



Rotary Tube Divider (RTD)

What does it do?



The Rotary Tube Divider (RTD) is designed for representative mass reduction of bulk material. The RTD can be used for mass reduction of virtually any type of dry materials.

The RTD is a robust, all-round sub-sampling solution. The RTD is used in many multi-stage sampling systems but may also be used as a stand-alone divider.

What's the benefit?

The Rotary Tube Divider (RTD):

- Provides reliable, accurate mass reduction with no risk of cross-contamination between sub-samples.
- Is easy to install and operate.
- Has low maintenance costs.



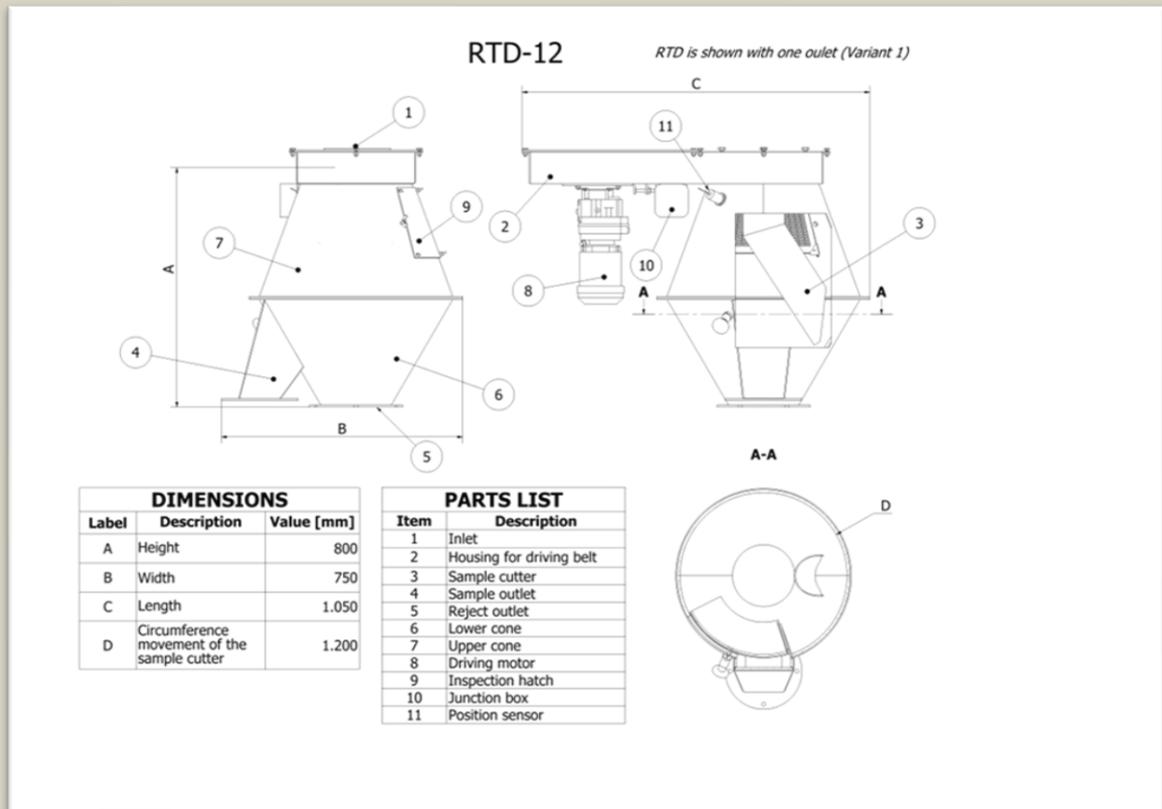
How does it do it?

The RTD consists of a drive unit, a rotating dividing pipe, a top cone with an inspection hatch, a rotation sensor, a bottom cone with a reject outlet and one adjustable sub-sample outlet. The motor unit is connected to a pulley that drives the timing belt and rotates the dividing pipe.

In the bottom section, material is ducted to the periphery of the bottom cone's inner wall where the sub-sampling division ratio is determined by stepless opening of the manually adjustable outlet slit opening.

The division ratio may be adjusted between 1:8 and 1:89 dependent of RTD model and material particle size. The non-sampled material passes directly to the reject outlet(s).

