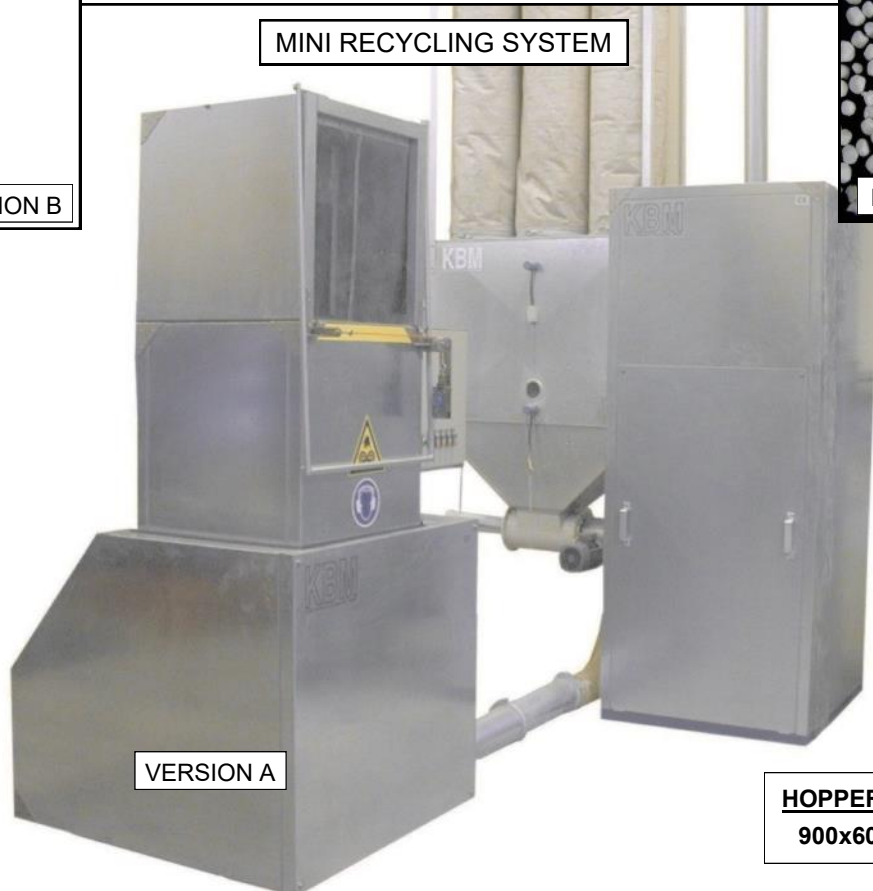
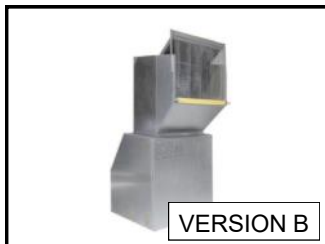


www.kbm.dk



KBM MINI RECYCLING

EPS / EPP / EPE / ARCEL / NEOPOR



HOPPER TOP OPENING
900x600 MM (36x24")

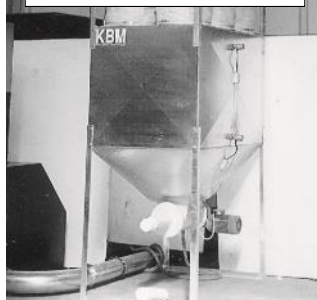
STEPLESSLY VARIABLE
METERING UNIT (7)



STYROMIX MIXING
BEFORE MACHINE



MAXI DUST-
COMPACTOR (5)



STYROMETER MIXING
BLOCK OR EPP (9)



KBM APS
DK 3400 HILLERØD
TLF.+45 4826 8090
Homepage: www.kbm.dk

VØLUNDSVEJ 13
DENMARK
FAX.+45 4826 8016
e-mail: kbm@kbm.dk



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 recycling problems and brought substantial savings**. Our experience in this field enables us to **solve the problem of reusing waste material with optimal result**.

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

For the larger size shape moulding operations and for the block moulding plants the **MAXI recycling plant** is available, and our **JUMBO recycling line** is 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 % without any perceptibly optical or physical change of the product quality. For block moulding 20-50 % can be added.

As the material is broken down to individual beads homogeneous with new pre-expanded beads, it consequently minimizes the de-mixing problems in the silos causing uneven density distribution. 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), a big bag made of antistatic fabric with a 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/m³ (12-19 lbs/ft³).

The **STYRODOSER** 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 STYRODOSE is a simple and less accurate metering unit for smaller ratios of recycled material.

