

FSMG Casting cooler

FSMG casting coolers are closed heavy duty resonance-type conveyors with many special design features. They are typically installed in the foundries operating a green sand mouldline. The FSMG casting cooler is directly installed after the shake-out conveyor. Basically, these machines are mass-compensated resonance type conveyors. Active mass compensation blocks are installed under the trough in a regular distance to compensate the dynamic forces within the machine; this avoids transmission of excessive dynamic forces in the foundation. The conveying trough vibrates at very low frequencies and a moderate stroke. The vibrating parameters are built that the castings do not jump but slide smoothly and slowly.

The machine is driven via eccentric crank drive unit with a belt drive. The vibrating trough is closed with a hood and designed to be air proof. A high velocity counter-current cooling air flow is forced towards the flow channel of the casting conveyors against the flow direction of the castings to cool them down from approx. 600°C to 80°C. If demanded, the cooling process could be supported by a temperature probe controlled, pulse width regulated water injection system. Standard widths: 1600,1800,2000,2500 und 3200 mm. Lengths up to 60.000 mm.



Properties:

- + Minor transmission of dynamic forces in the basement
- + Quite, smooth conveying process, no micro throw movements
- + Lengths deliverable up to 60m in one piece
- + Machine could be separated easily for transport and erection, low height of construction
- + No concrete filled pieces inside the machine, massive steel construction
- + Low energy consumption
- + Safe operation and start up under high load
- + Individual calculation for the customers with a special software under the consideration of all given parameters
- + Thermo dynamic and energetic the state of the art cooling principle
- + Best possible cooling air consumption / casting cooling result ratio