



## Cross-Belt Sweeper (CBSw) (for removal of tramp metal)

Product



**Contact us directly.**

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## What does it do?



Picture of hammerhead about 600 mm wide.

The Cross-Belt Sweeper (CBSw) is designed to remove tramp metal from bulk material being conveyed on a conveyor belt.

Without belt stoppage The CBSw will automatically remove tramp metal by a detection system with a minimal waste of usable bulk material.

The CBSw can be integrated on any belt size, speed, and construction. The CBSw is a cost-effective solution that increases uptime in your operation.

## What's the benefit?

### The Cross-Belt Sweeper (CBSw):

- Is a cost-effective solution for tramp metal removal whether for magnetic or non-magnetic metals.
- Is customized to the client's specific installation and type of tramp metal.
- Is a well-suited retrofit unit and can be integrated almost anywhere on existing conveyor belts.
- Increases the uptime in your operation and saves money without belt stoppage.
- Significantly reduce maintenance costs of the production further on caused by tramp metal.



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## How does it do it?

The unit consists of a rotating counter-weighted sweeper which moves in a 360-degree rotation perpendicular to the material direction. The sweeper is driven by a gear brake motor and the conveyor belt is supported and guided by a pair of inclined rollers or guiding plates. The cover house is equipped with hatches allowing easy inspection, cleaning, and maintenance.

When automatically triggered, the cutter is accelerated by the electric motor. It sweeps through the material stream on the conveyor belt in a circular motion, following the supported shape of the belt.

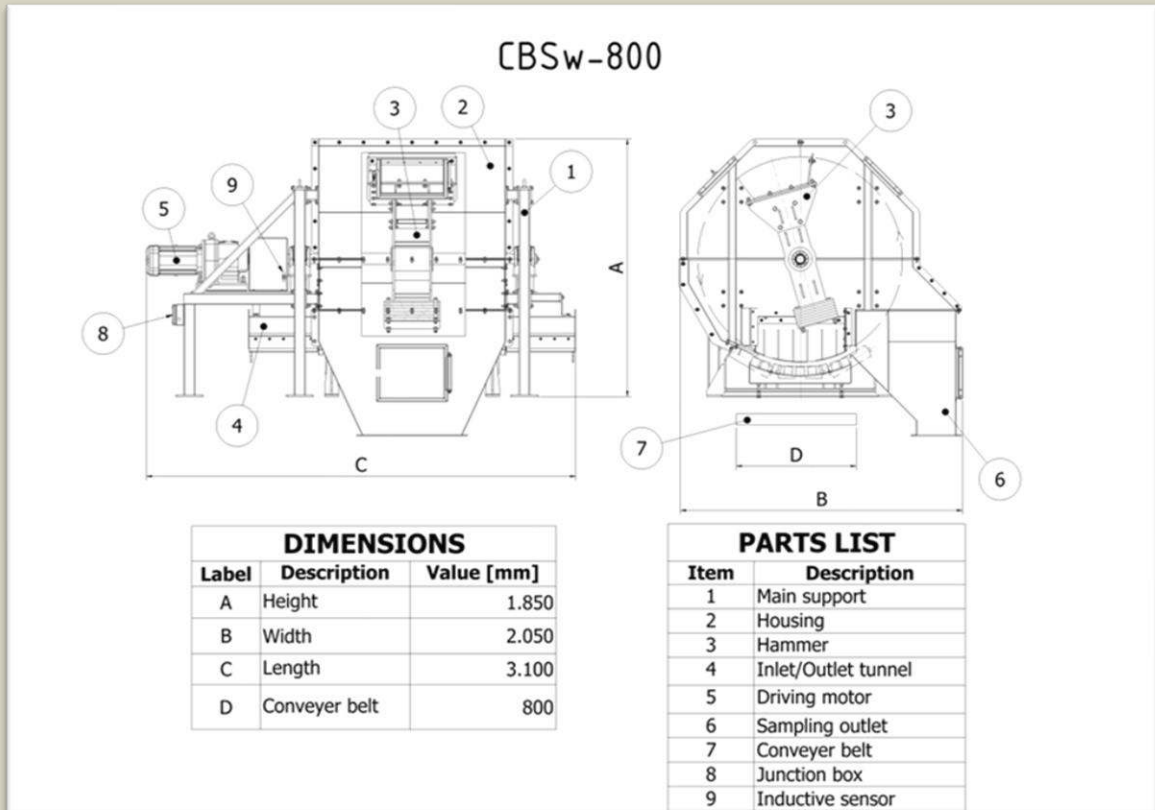
## Specifications:

- **Cutter:** Stainless Steel (AISI304) or painted carbon steel.  
A carbon steel counterweight is installed to reduce the dynamic effects on the support and cutter.
- **Support frame:** Painted carbon steel.
- **Housing:** Stainless Steel plates (AISI304) or painted carbon steel.
- **Gear Motor:** SEW with brake or similar.
- **Sensors:** Inductive type.

The CBSw is delivered with either a local control unit or/and is controlled by a M&W central control cabinet depending on concept and local conditions. The M&W central control cabinet consist of motor control centre, circuit breakers, PLC-system and man-machine interface.

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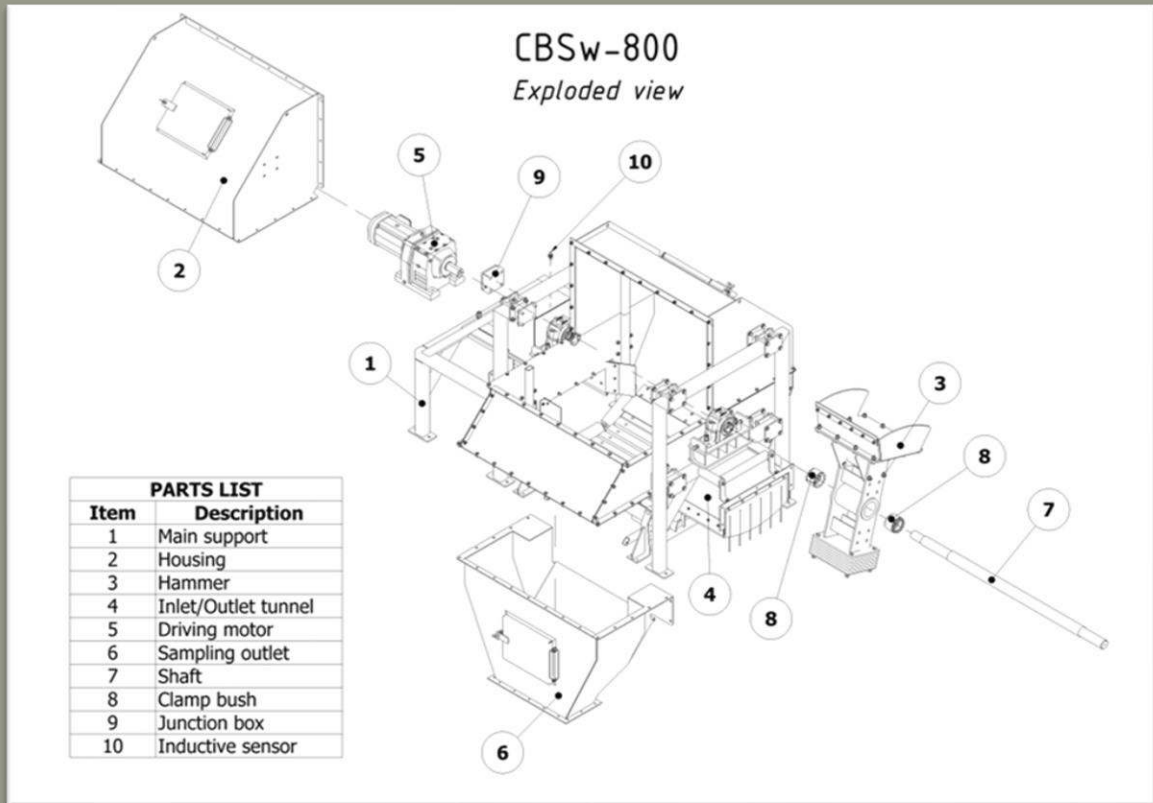
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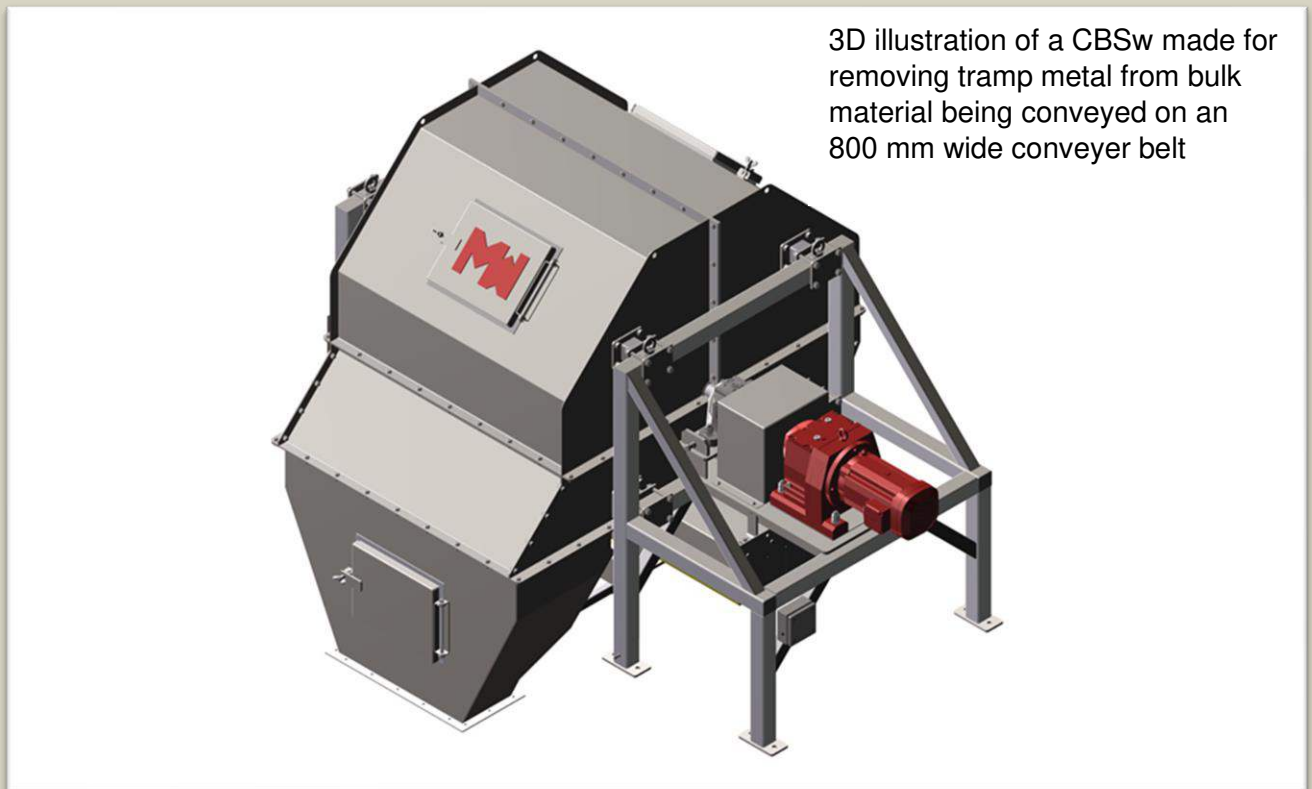
Dimensional Drawing