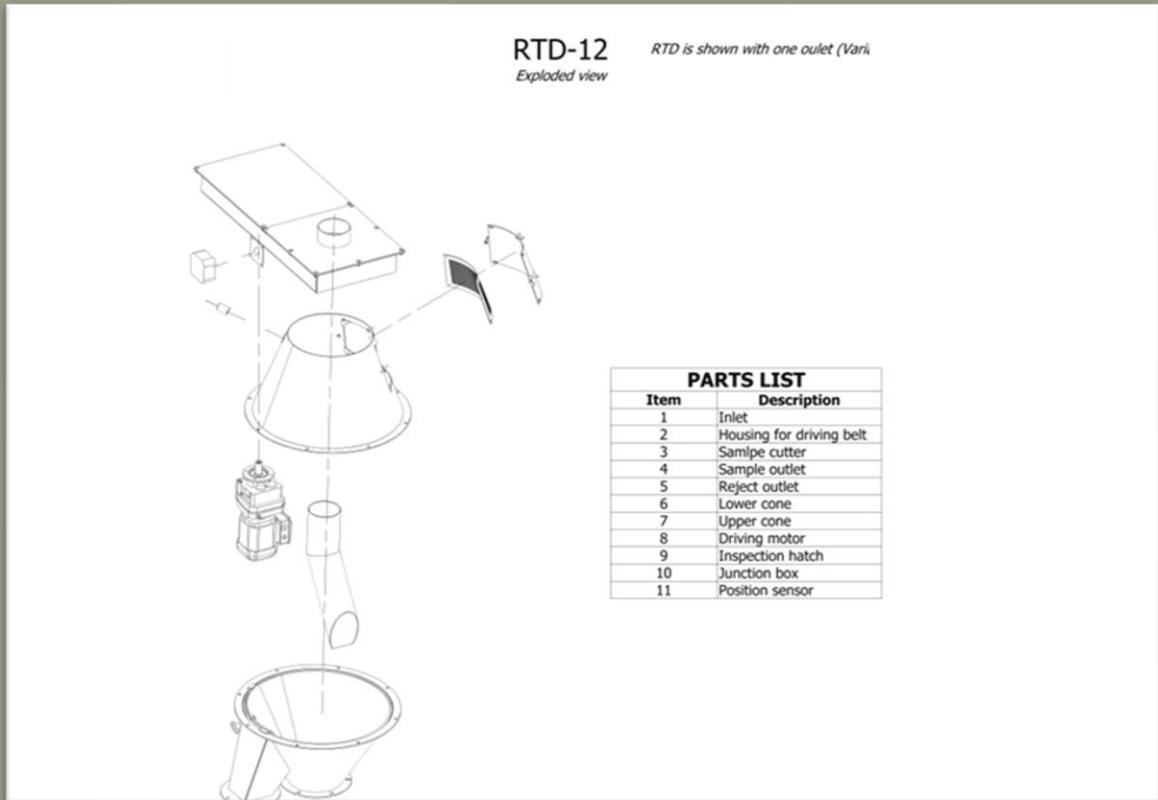
Specifications:



