



PHOTOS MAY SHOW OPTIONAL OR CUSTOMISED EQUIPMENT.



Double basic line



Double basic line



Dots



Dot'n line



Edgeflex



Longflex

THERMOPLASTIC EXTRUSION AND COLD PAINT APPLICATION

The BM 5000 series provides you with a variety of high capacity line marking machines designed for large scale jobs such as marking highways, motorways or airport runways.

The BM 5000 DL CA is a combination machine that can be used for applying both thermoplastic and cold paint markings in various widths.

The cold paint material tank capacity is 440 L and the plastic material tank is 585 L. The possibility of large material capacity naturally gives fewer stops during the day for refilling.

The BM 5000 has a two-seat slidable drive and operator section for flexible working on the left or right side.

KNOWING THE BM 5000

OPERATOR SECTION

Quick and easy change from side to side for marking left and right. Dual torque steering – good directional stability. Cruise control can be added as optional equipment.

LINEMASTER COMPUTER

With the LineMaster Computer you can control up to 6 paint or spray guns, 6 bead guns and equipment with up to 24 shutters. Moreover, it controls all these various sets of equipment in this ONE unit.

FULL REAR VIEW

DIESEL TANKS
Allows for a full day's work.

ENGINE ROOM
Easy access for service.

MATERIAL TANKS

The possibility of an extra large material tank for major works ensures the most efficient workday and fast progression of the road works.

PRESSURIZED BEAD TANK

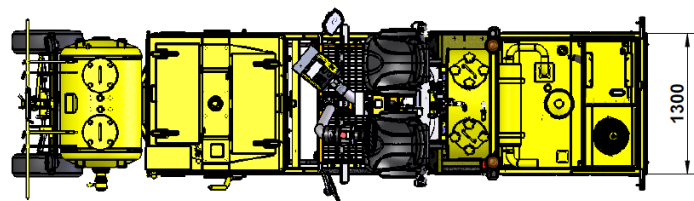
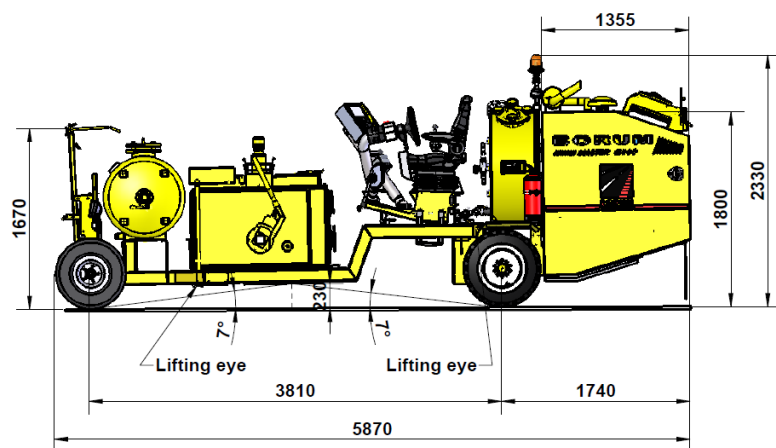
Tank divided in two tanks. Individual or single outlet. (2 in 1)

WHEEL MOTOR

2-speed wheel motor. Allows working uphill.

CHASSIS

Solid double-frame construction



TECHNICAL SPECIFICATIONS

ENGINE

Manufacturer	Kubota
Type	Turbo (Diesel)
Cooling	Water
Cylinder	4 stroke 3800 cm3
RatedPower	74 KW
Approval	EU Stage IIIA resp. TIER 3

COMPRESSOR

Compressor Capacity Choice of 1-2 compressors can give 1800 - 3600 L/min @ 10 bar.
Integrated oil-cooling system. Air-cooler incl. water separator

FILLING CAPACITIES

Fuel tank capacity	180 L (2 x 90 L) - Diesel
Hydraulic tank size	93 L
Bead capacity	330 L (2 x 165 L). Pressurized (max 3 bars)

MATERIAL TANK

Material Tank	585 L and 440 L
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DRIVING PROPERTIES

Drive angle	12.5 degrees / 22% (low gear 7200 kg)
Turning radius	4.90 m.
Steering	Dual torque steering

TRANSMISSION

Hydrostatic transmission	For variable speed
Speed	Low gear 0-12 km/h, high gear 0-24 km/h

ELECTRICAL SYSTEM

Electrical system	12 V / 150 Amp
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CONTROL UNIT

Borum LineMaster

Program up to 99 different line types. Organise lines in up to 30 marking programs. 8" display. Transfer of daily marking reports. Data about road marking jobs can be accessed online (optional).