The KBM **STYROMIX** units (see photo) are available to give a very exact mixing of material for each individual moulding machine allowing for a larger portion of recycled material in production.

For block production, **STYROMETER** (see photo) with two silos and metering/mixing station (9), to be placed just before the block mould, is available. 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:

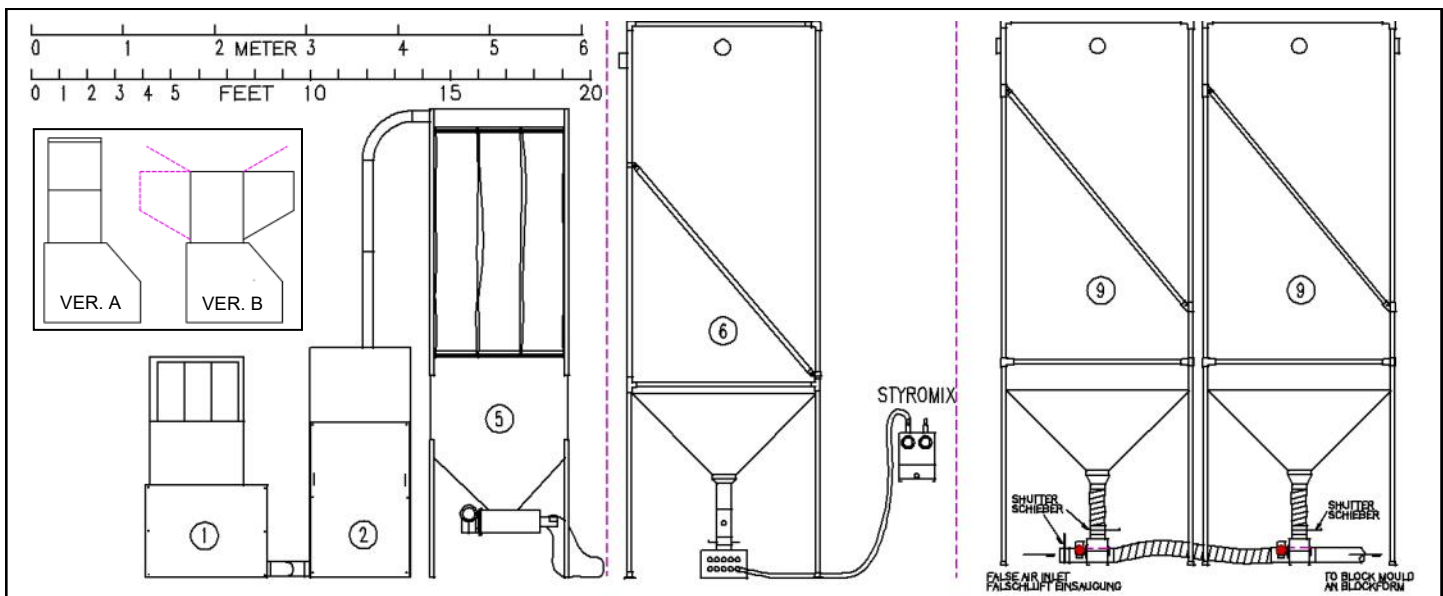
Capacity/Hour: (Granulated and dust extracted EPS)	
Screen with 6 mm holes (Shape):	6-8 m³ (210-280 ft³)
Screen with 10 mm holes (Block):	9-10 m³ (315-350 ft³)
Screen surface:	0.9 m² (19.7ft²)
Dust compactor with 12 kg/m ³ (0,75 lbs/ft ³) EPS dust:	approx. 10-15 Kg (22-33 lbs)
Dust compactor with 35 kg/m ³ (2,2 lbs/ft ³) EPS dust:	approx. 20-25 Kg (44-55 lbs)
Space required	ca. 12 m² (120 ft²)
Measurements:	L x W x H
Pre-crusher/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: (any size available)	2.0x2.0x4.0 m (80x80x160") (approx. 17 m ³ /600 ft ³)
Metering unit (7):	0.9x0.9x4.0m (36x36x160")
Styrometer mixing (9): (block or EPP)	2.0x2.0x6.0m (80x80x240")
Size each silo bag:	2.0x2.0x4.0m (80x80x160") (approx. 17 m ³ /600 ft ³)
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
Pre-crusher/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 pre-crusher and granulator (sound insulated). 2. Dust separating unit. 5. EPS and EPP dust compactor. 6. Storage silo for recycled material. **STYROMIX**. Mixing before each molding machine. 9. **STYROMETER** metering/mixing station to introduce recycled material before the block mould or EPP right before the pre-pressurizing tank.