



**Rotary Disc Divider (RDD)**

## What does it do?



The Rotary Disc Divider (RDD) is designed for combined dosing and representative division of almost all types of bulk material e.g. minerals, powders, coal, cement, gravel and wood pellets.

The RDD is an improved version of the Turnstile Divider enabling a better and more continuous dosing and division of material from big bags or material arriving in batches/non-continuous flow. With its built in dosing function material is evenly distributed before division.

## What's the benefit?

The Rotary Disc Divider (RDD):

- Has a built-in dosing function in cases where the sampled material does not come in a continuous flow. The RDD thereby enables a more even distribution of material before division.
- Has a compact design compared to a set-up with both a Dosing Conveyor and a Rotary Tube Divider.
- Is cost effective and easy to install and operate.
- Is designed with steep angles to ensure smooth and reliable flow of sample material.
- Is made with multiple inspection panels making the RDD easy to maintain and inspect.
- Has a stepless and precise adjustment of division ratio.

## How does it do it?

The RDD consists of a top section housing with an upper disc and two scrapers, a center section with a lower disc and a scraper, a drive unit, a rotor which is connected to the scrapers, a bottom section with an adjustable sample outlet(s) and a reject outlet.

There are inspection hatches in both the upper and the center section.

The material is fed vertically to the RDD through the top section. In the top of the RDD, an upper disc is mounted, and the material is scraped off and directed towards an annular opening. This allows the right amount of material to fall to the lower disc, where the material is scraped down to the bottom section.

The division ratio may be adjusted between 1:9 and 1:56 dependent of RDD model and particle size. In the bottom section, the divided material is led through a manually adjustable outlet and the remaining material is led into the reject outlet.

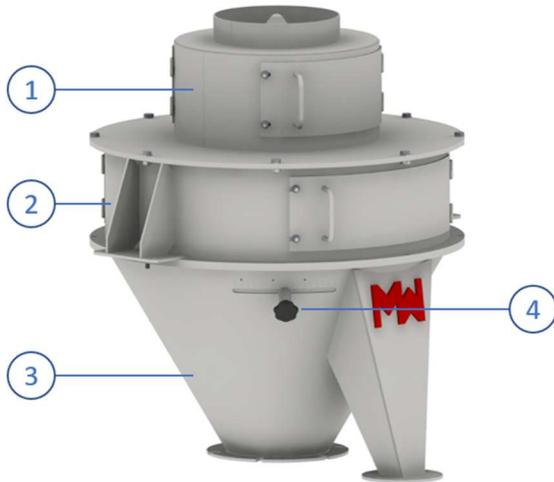
## Specifications.

<b>Material type:</b>	Bulk materials.
<b>Drive unit:</b>	Gear motor.
<b>Sensors:</b>	Induction sensor.
<b>Indicative Rotational speed:</b>	20 rev/min.
<b>Indicative Dimensions (LxWxH):</b>	740x856x875 mm.
<b>Indicative weight:</b>	152 kg.
<b>Housing material:</b>	Stainless Steel AISI 304/316 and/or painted galvanized mild steel.
<b>Feed size/particle size (input):</b>	Up to 30 mm
<b>Division ratio:</b>	Between 1:9 and 1:56.
<b>Sample outlet opening:</b>	Adjustable between 0-160 mm through stepless adjustment.

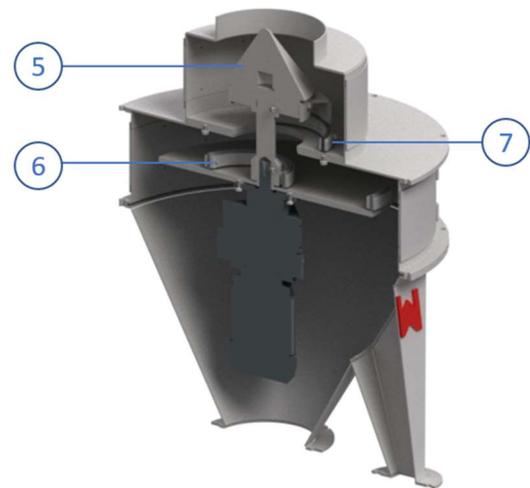
## Drawing.

**RDD-S.**  
*View 1.*

3D View.

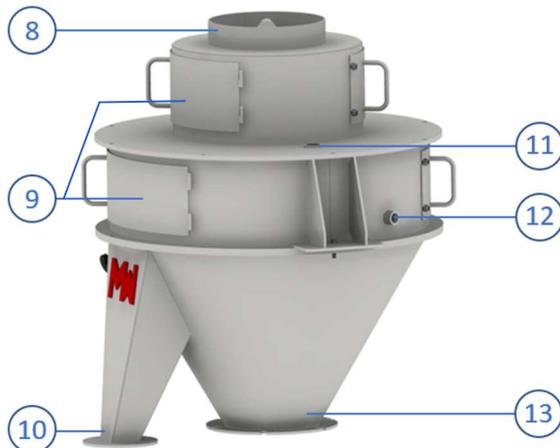


Cross Section.

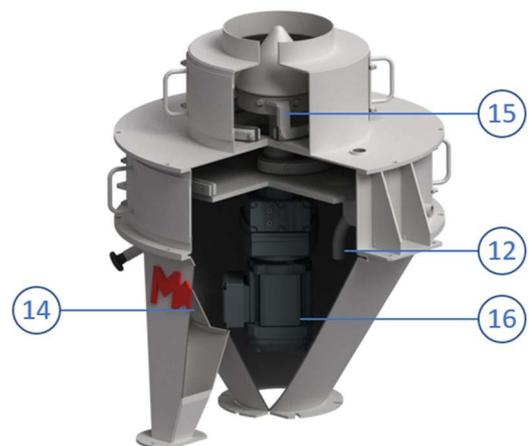


**RDD-S.**  
*View 2.*

3D View.



Cross Section.



1. Upper section
2. Center section
3. Bottom cone
4. Division ratio adjustment
5. Inlet cone
6. Scraper, center section
7. Scraper, upper section
8. Inlet

9. Inspection panel
10. Sample material outlet
11. Induction sensor placement
12. Wire tube
13. Reject material outlet
14. Sample material outlet opening
15. Scraper mount
16. Gear motor

## Variants/Options.

### Variant 1

The **Rotary Disc Divider Single (RDD-S)** has one sample outlet in the bottom section.

### Variant 2

The **Rotary Disc Divider Multiple (RDD-M)** have up to four sample outlets in the bottom section.

### Option 1

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

### Option 2

As an option the RDD can be installed with an air purging system for continuous cleaning of all three sections of the unit.

### Option 3

As an option the RDD can come with a screen built into the inlet hopper for screening of unwanted materials not entering the unit.

### Option 4

As an option the RDD can be made to accommodate ATEX requirements.

### Nota Bene 1

Regarding surface treatment, the RDD can be made with all necessary surfaces to ensure that all material leaves the unit. Additionally, the RDD can be made to withstand abrasive materials as well as other material requirements.

## 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.

## 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.

