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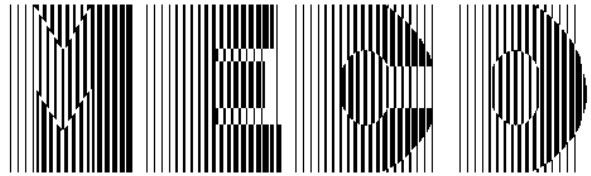
# MDF-1

**Dynamic sheet coating system**

**for MECOSTAT®-3**

**MECO**  
**ENERGIE-KOLLEKTOREN GmbH**  
Radolfzeller Str. 56  
D-78476 Allensbach / Germany

Tel: ++49 (0) 75 33 / 94 98 3 - 0  
Fax: ++49 (0) 75 33 / 94 98 3 - 33  
e-mail: [service@mecostat.de](mailto:service@mecostat.de)  
Internet: <http://www.mecostat.com>



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## **Description of unit**

MDF-1 is a dynamic sheet coating system particularly developed for the single sided coating of plastic sheets with MECOSTAT<sup>®</sup>-3 (highly effective surface antistatic agents).

The sheets are coated by means of a block felt which is clamped into a movable holder.

The felt is pressed against the sheet by pneumatic cylinders. The customer has to fit a return roller to the opposite side to provide a stable working area.

The block felt is saturated with MECOSTAT<sup>®</sup>-3 by means of a traversing nozzle.

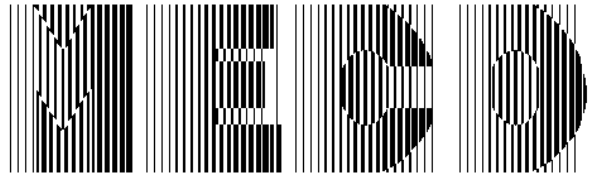
Uniform coverage is ensured by an application system which draws the liquid from a holding tank by means of a dosage hose pump and distributes it in defined quantities through a subsequently following flow meter to the application nozzle.

The quantity of MECOSTAT<sup>®</sup>-3 to be applied on the sheet can be adjusted very precisely by means of the quantity of flow, as well as by the traveling speed of the linear drive.

The felt which comes into contact with the sheet is a special felt trimmed exactly to the sheet angle, and is characterized by extremely high resistance to abrasion and to high temperatures.

The MDF-1 system can be used on all conventional sheet extrusion lines. Because of its compact design, there is rarely any problem in retrofitting it to existing plant.

An eventually required drying unit for our MECOSTAT<sup>®</sup>-3 surface antistatic agents applied on sheet is not included in the system. Please contact our application technique department in case of need.



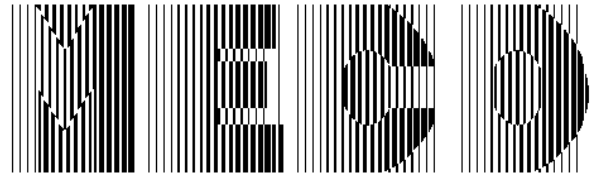
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## **Technical data**

Dimensions:	Height x depth: approx. 530 mm x 290 mm Working widths: Production sizes from 300 mm to 2500 mm working width (special types with even larger widths)
Drive:	Pneumatic linear drive with automatic control (approach-switches permit the edges to be set at any required point)
Control:	Electronic control An emergency stop can be provided either from the sheet plant (e.g. from the drawing off) or, as an option, from a separate "EMERGENCY OFF" button.
Design:	fine steel V2A / Plastic
Operation:	100 % duration of operation
Quantity being transported:	is adjusted continuously variable in the range of 0.8 g and 6 g wet coating per square metre sheet surface, depending on the mode of application

## **Services to be connected**

Compressed air:	5 to 10 bar (without oil)
Electric power:	230 V $\approx$ at 50 Hz (other voltages on request)



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## **Items included in delivery**

**Coating unit** consisting of:

- Coating bath of fine steel
- Pneumatic, inclinable felt holder of fine steel
- Quick-acting felt holder of fine steel with coating felt
- Optional felt holder coolable on both sides
- Linear drive including positioning unit, adjustable continuously variable for any sheet width
- Adjustable nozzle holder including special nozzle

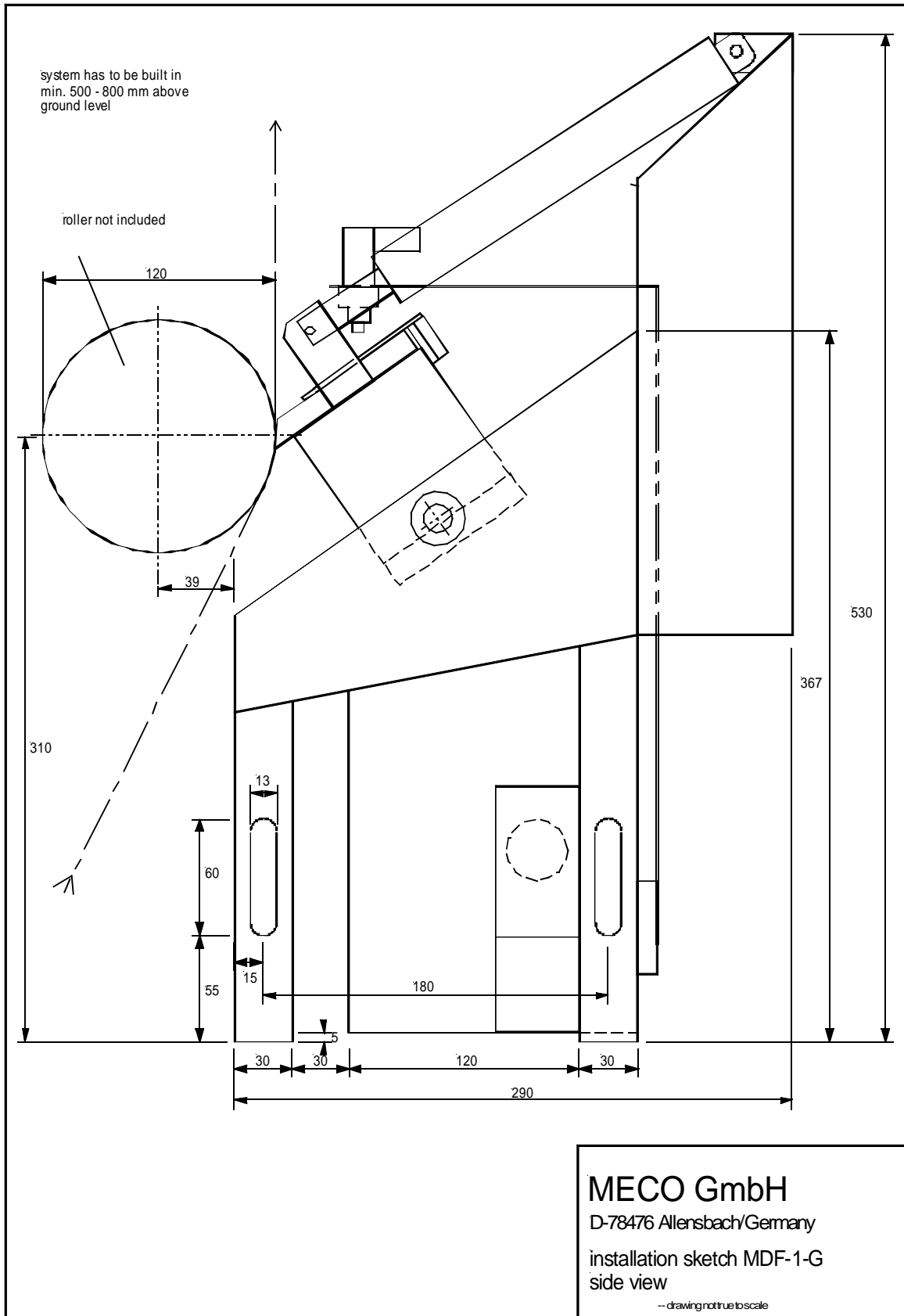
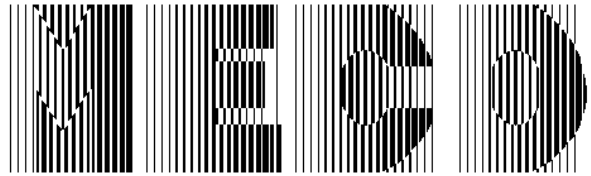
**Control unit** with equipment as follows:

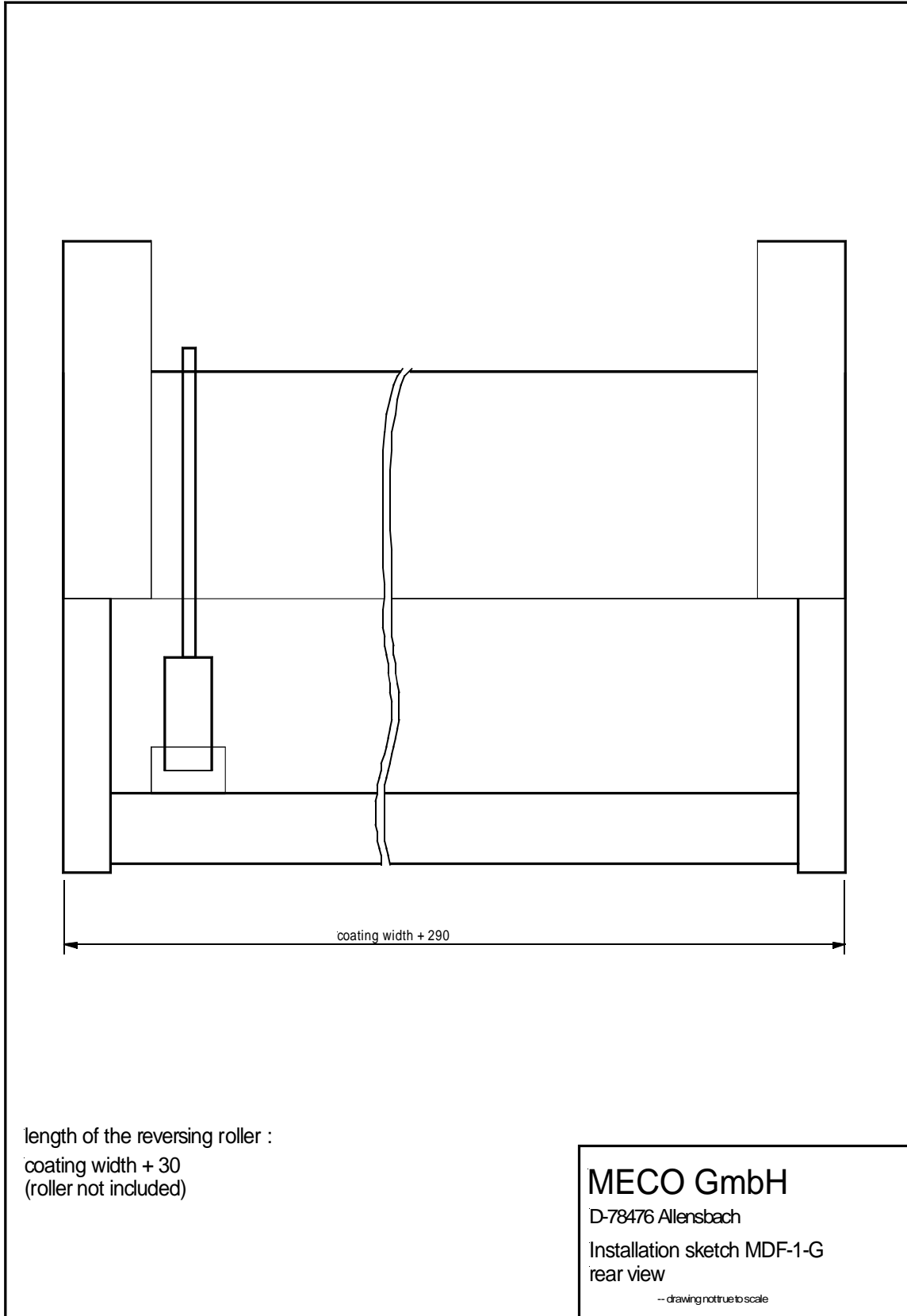
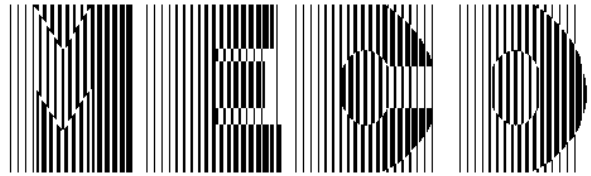
- Electronic control unit for the entire system with display of state
- Adjustable dosage hose pump with pressure equalisation system
- High-precision flow measurement system
- Running-time meter coating time
- MECOSTAT holding tank (60 l) with warning indicator for the minimum amount is fallen below
- Pump with suction device for the MECOSTAT holding tank, automatic disconnection by reaching of the a preadjusted maximum index mark
- Entire hose coupling set

