

Fibre Dosing For All Types of Steel and Synthetic Fibres



Steel Fibre Dosing Equipment



Function

The doser is filled with steel fibres from paperbags, boxes or big-bags. The desired batch, in kg, is set on a weighing instrument or in the mixing computer. The fibres are fed into the mixer, or together by the charge of the concrete. Direct addition into the truck mixer is also possible.

Design

A cylindrical container, with a spirally shaped feeder coil on its inside, is mounted on a rigid framework with 2 vibration motors attached to it. The container can be removable with the option of additional containers for quick change of fibre type. The equipment complies with CE and EMC directives.

Feeding capacity and tray content

The dosing speed in kg/min varies depending on type of fibre as well as fibre level in the doser. The doser filling capacity in kg, varies also depending on the type of fibre. The dosers are suitable for dosing of loose steel fibres with L/D ratio of max 60, all types of glued steel fibre, and the most common synthetic fibres. For dosing of loose steel fibres with an aspect ratio above 60, models with SR design are offered.

Power supply

Our standard doser are designed and built for 220 -400V/3ph/50 Hz. Dosers adapted for other voltages and frequencies can also be supplied upon demand.

Weighing / control system

The fibre dosers are mounted on loadcells using negative weighing with two options of control systems, MS and FS. The control system type MS is a complete system with integrated weighing automation while type FS is used for total integration of the unit into the concrete mixing computer system. With the FS control system, start/stop of the doser is controlled by the mixing computer system. The Dosing accuracy reaches ± 1 to 2 kg for steel fibres and final accuracy is dependent on the integration by the on-site control system.

Installation and start-up

The units are delivered ready for a quick installation and instant connection. The bigger units can be mounted on concrete foundations or, if in a steel construction, minimum counter weight is required accordingly.

References

Today, more than 1100 fibre dosing units are installed in over 50 countries. Reference lists and contacts upon request.



Steel fibre dosing data:

Model	Dosing Speed (kg/min*)	Volume (litre**)
MD75	10 - 30	150
MD75SR	10 - 30	150
MD250	20 - 75	400
MD250SR	20 - 75	400
MD300	30- 100	1100
MD300SR	30 - 100	1100
MD400	40 -150	1800
MD400SR	40 -150	1800
MD450	60 - 160	2200
MD500	60 - 180	3000
SF1200	60 - 200	3000
SF1200SR	60 - 200	3000
SF2400	60 - 200	4500

* The capacity varies, depending on type of fibre.
**Doser total container volume. Filling capacity in kg varies depending on type of fibre.



Best Fibre Dosing Systems for Your Fibre Concrete



Installation example of 2 pcs of model MD250SR in Germany. Dosing two different types of micro steel fibre with dosing speed at 25 kg/min.

Installation example in Finland.

Dosage feeder mounted on a concrete slab. The fibres are transported via a conveyer belt in connection with the discharge from the mixer.



Installation example of 2 pcs MD500 in Japan.

Dual dosing equipment for optimisation of steel fibre concrete production for flooring and shotcrete.



Synthetic Fibre Dosing Equipment



Dosing unit type MD500 + MD1200SR in Finland Dual dosing equipments for dosing of macro synthetic fibres in pucks and steel fibres.

Function

The fibre doser is filled with synthetic fibres from paperbags, boxes or big-bags. The desired batch, in kg, is set on a weighing instrument or in the mixing computer. The fibres are fed into the mixer, or together by the charge of the concrete. Direct addition into the truck mixer is also possible.

Design

A cylindrical container, with a spirally shaped feeder coil on its inside, is mounted on a rigid framework with 2 vibration motors attached to it. The container can be removable with the option of additional containers for quick change of fibre type. The equipment complies with CE and EMC directives.

Feeding capacity and tray content

The capacity in kg/min varies depending on type of fibre as well as fibre level in the doser. The doser filling capacity in kg varies also depending on the type of fibre. The dosers are suitable for dosing of any loose micro- or macro synthetic fibres with maximum length of 30 mm or macro synthetic fibres in pucks. The dosers can also be used for most common steel fibres. For dosing of loose macro synthetic fibres with lengths over 30 mm, Incite has also solutions!

Power supply

Our standard doser are designed and built for 220 -400V/3ph/50 Hz. Dosers adapted for other voltages and frequencies can be supplied upon demand.

Weighing / control system

The fibre dosers are mounted on loadcells using negative weighing with two options of control systems, MS and FS. The control system type MS is a complete system with integrated weighing automation while type FS is used for total integration of the unit into the concrete mixing computer system. With the FS control system, start/stop of the doser is controlled by the mixing computer system. The Dosing accuracy reaches ± 100 to 200 grams for synthetic fibres and final accuracy is dependent on the integration by the on-site control system.

Installation and start-up

The units are delivered ready for a quick installation and instant connection. Installation on concrete slabs or in steel constructions with a counterweight. Weather and wind protection is necessary for synthetic fibres!

References

Today, more than 1100 fibre dosing units are installed in over 50 countries. Reference lists and contacts upon request. Reference lists and contacts upon request.



Dosing unit type MD75 Installed in CERIB - central





Dosing unit type MD500

dosing of macro synthetic fibres for precast concrete.





Dosing system MD400 with weigh-belt High precision dosing of micro synthetic fibres. Dosing accuracy: ±10 g

Quality control your fibre concrete production easily from your control room.



Model	Dosing Speed (kg/min*)	Volume (litre**)
PPE40	0,5 - 2	40
MD75	1 - 3	160
MD250	1 - 7	450
MD300	2 - 8	1100
MD400	4 - 10	1800
MD450	8 - 15	1800
MD500	10 - 25	3000
VSD1400BB	8 - 25	1400

* The capacity varies, depending on type of fibre.

**Doser total container volume. Filling capacity in kg varies depending on type of fibre.



Dosing unit model MD400 installed in Switzerland 2015.

doser with up to 200 kg PP-fibre content. Feeding capacity: up to 15 kg/min.





Dosing unit type MD400SR + VSD1400BB installation in France

Dosing of loose macro fibres with doser content 300 kg and feeding capacity at 15 kg/min. Dosing of steel fibres in MD400SR with dosing speed at 120 kg/min.

Dosing unit type MD400 installation in Australia

Filling from big-bags of 150 kg. Doser capacity max 200 kg of PP-fibres. Feeding capacity: up to 15 kg/min.

Additional Equipment

Special equipment / custom made systems





With a sieve system and a by-pass path for extremely difficult fibres.

SF1200SR

MD500/MD250 (below) Continuous dosing adjustable in kg/min for specific applications.

Other sizes available upon demand.



Buffer belts for large fibre quantities





Conveyer belt as intermediate batch storage



The fibre batch is pre-fed and stored on a conveyor belt. The addition to the aggregates or into the mixer can than flow rapidly, or with a controlled speed to achieve a pre-mix. The belt is equipped with frequency-controlled drive.

For weather and mobility reason, our dosers buildin in container can also be supplied on demand.



Vertical fibre elevator



This specially developed bucket elevator allows a rapid (2.2 m/s) vertical transport of steel fibres, up to 30 m height. Over 50 elevators are installed world-wide.

Dosing of loose macrofibres



Fibre doser, model VSD1400BB. Specially developed for dosing of loose macro synthetic fibres with lengths over 30 mm. The doser can be filled from boxes or big-bags.





Specialized in steel and synthetic fibre dosing systems for the fibre concrete industry, Incite AB, a Sweden-based mechanical engineering company is the world leader within its area of expertise.

Incite's range of equipment includes fibre dosing systems for both steel and synthetic fibres, with an extensive range of dosing capacities to suit the individual needs of the customer. Integrated conveyor and storage equipments are also available, as well as additional equipments that are custom-made to the requirements of the customer. All equipments are produced in accordance with CE- and EMC directives.

The company's operations include development, manufacturing and sales, as well as service and customer support. Since the start in 1992, today Incite's steel and synthetic fibre dosing technology is used in most key infrastructural construction projects in over 50 countries in Europe, Africa, Asia, Australia, New Zealand, North and South America.



The company's stated business mission is to create continual improvements in productivity for its customers. Various fibre types and complex technical challenges have provided Incite with the experience required to set the standard within this field of operation.

Please browse in our website for more information on products, services, and over thousands of installation references.

www.incite.se



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