Fibre Dosing
Fully Automatic Equipment
For Steel and Synthetic Fibres
Function
The fibre tray 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, on to aggregates on belts, into a skip in the weighing bins or to the mixer outlet. Direct addition into the truck mixer is also possible.

Design
A cylindrical tray, with a spirally shaped feeder coil on its inside, is mounted on a rigid framework with 2 vibration motors attached to it. The tray can be removable with the option of additional trays 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 tray. The tray capacity in kg, varies also depending on the type of fibre. The dosers are suitable for dosing of loose steel fibres with L/D of max 60 or all types of glued steel fibres. The dosers can also be used for dosing of the most common synthetic fibres. For dosing of loose steel fibres with an L/D above 60, please ask for a special quotation. Incite has the solution!

Power supply
In standard execution, the dosers are built for 220 - 400V/3ph/50 Hz. Doses adapted for other voltages and frequencies can be supplied upon demand.

Weighing / control system
The fibre dosers are mounted on loadcells. We use negative weighing with two options of control systems, MS and FS. The control system type MS is a complete system with integrated weighing automation. The control system type FS is used for total integration of the unit into the concrete mixing computer system. With the FS control system, start and stop of the doser is controlled by the mixing computer. The accuracy for normal batches is ± 0.5-2.0%. The accuracy is fibre-dependent.

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, preferably with a 5 – 7 tons counter weight.

References
Today, more than 500 steel fibre dosing units are installed in over 45 countries. Reference lists and contacts upon request.
Steel fibre dosing data:

<table>
<thead>
<tr>
<th>Model</th>
<th>D (mm)</th>
<th>L (mm)</th>
<th>B (mm)</th>
<th>H1 (mm)</th>
<th>H2 (mm)</th>
<th>Power (W)</th>
<th>Current (A)</th>
<th>Weight (kg)</th>
<th>Capacity (kg/min*)</th>
<th>Tray content (kg**)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MD75</td>
<td>600</td>
<td>700</td>
<td>75</td>
<td>1020</td>
<td>1100</td>
<td>720</td>
<td>1.2</td>
<td>250</td>
<td>10-30</td>
<td>40-70</td>
</tr>
<tr>
<td>MD250</td>
<td>1000</td>
<td>1200</td>
<td>200</td>
<td>1350</td>
<td>1580</td>
<td>2200</td>
<td>4.4</td>
<td>680</td>
<td>15-75</td>
<td>160-300</td>
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<tr>
<td>MD400</td>
<td>1800</td>
<td>2300</td>
<td>350</td>
<td>1260</td>
<td>1600</td>
<td>3000</td>
<td>6.0</td>
<td>1100</td>
<td>40-150</td>
<td>600-1200</td>
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<tr>
<td>MD500SX</td>
<td>2000</td>
<td>2400</td>
<td>420</td>
<td>1590</td>
<td>1900</td>
<td>3920</td>
<td>8.2</td>
<td>1380</td>
<td>40 - 200</td>
<td>900-2000</td>
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<tr>
<td>SF2400</td>
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<td>2900</td>
<td>475</td>
<td>1825</td>
<td>2150</td>
<td>10000</td>
<td>20.0</td>
<td>3270</td>
<td>40-200</td>
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* The capacity varies, depending on type of fibre
** The tray content varies, depending on type of fibre
Function

The fibre tray 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, on to aggregates on belts, into a skip in the weighing bins or to the mixer outlet. Direct addition into the truck mixer is also possible.

Design

A cylindrical tray, with a spirally shaped feeder coil on its inside, is mounted on a rigid framework with 2 vibration motors attached to it. The tray can be removable with the option of additional trays 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 tray. The tray 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, please ask for special quotation. Incite has the solution!

Power supply

In standard execution the dosers are 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. We use negative weighing with two options of control systems, MS and FS. The control system type MS is a complete system with integrated weighing automation. The control system type FS is used for total integration of the unit into the concrete mixing computer system. With the FS control system, the start and stop of the doser is controlled by the mixing computer. The accuracy for normal batches is ± 0.5-2.0%. The accuracy is fibre dependent.

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

Dozens of units are installed in Australia, Austria, England, Holland, Spain, Sweden, Switzerland and USA.
Dosing unit type MD400

Dosing of pucks of macro fibres. Tray content 600 kg. Feeding capacity: 20 kg/min.

Dosing unit type MD500SX

Dosing of pucks of macro fibres. Tray content 600 kg. Feeding capacity: 20 kg/min.

Dosing unit type MD500SX

Tray with up to 400 kg PP-fibre content. Feeding capacity: up to 15 kg/min.

Dosing unit type MD400

Filling from big-bags of 150 kg. Tray capacity max 250 kg of PP-fibres. Feeding capacity: up to 15 kg/min.

Synthetic fibre dosing data:

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Special equipment / custom made systems

SF1200SR for dosing of loose steel fibres with L/D above 60!

Continuous dosing in kg/min for specific applications, for example units like the MD500SX/MD250C (below) or the SF1200SR with a sieve system and a by-pass path for extremely difficult fibres (to the left). Other sizes available upon demand.

Buffer belts for large fibre quantities

The addition of fibres from the buffer belts to the Incite doser can follow automatically or manually. Standard buffer capacities can vary from 1 to 8 big bags. Other sizes available upon demand.
Conveyer belt as intermediate batch storage

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

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. Fibres are fed into the weighing bin or directly into the mixer. Over 50 elevators are installed world-wide.

Dosing of loose macrofibres

Fibre doser, type Macroflex 1000. Specially developed for dosing of loose macro synthetic fibres with lengths over 30 mm. The doser can be filled from boxes or big-bags.
World Leader in Fibre Dosing Systems

Specialized in steel and synthetic fibre dosing systems for the construction industry and suppliers of precast concrete components, 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 equipment is also available, as well as additional equipment custom-made to the requirements of the customer. All equipment is 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 hundreds of installations in more than 45 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. Hundreds of installations and complex technical challenges have provided Incite with the experience required to set the standard within this field of operation.

Please click in at www.incite.se for more information on products, services and local agents.

Your contact: