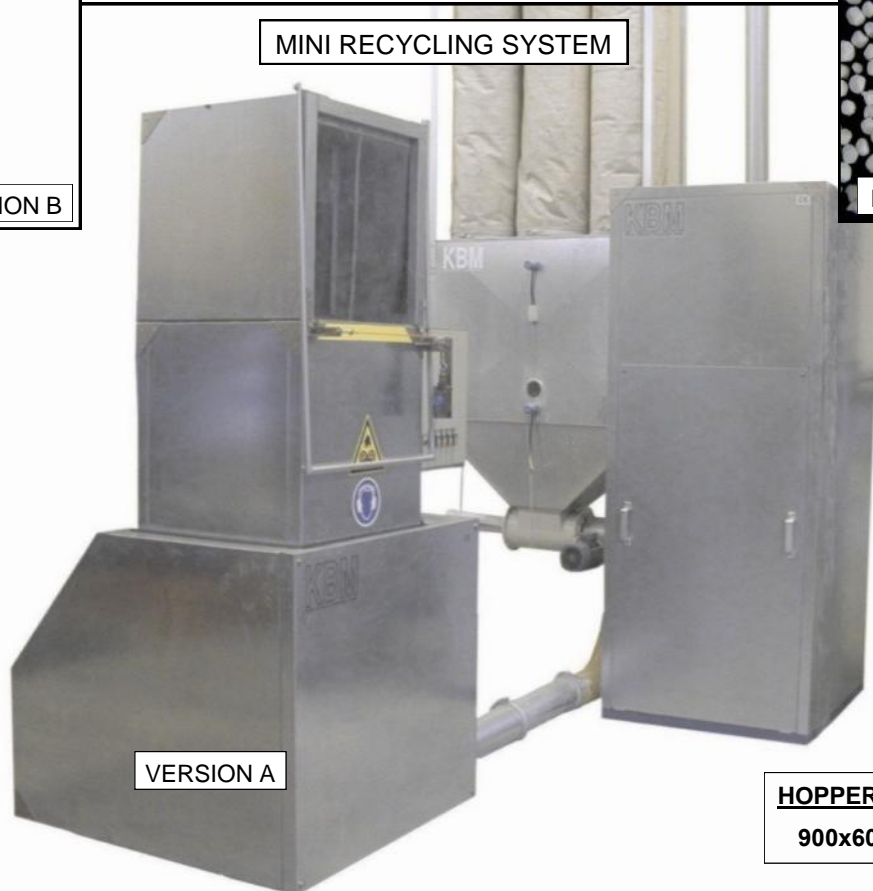
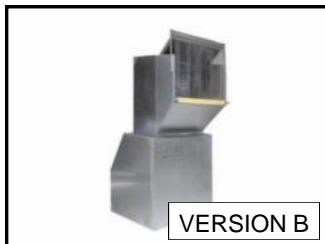


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# KBM MINI RECYCLING

EPS / EPP / EPE / ARCEL / NEOPOR



**HOPPER TOP OPENING:**  
900x600 MM (36x24")

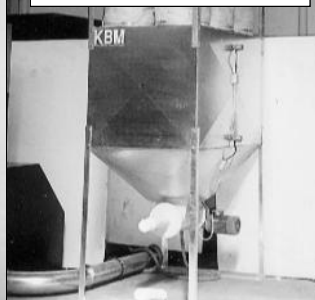
STEPLESSLY VARIABLE  
METERING UNIT (7)



STYROMIX MIXING  
BEFORE MACHINE



MAXI DUST-  
COMPACTOR (5)



STYROMETER MIXING  
BLOCK OR EPP (9)



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We developed the completely integrated recycling concept for reusing EPS material in 1978 and have in the past supplied more than 350 complete recycling plants world-wide, where they have solved the recycling problems and brought substantial savings. Our experience in this field enables us to solve the problem of reusing the waste material with optimal result.

The KBM MINI recycling plant for EPS and EPP is suitable for the small and medium shape moulding and the small block moulding operations.

For the larger size shape moulding operations and for the block moulding plants the MAXI Recycling plant is available, just like our JUMBO recycling line is available for the largest moulders.

Thanks to the two step/double chamber system and the large sieve surface and granulation chamber the MINI Plant produces from waste production, cut-offs from block production or even from used EPS and EPP/EPE mouldings, a high quality recycled material, which contains a minimum of dust.

The recycled EPS and EPP material can be reused in shape moulding production in a ratio of at least 10-20 percent without any perceptibly optical or physical change of the product quality. For block moulding 20-50 percent can be added.

Due to the fact that the material is broken down to the individual bead size similar to the new beads, it is homogeneous with the new pre-expanded beads and consequently demixing problems in the silos causing uneven density distribution are minimized. Problems like blocking of core vents due to dust and lumps of material causing hot wire cutting problems in terms of inaccurate sheets with bad surface are also minimized.

The KBM MINI recycling plant consists of one combined pre-crushing and granulating unit (1), and a separate dust separating unit (2). Both units are sound insulated. After the recycling, the material is blown into a storage silo (6) made from plastic fabric, sewn as one big bag, with steel frame for easy assembling.

The dust is blown into the dust compactor (5), with filter bags for exhaustion. The dust is collected in the lower part and is compacted into a octagonal rod with a density of 200-300 Kg/m<sup>3</sup> (12-19 lbs/ft<sup>3</sup>).

Two metering/mixing systems are available for the shape moulding production. The metering unit (7) is steplessly variable to ensure correct metering of EPS before the pre-expander and of EPP before the pre-pressurizing tank.

The KBM STYROMIX units (see photo) are available to give an individual and exact mixing of material for each moulding machine (see special leaflet).

For block production, STYROMETER (see photo) with two silos and metering/mixing station (9), to be placed just before the block mould, is available. In the same way it can be used to fill pre-pressurizing tanks with recycled and new EPP material mixed in an accurate ratio.

All units can be delivered separately.

#### Technical Data - MINI Plant:

##### Capacity/Hour:

(Granulated and dust extracted EPS)

Sieve with 6 mm holes (Shape): 6-8 m<sup>3</sup> (210-280 ft<sup>3</sup>)

Sieve with 10 mm holes (Block): 9-10 m<sup>3</sup> (315-350 ft<sup>3</sup>)

Sieve surface: 0.9 m<sup>2</sup> (19.7ft<sup>2</sup>)

Dust compactor with 12 kg/m<sup>3</sup> (0,75 lbs/ft<sup>3</sup>) EPS dust: approx. 10-15 Kg (22-33 lbs)

Dust compactor with 35 kg/m<sup>3</sup> (2,2 lbs/ft<sup>3</sup>) EPS dust: approx. 20-25 Kg (44-55 lbs)

Space required ca. 12 m<sup>2</sup> (120 ft<sup>2</sup>)

##### Measurements:

L x W x H

Precrusher/Granulator (1): 1.4x1.1x2.5 m(55x44x100")

Dust separating unit (2): 1.2x1.1x2.5 m(48x44x100")

Dust compactor (5): 1.6x0.6x5.1 m (64x24x204")

Storage silo (6): 2.0x2.0x6.0 m (80x80x240")

Size Silo bag: 2.0x2.0x4.0 m (80x80x160")  
(Any size available) (approx. 17 m<sup>3</sup>/600 ft<sup>3</sup>)

Metering unit (7): 0.9x0.9x4.0m (36x36x160")

Styrometer mixing (9): 2.0x2.0x6.0m (80x80x240")  
(block or EPP)

Size each silo bag: 2.0x2.0x4.0m (80x80x160")  
(approx. 17 m<sup>3</sup>/600 ft<sup>3</sup>)

Pipe connections: 160 mm (6")

Hopper top opening: 900x600mm (36x24")

Reusable EPS material after recycling: min. 93-95 %

Extracted EPS dust and fines: max. 5-7 %

Dust content after dust separation: max. 1 %

(Experienced with EPS granulated on a KBM granulator.)