**The system is delivered completely pre-assembled.**

**For further information and advice on your special application, please contact our Applications Technology Department.**

**Subject to technical modifications.**





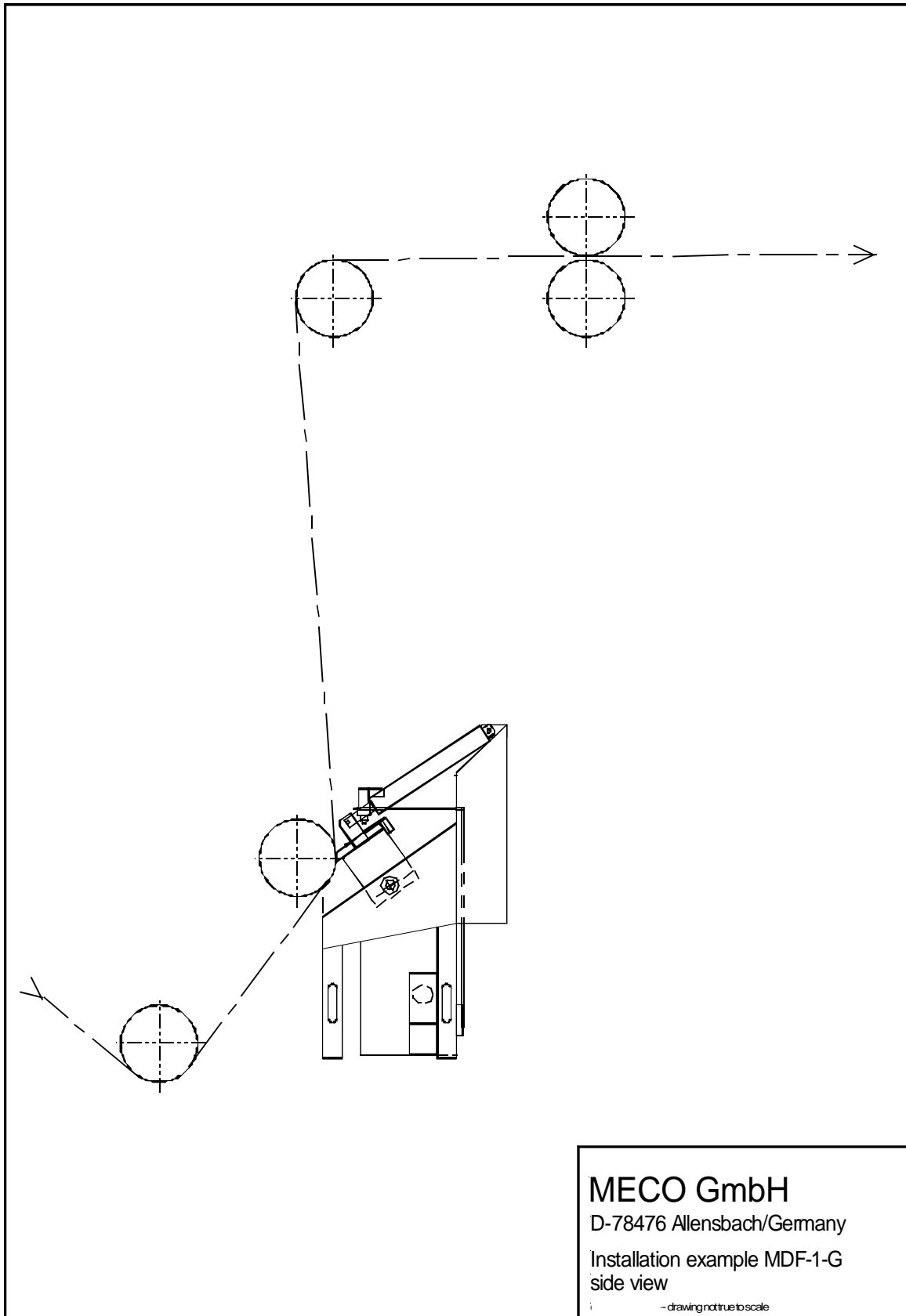
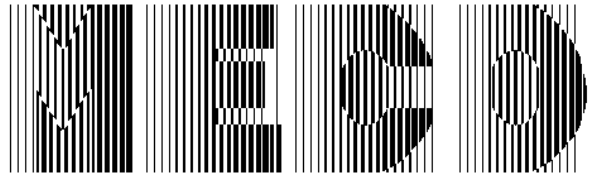
length of the reversing roller :  
coating width + 30  
(roller not included)

