Vibrating Washing Drum

- **Designed for cleaning of natural rock**
- **Throughputs up to 200 t/h**
- **Low energy consumption**
- **Low water consumption**
- **Excellent cleaning effect by using the 'Micro throw'-principle**
- **Easy maintenance**

Application

Schenck Vibrating Washing Drums can be used wherever

- recovered natural rock is to be cleaned from strongly adhesive impurities,
- washing screening machines with water spraying cannot remove the adhesive impurities,

in order to keep downstream production processes and thus the final product free from impurities.

Vibrating Washing Drums are designed for throughputs up to 200 t/h and for the reduction of operating costs:

- Up to 30 % lower energy consumption compared to conventional washing systems
- Up to 50 % reduced water consumption due to the high quality of the washing process
- Minimum maintenance due to the long service life and the fact that there are no parts rotating inside the material flow (easy access of wear-resistant internal lining).

Construction

The standard Schenck Vibrating Washing Drum comprises:

- Vibrating steel drum with wear-resistant internal lining
- Integrated water spraying
- Vibrating drum resting on springs
- Directional force exciters with drive motor, universal-joint and intermediate shafts.

In addition, vibrating drum can be mounted on isolating frame which reduces the dynamic forces resulting from vibrating construction by more than 95 %.

After washing, screening machines for dewatering and/or classifying can be used.

For controlled material infeed, or totalization of cleaned material, belt weighers can be installed.

To be prepared for unexpected downtimes and to avoid malfunctions, drive unit monitoring can be provided as option.

Functions

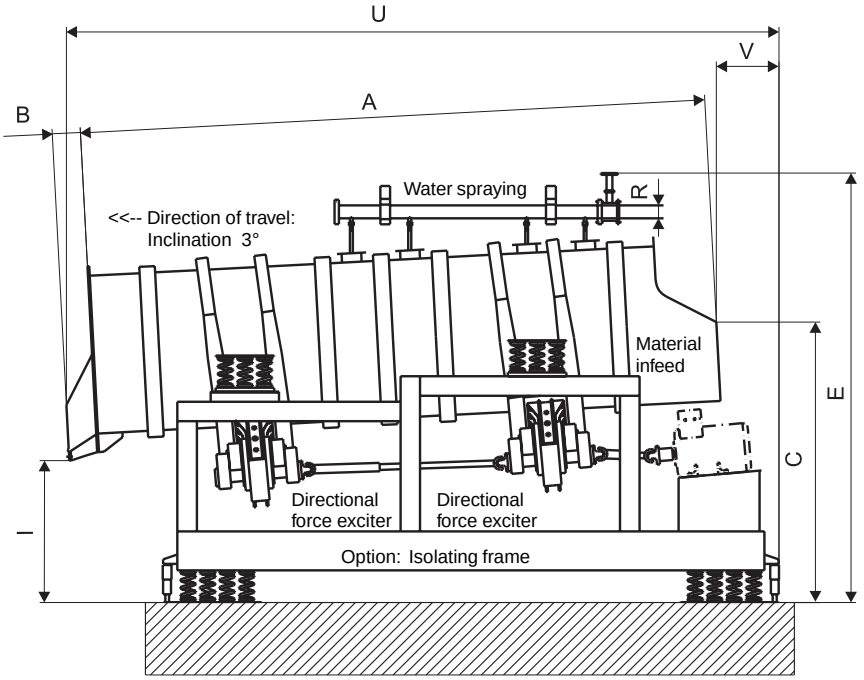
Schenck Vibrating Washing Drums operate according to the well-known „Micro throw" principle developed by Schenck engineers. By means of small throw phases trigged by linear vibrations of construction, individual material particles are brought to a conveying and tumbeling movement.

Rock recovered (and crushed) enters into the drum while it is sprayed with water. The vibrating washing drum resting on springs is caused to vibrate in linear fashion by directional force exciters. These vibrations ensure that the water/rock mix passes through the drum in spiral-type form. Through permanent tumbling, the impurities adhering to the rock are rubbed off.

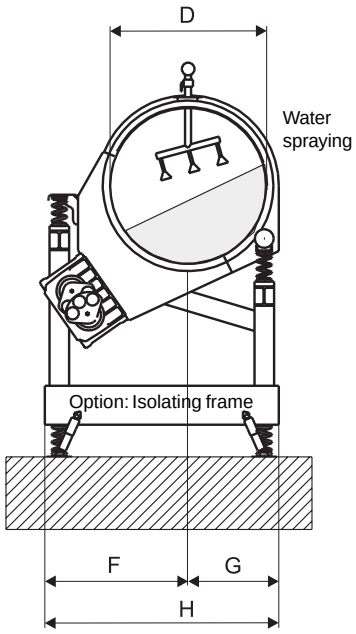
Dimensions (mm)

Vibrating Washing Drum

Side view



Front view



Type	Vibrating Drum Size [mm]									System Size [mm]		
	A	B	C	D	E	F	G	H	I (at 3°indination)	R	U	V
BQT 120	6410	290	2880	1600	4410	1520	930	2450	1460	133	7310	650
BQT 200	6700	300	3380	2000	5200	1900	1200	3100	1700	133	7470	550

Technical Data

	Vibrating Washing Drum BQT 120	Vibrating Washing Drum BQT 200
Max. throughput	120 t/h	200 t/h
Drum diameter	1600 mm	2000 mm
Drum length incl. outlet	6700 mm	7000 mm
Space requirements (including isolating frame)	7310 x 4410 x 2400 mm	7470 x 5200 x 3100 mm
Inclination angle	3° - 5°	3° - 5°
Directional force exciter	2 x type DF 501 V	2 x type DF 601 S
Drive power	37 kW	55 kW
Max. rock size	up to 250 mm	up to 250 mm
Water requirements	apr. 0,5 m^3 per 1 t/h throughput	apr. 0,5 m^3 per 1 t/h throughput

Options

Standard equipment can be completed by a variety of options for upstream and downstream processes:

- Isolating frame including spring elements for optimum vibration damping
- VIBROMAC for machine monitoring with vibrating sensors
- Screening machines for dewatering and/or separation
- Special sizes for installation into existing systems (upon request)
- Belt weighers for integration into the conveying line, for controlled material infeed or acquisition/totalization of cleaned material.

Ordering Data

For us, to be able to process your order smoothly and promptly, please let us have the following data:

Material .....
Bulk density ..... [t/m^3]
Feed rate ..... [t/h]
Grain size ..... [mm]
Grain composition .....
Type of impurity .....

Notes:

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