##### Electrical load:

EPS

EPP

Precrusher/Granulator (1): 13.2 Kw 26.0 Kw

Dust separating unit (2): 4.0 Kw 4.0 Kw

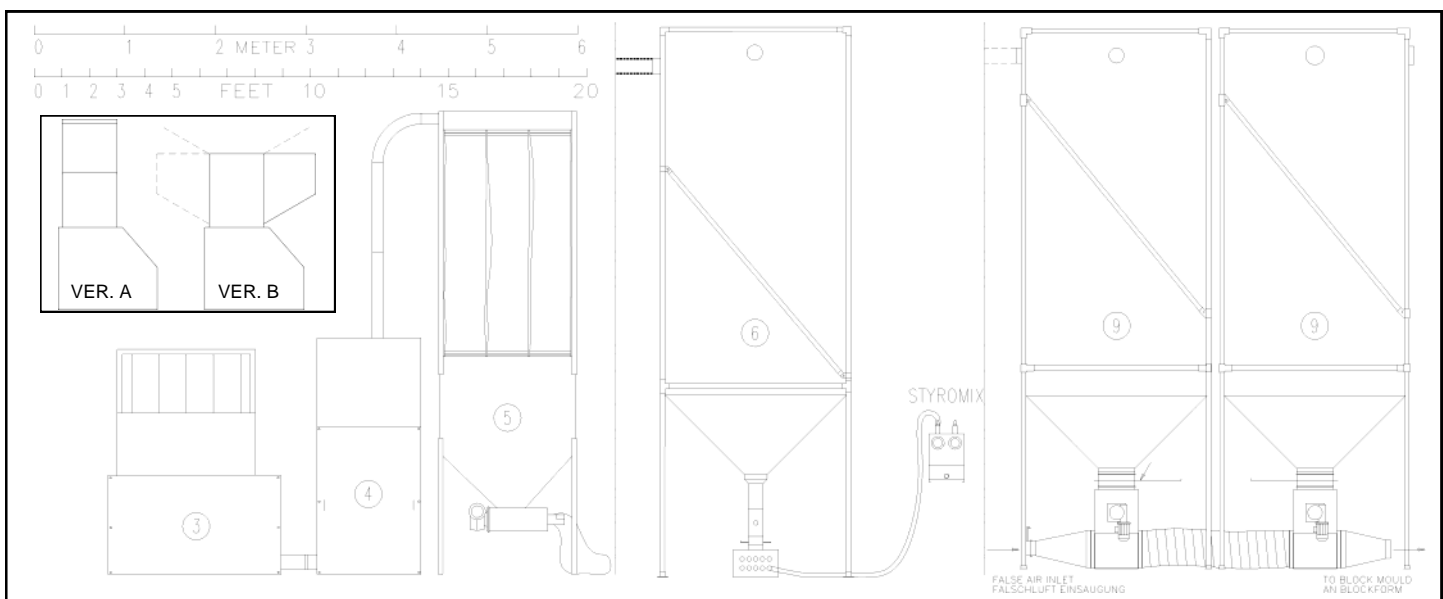
Dust compactor MAXI (5): 1.5 Kw 2.2 Kw

Metering unit (7) with blower: 1.0 Kw 1.0 Kw

STYROMETER Mixing (block or EPP) (9): 0.4 Kw 0.4 Kw

Voltage: 3x400V/50Hz or other voltages.

SUBJECT TO ALTERATIONS



**Explanation of drawing:** 1. Combined precrusher and granulator (sound insulated). 2. Dust separating unit. 5. EPS and EPP dust compactor. 6. Storage silo for recycled material. STYROMIX. Mixing before each moulding machine. 9. STYROMETER metering/mixing station to introduce recycled material before the blockmould or EPP right before the pre-pressurizing tank.