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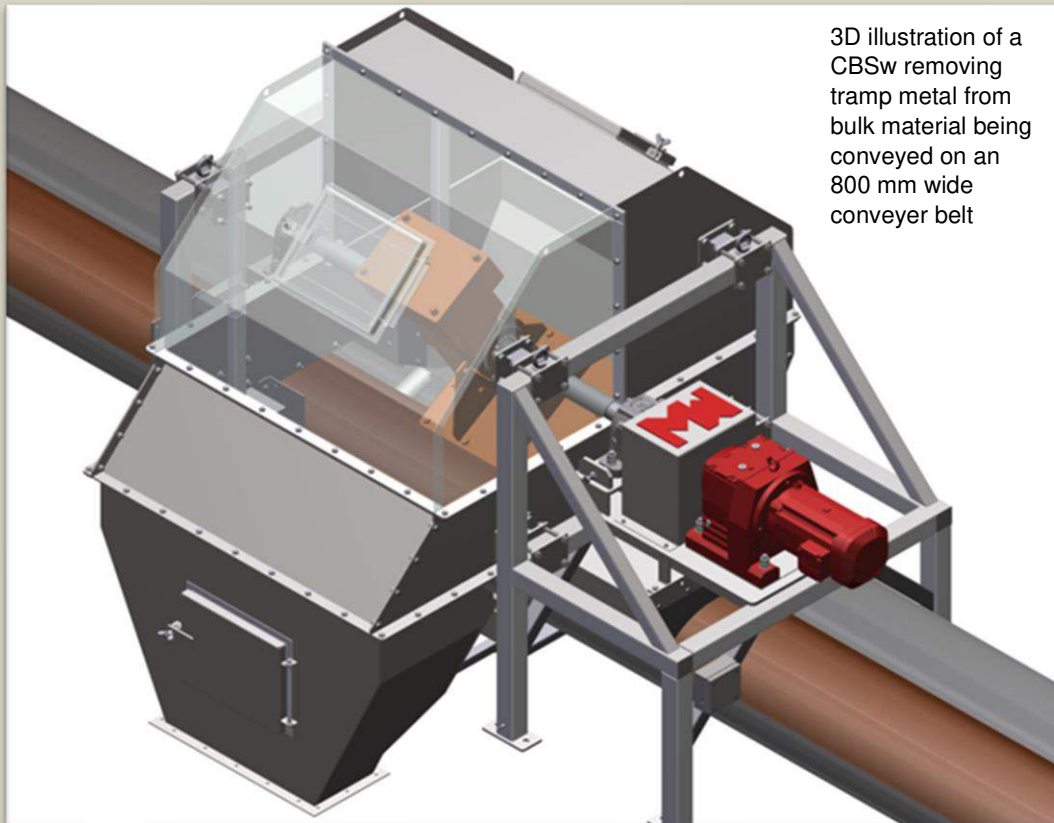
Exploded view



3D Drawing

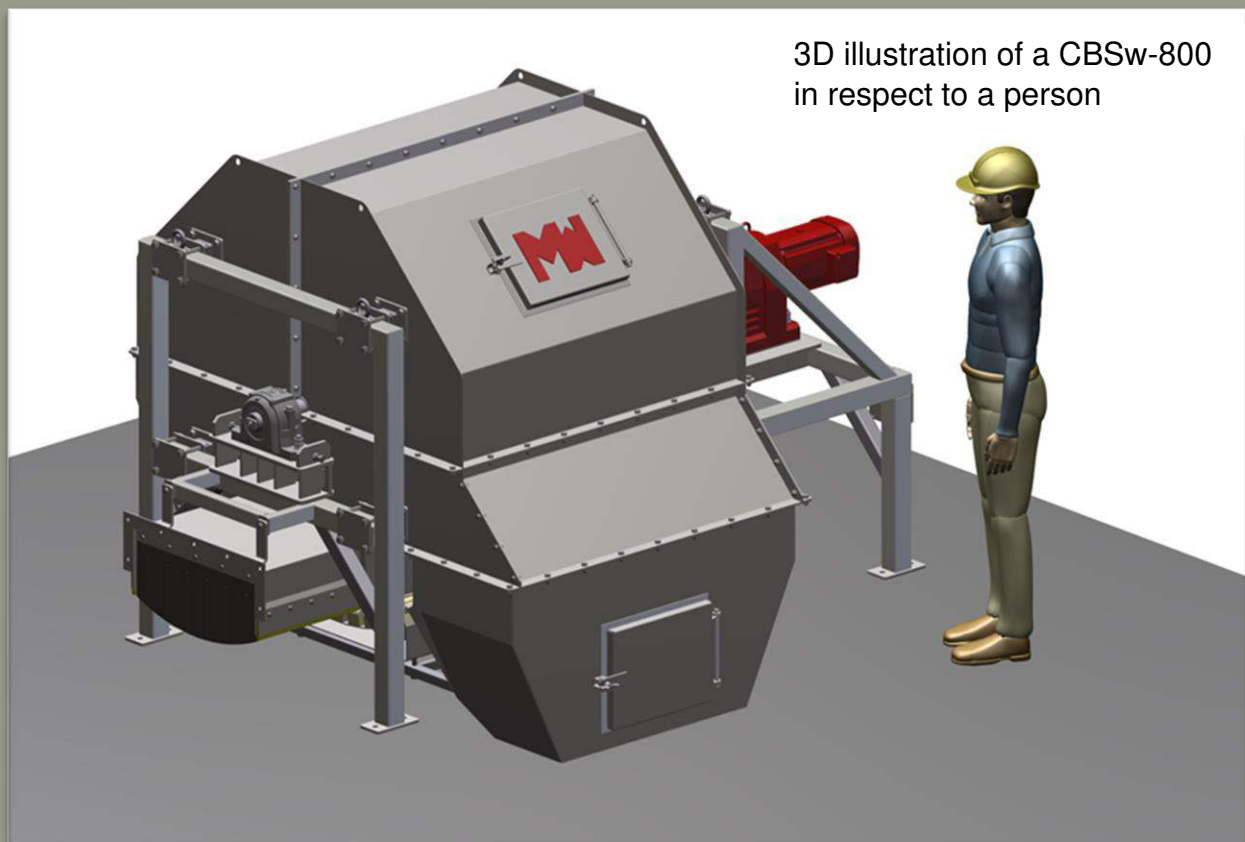
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3D illustration of a CBSw removing tramp metal from bulk material being conveyed on an 800 mm wide conveyer belt

3D Drawing with Material



3D illustration of a CBSw-800 in respect to a person

Illustrative drawing

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## Variants/Options.

### Options

The M&W main control cabinet can exchange signals with the client's control system.

### Customer testimonial 1

*Our conveyor belt transports about 6-8 ton of material every hour. Tramp metal is a well-known and very real threat to our uptime. In the two years since we acquired the **CBSw** from Mark & Wedell it has been triggered up to 450 times daily.*

*At this point, there can be no doubt that the **CBSw** has saved our crushers from expensive damage many times over, and we have had a return on investment in less than 6 months. - Industrial Automation Manager at Etex*



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## What is the standard?

M&W JAWO Sampling equipment and sampling systems operate in accordance with approved international material standards such as ISO, ASME, GOST, EN as well as DS3077 (2013). All sampling equipment and solutions aim for compliance with the principles laid down in the Theory of Sampling (TOS) and gives our customers reliable knowledge of the material properties such as moisture content, particle size distribution, mineral proportions, and content grade essential for commercial, operational, and technical characterization.

## About M&W.



Mark & Wedell A/S (M&W) is a global mechanical/electrical engineering and manufacturing company. M&W serves a solid and growing international customer base within the global mining-, minerals-, metals-, power generation- and big science markets.

We develop, engineer, and produce high quality mechanical and electrical machines, instruments, and solutions. Our brand JAWO and unique know-how is well recognized in our markets and among our customers due to more than 40 years of experience.

M&W JAWO



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