COLOUR

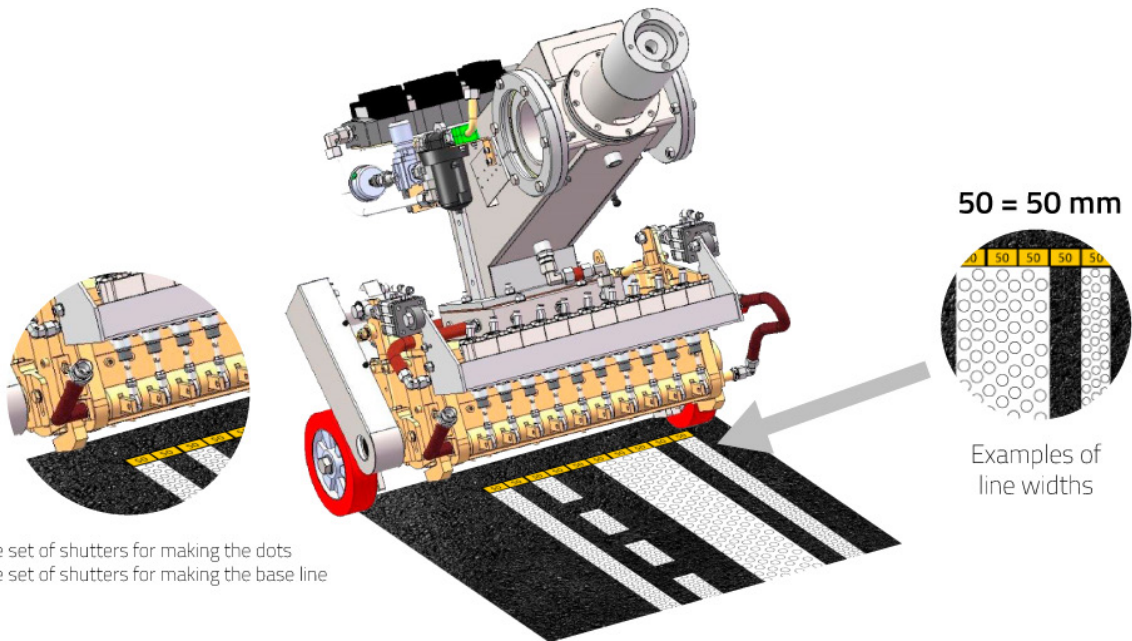
Colour RAL 1007 (Other colours available on request)

DIMENSIONS

Length	5910 mm
Width	1300 mm
Height	2250 mm (Without Beacon)

THERMOPLASTIC DOT'N LINE EXTRUDER

The Dot'n line system offers a three-in-one solution for thermoplastic markings. This equipment can apply flat lines, dots and unique combination of lines and dots using only one extruder head.



In the drawing you can see examples of different valve set-ups giving different widths. The total line width can be between 30-50 cm depending on the set-up. The line width starts at 5 cm and can be built up to 50 cm with 5 cm standard shutters.

By using two sets of shutters the base line has time to cure slightly before the Dots are applied. Consequently, the Dots will settle on top of the line with sharp edges, securing the optimum retroreflection.

The diameter of dots can be chosen between $\varnothing 18$ and $\varnothing 45$ mm depending on the chosen drum. The number of dots/meter is 15-35 dots and is controlled by the LineMaster.

The shutters have no contact with the high tensile steel drum and therefore wear is minimalized and lifetime is prolonged.

Effective heating of the complete unit using a centrifugal pump, 42 L/min, hydraulically driven.

Pneumatically controlled quick cleaning system for removal of solids left in the extrusion slot. It can be activated while extrusion is in process and is only slightly detectable on the line in the form of a moderate thickening of the layer.

Continuous circulation of the thermoplastic material inside the equipment. This avoids settling and catching of solid parts and prevents unnecessary wear of mechanical parts.

