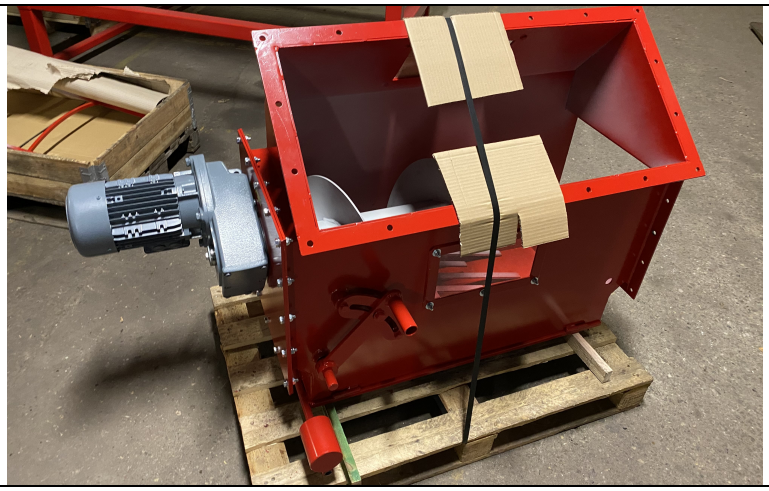
Data Sheet	ST - stone trap

januar 11, 2021

Picture: Stone trap with auger	
Machine function	Stone trap The stone trap work with gravity and sorting. The material "sorting" starts before it arrives in the stone trap and the stone trap is just the last step in a chain of handling: - Bale Breaker The bale breaker works in an angle of 25 degree, when straw bales are "ripped up" by the bale breaker, the heavier particles, stones, grain etc, falls down first and into the TDA auger - TDA auger the material is conveyed at an angle of 25 degree in the TDA auger, during this transport all smaller particles and heavier stones fall to the bottom of the auger before reaching the auger outlet - Scratcher At the outlet of the TDA auger is places a scratcher/ripper that ensures all straw material is getting out of the TDA auger, and rips apart any remaining lump/birds-nest in the straw. The scratcher separates again the straw and heavier particles into straw in the top and particles in the bottom and throughs all material into the stone trap. The suction is also working inside the scratcher, there is air inlet just above the scratcher Stone trap the material falls/is thrown down into an almost vertical line to the stone trap. In the bottom of the stone trap there is a grid with openings allowing stones, grain etc, to pass through, but also hold back the straw. The straw material makes a 90 degree turn in the stone trap and only light material that can be air born, is pneumatically transported out sideways of the stone trap. To ensure this function, there cannot be too much air suction, that is why there is a conveying auger inside the stone trap opposite the outlet, to make sure that there is no build-up of straw, and all straw gets to the pipe inlet. The air suction inside the sone trap is coming from above and all the way out from the bale breaker, to ensure negative pressure, thus ensuring no dust comes out of the machine and

	also from above the TDA outlet down through the Scratcher, and also from below the adjustable “bomb doors” on the stone trap, that allows stones from time to time to fall out by gravity, and quick being closed again by contra weights in the “bomb doors”. - Piping and air suction The piping goes straight in a 90-degree angle up, to ensure that any stone that may have found a way, will roll back out again, the air suction and speed is not big enough to suck it up, and it falls back into the trap. - Dimensioning Air suction - machines are dimensioned (TDA, Scratcher, stone trap and piping), to the material capacity, so the air speed is in balance. - Filtering/fragmentation size The stone trap is filtering down to sand corn size, rape grain etc. You can see this in the pictures in the enclosed document .
Machine number	1039-283 - TDA 400: outlet 400x400 1039-282 - TDA 500: outlet 400x600 TDA 600: 1039-281 - outlet 500x600
Machine paint	Standard ISO 12944-5 category C2. Machines, guards etc. comes in a color type RAL 3001 red suitable for indoor, non corrosive environment - water and oil resistant -15 to + 60 degrees C, surface purified with alkaline degreaser, painted with a machine primer and here after coating paint.
Custom tariff number	84369900

Dimensions	TDA	Width	Length	Height	Weight
	400	400	1525	980	85
	500	600	1740	980	98
	600	600	1950	1170	115

Power konsumption kW	1,1 kW
Starter and wiring	DOL, 4 x 1,5 mm^2
Standard	DS/EN 60204-1:2006 Safety of Machinery - Electrical Equipment of Machines, DS/EN ISO 13850 of January 29th 2007 emergency stop, DS/EN ISO 13849-1 safety-related parts of control systems, DS/EN 60204-1: 2006, cable installation method E

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RISK ASSESMENT - Machine	This machine cannot work as a “Stand Alone”, and can therefore not be delivered with a CE marking. There is no risk for dust explosion in the machine.