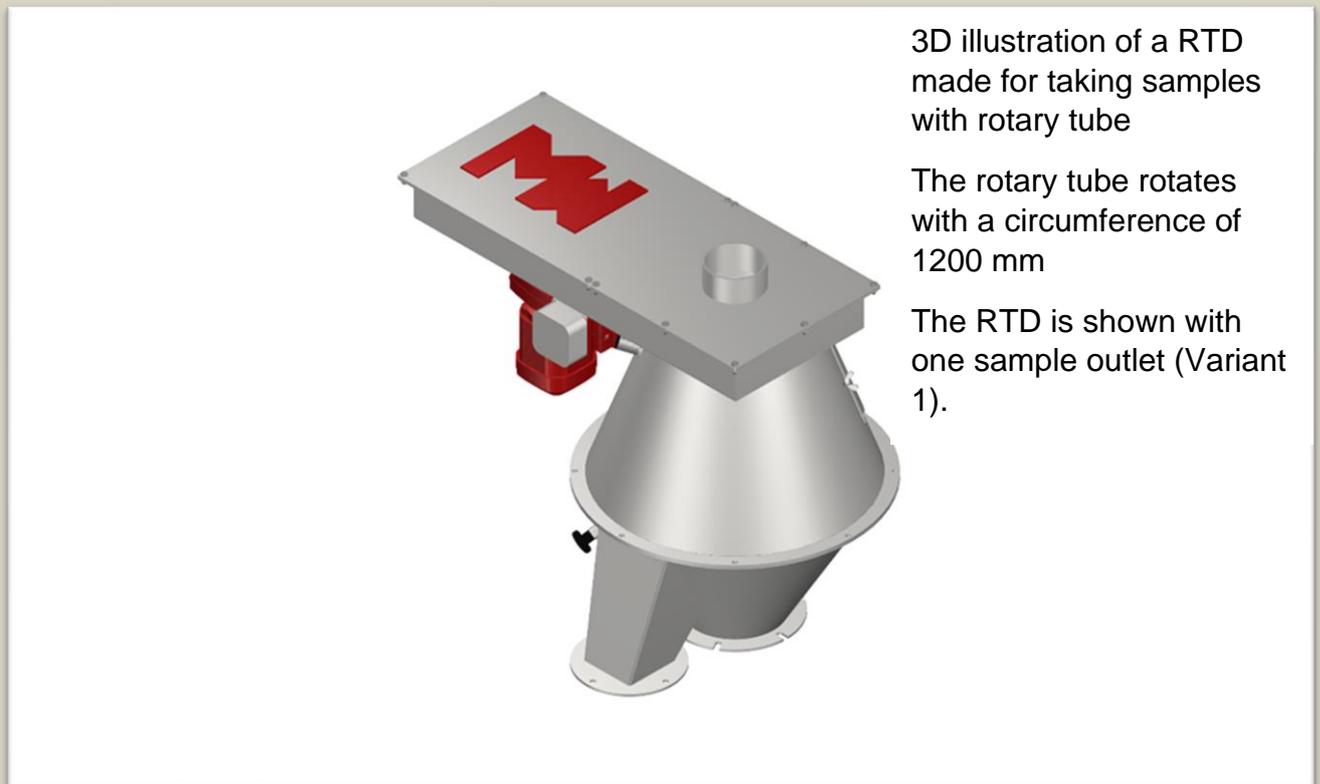
Dimensional Drawing

RTD TYPES, DIMENSIONS AND WEIGHT					
Type	Height (A) [mm]	Width (B) [mm]	Length (C) [mm]	Pitch Circle (D) [mm]	Weight [kg]
8	550	500	700	800	50
12	800	750	1.050	1.200	100
17	1.000	800	1.100	1.700	120
27	1.600	1.350	1.350	2.700	200

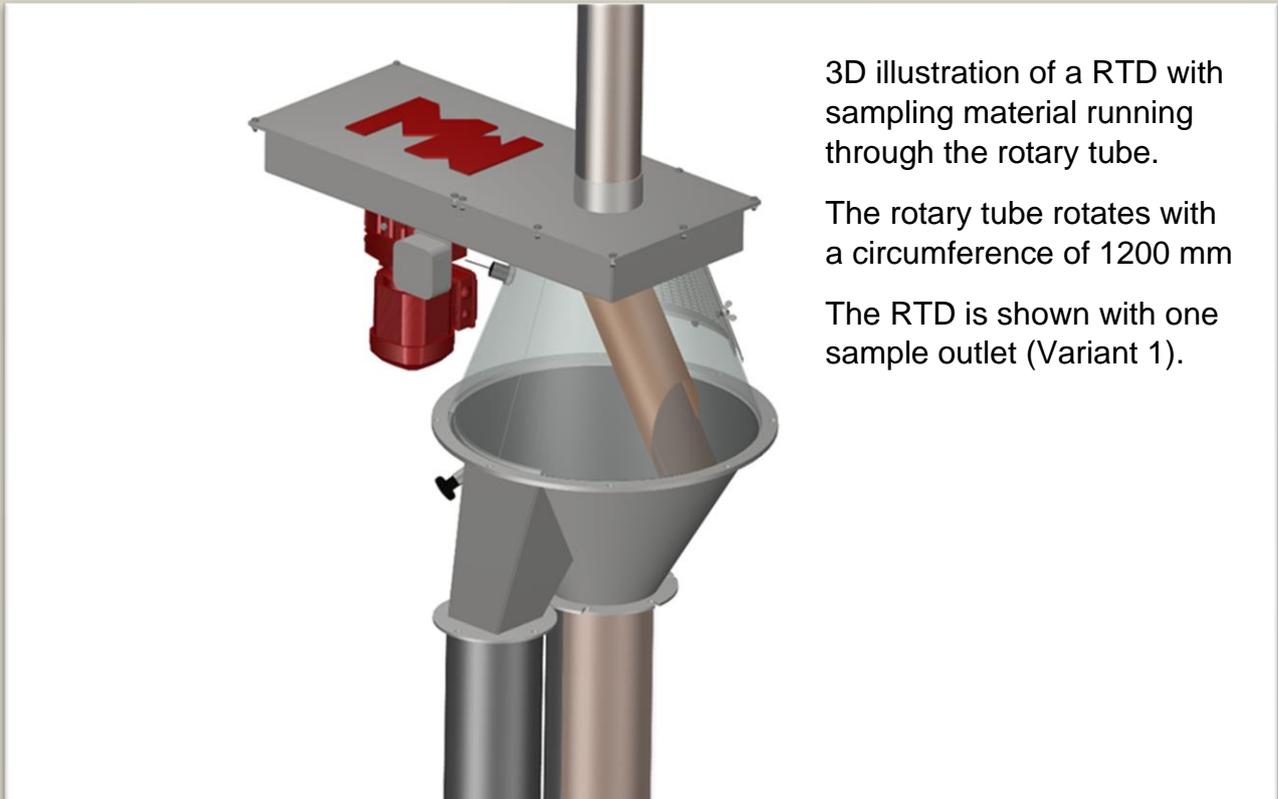
The table consist of indicative values from the previous projects