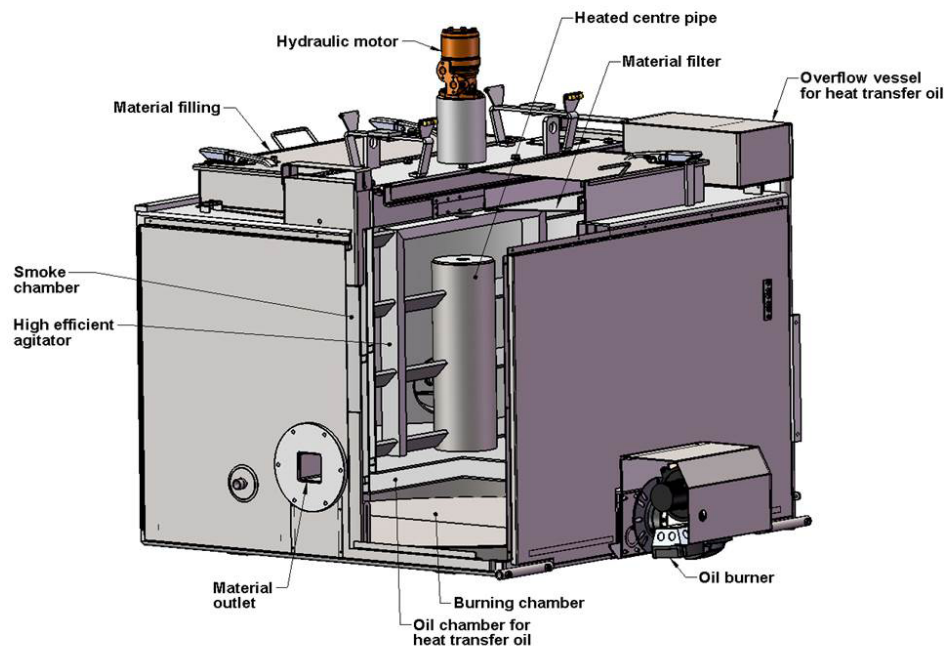
The application speed depends on the type of application and goes up to 6 km/h.

AUGER SCREW PUMP WITH CONTINUOUS RECIRCULATION SYSTEM

The transport of material from tank to Dot'n'Line head is done by a hydraulically driven auger screw pump, which is electronically controlled. The screw pump has a permanent thermoplastic re-circulation system, which ensures a constant flow also past the inactive extrusion shutters, keeping solid parts from settling and keeping the equipment ready for working.

Build-in pressure regulating system ensures that line width and thickness do not change no matter the number of shutters involved in the current marking assignment.

NON-PRESSURIZED THERMOPLASTIC TANK



Non-pressurized thermoplastic tank, indirectly heated via heat transfer oil. The thermal oil and thermoplastic material temperature is thermostatically controlled and regulated automatically according to the settings

VERTICAL AGITATOR (MIXER)

With hydraulic transmission. Heated center pipe for efficient uniform temperature control. Perfect melting & homogenization of the thermoplastic. Stable construction with foundation and bearings at the top of the material tank.

BURNER SYSTEM

Diesel burner system for heating of the thermal oil (and thermoplastic). Propane burner is available on demand.

CLEANING SYSTEM

10L pressure solvent tank for cleaning of hoses and paint guns.

LINEMASTER FEATURES

The Borum LineMaster control unit is an easy way of setting and controlling your line marking jobs. The LineMaster is attached to the operator's section of the machine and gives you full control of all your line marking tasks, from line application and pre-marking to reporting and invoicing.

It is possible to store up to 99 different line types, and to arrange these in up to 30 different marking programs. You are also able to pre-set line widths, line types and different combinations to have them ready for marking, and can instantly adjust them on the go.



Furthermore, you are able to view the status of various parts of the machine (e.g. compressor) on the computer screen that will help with correctly maintaining the machine and avoiding break downs.

AIRLESS COLD PAINT EQUIPMENT

High-pressure airless spraying uses a high-pressure airless piston pump to spray the paint. This method can apply paints of high viscosity, and apply relatively thick layers in a single pass. However, the paint cannot be mixed in with glass beads as in the case of atomizing spray equipment due to the pump.



