AZO Cyclone Screener type DA 650 Vario – the new screener generation

Patent No. EP0917911 / US6193072

Control screening

Safety screening

Fractioning

Separation of foreign particles

Breaking of lumps

Aeration of products

Preferred applications

The Type DA 650 Vario cyclone screener has reinvented cyclonic screening technology. The special feature of this unit is the fact that, because of the built-in self dosing device, no additional upstream dosing unit is required. The dosing capacity can be adapted to specific process requirements by means of the frequency converter. To cope with a wide range of differing products, screening capacities or mesh sizes, the screener output can be adapted by combining different dosing modules with the screener module.

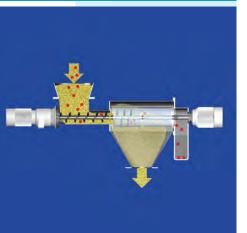
Special advantages

- · Low overall height
- No additional dosing unit required
- Completely extractable without the need for tools
- Drive unit together with dosing screw can be removed and swivelled to the side by releasing quick release fasteners
- Drive unit together with screen basket can be extracted and swivelled, for easy and fast inspection of the screen basket
- Chromium-nickel-steel design with various surface finishes

NEW

- Inlet area free of dead space
- Dosing module with trickle guard
- Optimum adaptation to throughput and mesh size
- Large output range
- Retrofittable at any time

THE INNOVATION



Large output range
Future-proof retrofit
Optimum layout



How it works

The bulk material enters the dosing screw via the product inlet and is transferred into the screener housing. The dosing rate of the bulk material required for the screening operation can be set to product-specific values by adjusting a frequency converter for the screw speed. The bulk material is picked up by the separately driven intake distributors with agitator bars and gently swirled through the screen basket. The fines drop through the screen basket into the fines outlet while the coarse material is transferred to the coarse material outlet where it is discharged. For inspection purposes, the screen basket can be easily pulled out and swivelled to the side of the housing by means of a special extraction device with quick release fasteners. This enables detailed inspection and fast replacement of the screen if necessary. The dosing screw can also be pulled out and swivelled to the side. All connections relevant to safety are protected by electrical safety devices (safety switches) which immediately

shut down the machine when it is opened. The screen fabric, which is mounted on rings, can vibrate and therefore clean itself automatically. The built-in baffle prevents that too much fine material getting into the coarse product outlet.



AZO SOLIDS Innovation

Cyclone screener type DA 650 Vario



Cyclone screener type DA 650 Vario on mobile frame, including plug-in controller



Adapter frame for easy installation of replaceable dosing modules



The screen and infeed can be extracted and swivelled to the side for quick inspection and cleaning

Specific advantages in detail:



Various connection options between dosing and screening modules: bayonet catch, flange connection, welded



Inlet area free of dead space minimises product residue in dosing module



Trickle guard prevents soiling when removing the dosing screw



Coarse product collecting hopper with bayonet catch for easy removal without tools



Tri-Clamp 12" product inlet

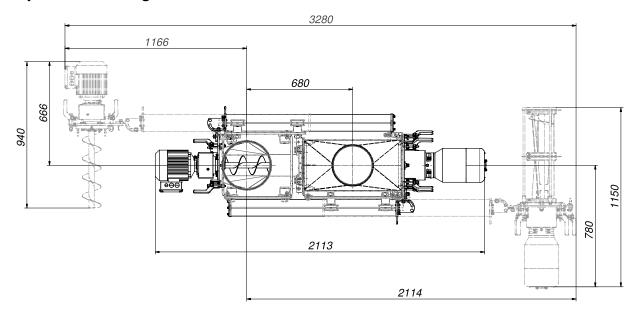


Tri-Clamp 10" product outlet

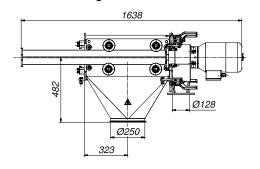


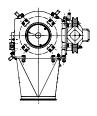
Quick release clamps made of stainless steel

Specific advantages in detail:

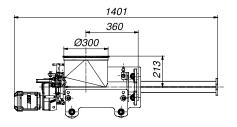


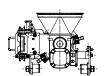
Screener housing



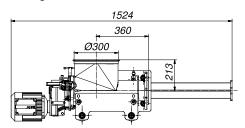


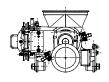
Dosing screw DFS 70





Dosing screw DFS 140





Mechanical system			
Weight	approx. 250 kg		
Product inlet	Ø 300 mm		
Fine-product outlet	Ø 250 mm		
Coarse-product outlet	Ø 128 mm		
Distance between	680 mm		
product inlet and fines outlet			
Electrical data	Connected load [kVV]	Theoretic volu- metric flow rate at nominal	Control range with FU 20 - 87 Hz
		speed [l/h]	[l/h]
Dosing screw DFS 70	0,37	680	270 - 1180
Dosing screw DFS 100	0,75	2615	1150 - 4550
Dosing screw DFS 140	1,10	5965	2385 - 10380
Dosing screw DFS 170	1,50	9455	3782 - 16451
Rotor	1,50		
Dosing screw drive	400 V~, frequency controllable		
Speed dosing screw	appropx. 88 rpm (50 Hz)		
Speed range	40 - 150 rpm		
Rotor drive	1,5 kW, 400 V~		
Rotor speed	720 rpm (50 Hz)		
Speed range (opt.)	430 - 860 rpm		
Protection class	IP 54		
Noise level	< 70dB(A)		
Air purged bearing			
Compressed air	6 bar		
Compressed air consumption	approx. 140 standard litres per hour and bearing point		
Power supply	24 V / DC (110 V / AC)		