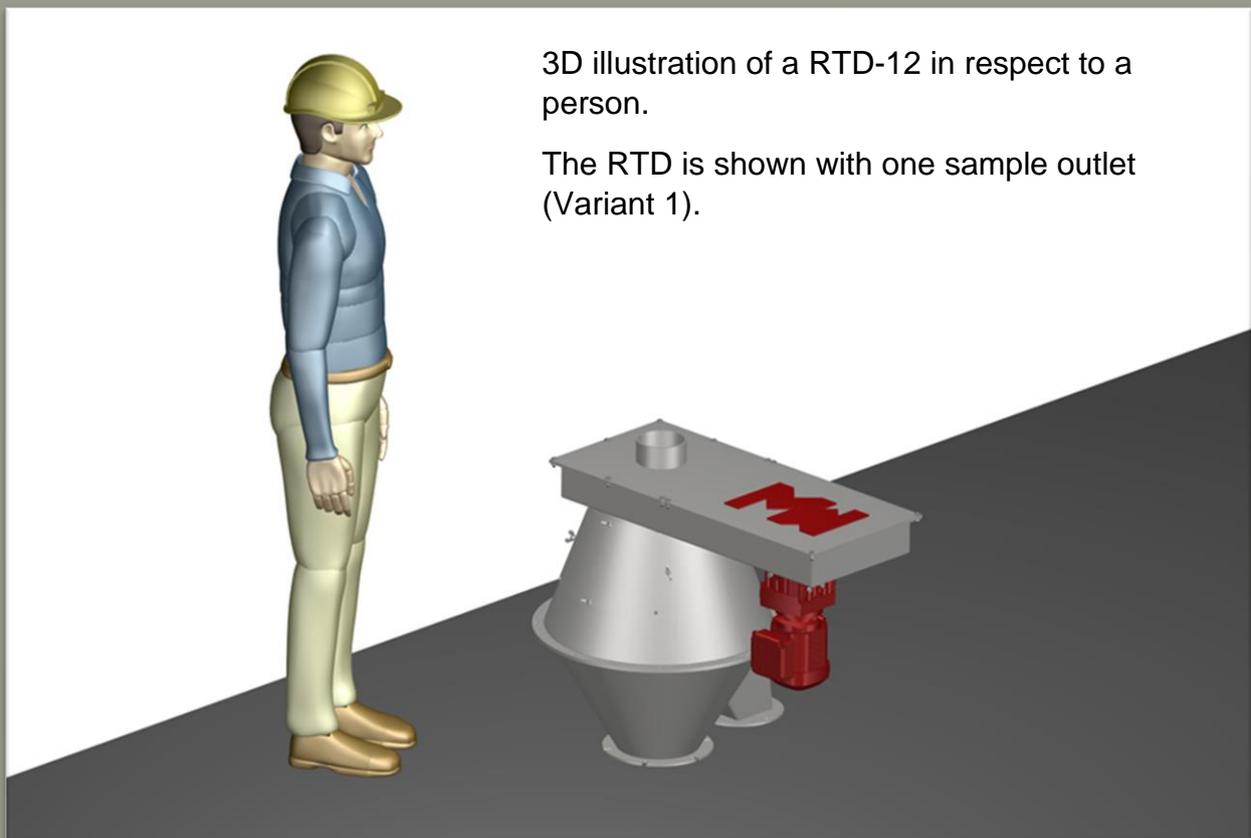
Exploded view



3D Drawing



3D Drawing with Material



Illustrative drawing

Variants/Options.

Variant 1 (standard):

The Rotary Tube Divider Single (RTD-S) has one sample outlet in the bottom section.

Variant 2:

The Rotary Tube Divider Multiple (RTD-M) have up to four sample outlets in the bottom section. The RTD-M is used where several aliquot analyses are needed for each sample (e.g. moisture, PSD, FE-content) or where different quantities of sub-samples are needed for different sample outlets (e.g. 1:15 and 1:25) during the sampling operation.

Option 1.

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

Option 2.

The RTD can be delivered with heat bearings on the lower cone.

Option 3.

The RTD can be delivered with an inner rubber coating in the housing unit to reduce operating noise levels.

Option 4.

The RTD-S (single outlet) can be delivered with a "Virtual Adjustable Divider Standard" (VAD-S) by means of an electronic controller. This means the division ratio can be electronically changes. The RTD-S can also be delivered with a VAD-Precision that in addition to the electronic.

Nota Bene

The VAD can be retrofitted on any M&W RTD that is delivered after 2010.



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.