Sliding retainer frame, upon which 1-3 paint guns and 1-3 bead guns can be attached as standard. You can also opt for the option wide retainer on which up to 5 paint guns and 5 bead guns can be provided.

Easily slideable retainer from side to side for an optimal working position. Ground distance is maintained by retainer wheel to ensure a constant road marking width.

Lifting of retainer is done from the operator's seat.

The machine can be equipped with multiple material tanks, so that dual-color marking can be carried out.

Working speed can be up to 15 km/h depending on the conditions, e.g. material, line type, and operator experience.

BM COLD PAINT AIRLESS GUN

Automatic high-performance spray gun. Nozzle set for water-based, solvent-based and high solid paints. Possibility to apply line widths up to 25 cm with standard nozzles depending on line thickness, work conditions, and application speed. You can also choose from a wide range of nozzle sizes depending on your requirements.

High-pressure filter unit with integrated pulsation damper. Easy cleaning and maintenance.

NON-PRESSURIZED BLACK STEEL TANK



Non-pressurized black steel tank for water-based cold paint.

The material tank has a filling system with large filling holes. This makes the filling process very easy to manage. In addition, the large filling holes also make cleaning the tanks easy.

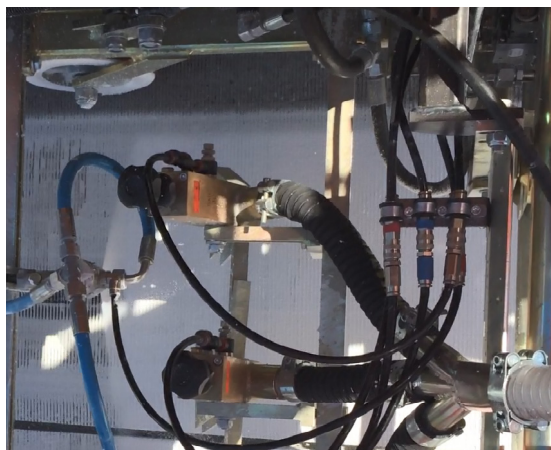
AGITATOR (MIXER)

Driven by hydraulic motor and with manually operated reversing valve.

ADVANTAGES OF COLD PAINT MATERIAL

High-pressure airless spraying uses a high-pressure airless piston pump to spray the paint. The airless spray paint is sharper and smoother than atomized spray as there is no high-speed airflow to scatter any rebounding paint.

The marked lines are neat and more clear-cut compared to atomizing spray paint. This method can apply paints of high viscosity, and apply relatively thick layers in a single pass. However, the paint cannot be mixed in with glass beads as in the case of atomizing spray equipment due to the pump.



THERMOPLASTIC DOT ADVANTAGES

Having numerous dots in a line gives the light a lot of possible areas to fall onto and create a retro-reflective effect. This is essential for having clear visibility, especially while driving during night time.

The drainage effect of the profiled markings ensures that rain water will easily drain away from the lines, thus maintaining high reflective values in rainy weather. This is possible because of the structure that allows the water to drain. Furthermore, the profiled nature of the road marking produces a noise when driven over that will warn the driver against driving off the road.



TYPICAL USES:

Cold paint is a cost effective solution for executing flat markings over asphalt pavements and for use in repairs.



LEARN MORE

Find out more in the Borum Knowledge Lab.

ADDITIONAL EQUIPMENT

The additional equipment can be mounted on the machine according to your requirements. They are not necessary for the running of the machine but add to the comfort of the machine driver or to the functionality of the machine.



Hand paint gun



Quick shift



Pre-marking system with paint can



BM Online



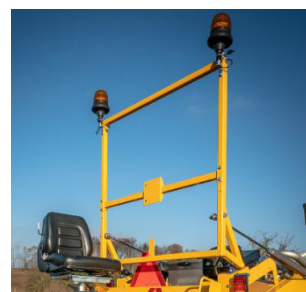
Air drier for bead tank



Bead alarm mounted on bead gun



Pointer turning with steering
With hydraulic lifting system



Bar with pneumatic lift for mounting warning lights
(Comes without lights)



Cone holder



Remote control for BM Line-Master



Cruise control



Sunshade with 1 rotating light



Pre-marking system with paint gun



Airknife



Ejector filling of bead tank



Fixed pointer
With hydraulic lifting system