**MECO GmbH**

D-78476 Allensbach

Installation sketch MDF-1-G  
rear view

-- drawing not true to scale

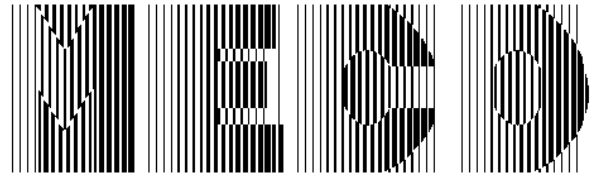


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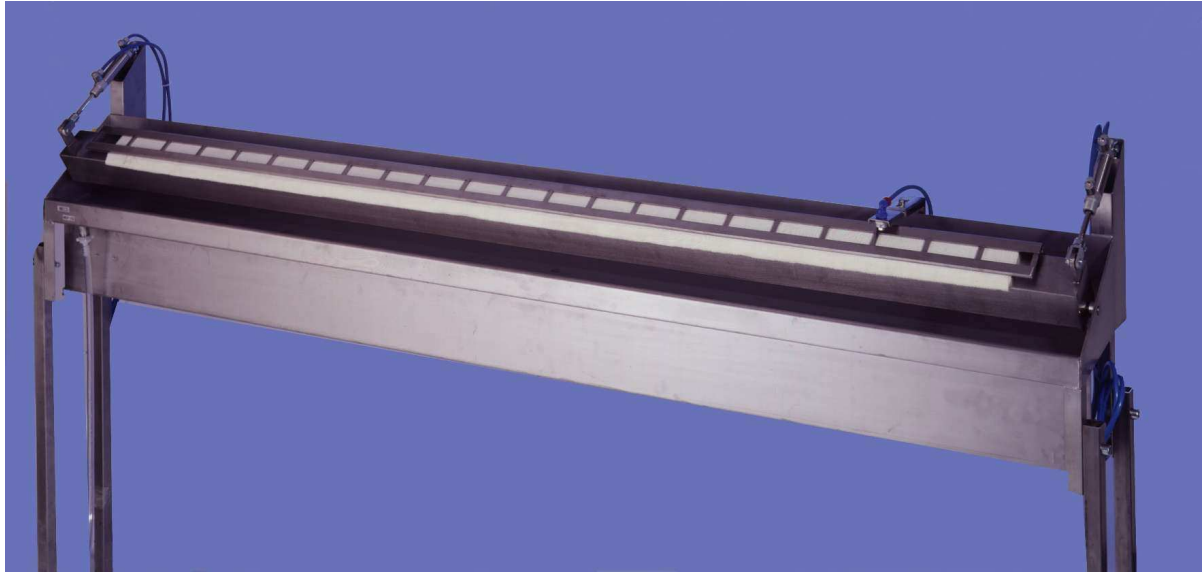
Installation example MDF-1-G  
side view

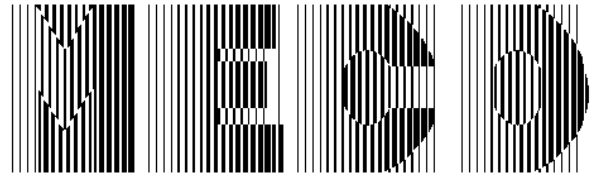
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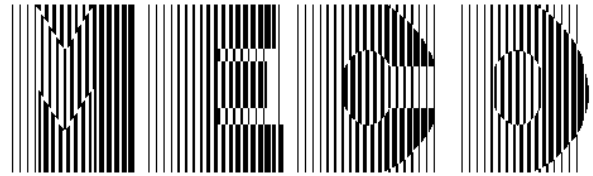
## Coating unit (front side)





## Coating unit (rear side)





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## Control unit

