FIBRE DOSING
Fully Automatic Equipment
For Steel and Synthetic Fibres
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, 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 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 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. Würschum 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, 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 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>Doser content (litre**)</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>160</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>450</td>
</tr>
<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>1800</td>
</tr>
<tr>
<td>MD500SX</td>
<td>2000</td>
<td>2400</td>
<td>420</td>
<td>1590</td>
<td>1900</td>
<td>4400</td>
<td>8,2</td>
<td>1380</td>
<td>40 - 200</td>
<td>3000</td>
</tr>
<tr>
<td>SF2400</td>
<td>2400</td>
<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>
<td>4500</td>
</tr>
</tbody>
</table>

* The capacity varies, depending on type of fibre
** Theoretical volume. The doser content in kg varies, depending on type of fibre.

Installation example from AB Fardig Betong, Sweden.
Dosage feeder mounted on a concrete slab. The fibres are transported via a conveyor belt in connection with the discharge from the mixer.

Installation example from Ishibe-Machi, Japan.
Dual dosing equipment for optimisation of steel fibre concrete production for flooring and shotcrete.
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, 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 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 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 steelfibres. For dosing of loose macro synthetic fibres with lengths over 30 mm, please ask for special quotation.

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

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.

**Synthetic fibre dosing data:**

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* The capacity varies, depending on type of fibre
** Theoretical volume. The doser content in kg varies, depending on type of fibre.
Special equipment / custom made systems

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 fibre doser can follow automatically or manually. Standard buffer capacities can vary from 1 to 8 big bags. Other sizes available upon demand.
Conveyor 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.
Since 1961 we develop and manufacture a wide range of metering systems and filling machines.

In 1998 we set up a quality management system according to ISO 9001, so we can offer you high quality products and service in the future.

In 2011 we celebrated our 50 year anniversary with our customers, suppliers, employees and friends.

**OUR PRODUCT LINE**

- Powder dosing systems
- Granule dosing systems
- Liquid weighers
- Metering cylinders
- Gear pumps
- Mixing tanks
- Fibre dosing
- Filling lines
- Capping machines

Our machines are used for many years in the following industries: Concrete industry, Chemical industry, Pharma, Cosmetics, Food, Paint.

We export directly to more than 40 countries worldwide and have representatives in the following countries: United States, Great Britain, Italy, Australia, Denmark, Finland, Netherlands, Belgium, Spain, France, Russia, Poland, Romania, Brazil, Switzerland, South Africa, United Arab Emirates, Thailand and Malaysia.

**OUR ADVANTAGES**

- High-quality materials and components
- Customized solutions
- Economical equipment prices
- Simple reliable operation
- Long product life
- Accurate electronic weighing
- Local service and spare parts

"We are only satisfied, when our customers are satisfied."

Our staff

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