BM 2700 DL RL

PHOTOS MAY SHOW OPTIONAL OR CUSTOMISED EQUIPMENT.

LINE TYPES

Double basic line combi

Edgeflex

Rib line

Dot'n line

Dots

Chess

THERMOPLASTIC EXTRUSION AND SCREED APPLICATION WITH RIB FUNCTION

From city areas to urban and interurban roads, the BM 2700 can handle both smaller jobs and longer road stretches. The BM 2700 is an agile machine with excellent load abilities.

Equipped with the new generation of Borum's LineMaster computer, operating the machine is easy and convenient.

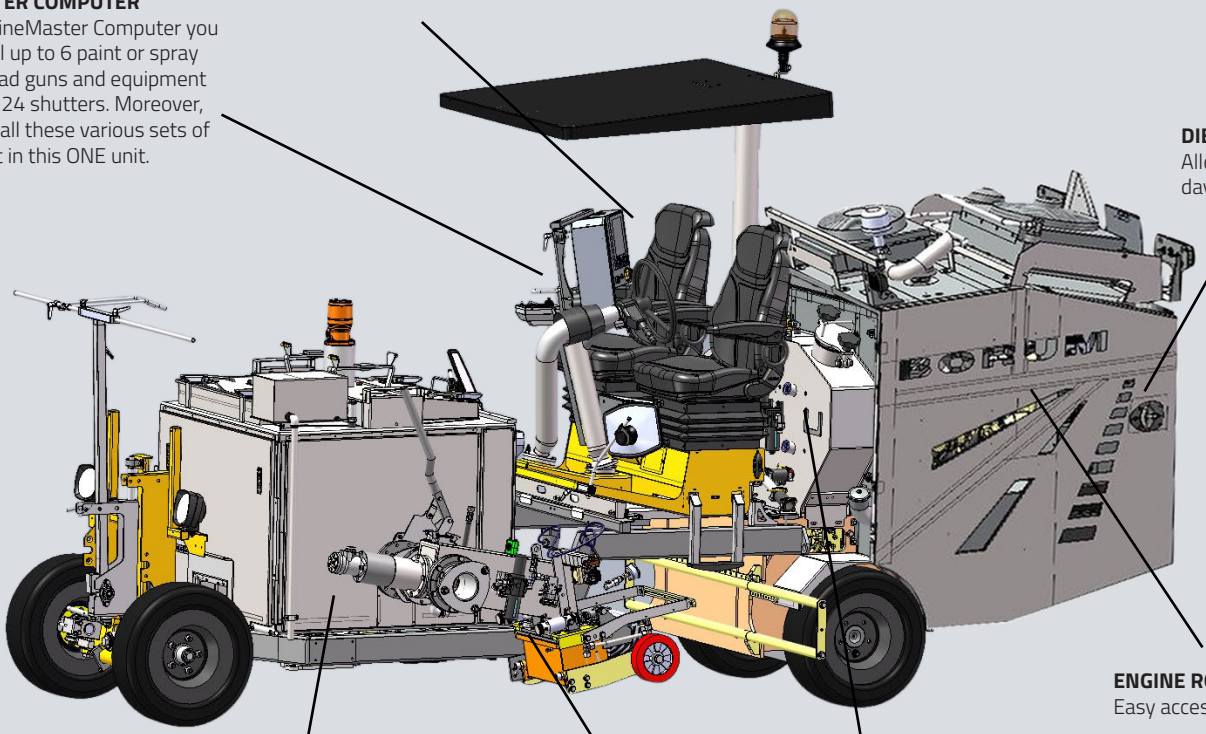
The BM 2700 has a one-seat slidable drive and operator section for flexible working on left or right side. Easy access and servicing of the machine through large doors to the engine room.

The screed equipment with rib function can apply flat lines, long flex, and rib over line in fixed prechosen line widths up to 20 cm.

KNOWING THE BM 2700

OPERATOR SECTION
Quick and easy change from side to side for marking left and right. Dual torque steering - good directional stability. Cruise control is a part of 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.



DIESEL TANKS
Allows fora full day's work.

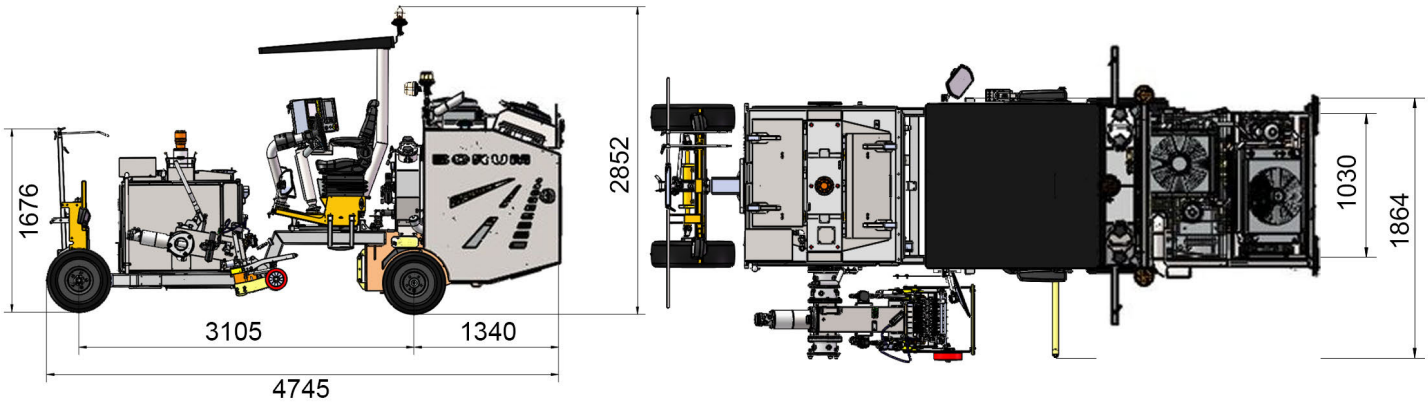
ENGINE ROOM
Easy access for service.

CHASSIS
Solid double-frame construction

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.

THERMOPLASTIC EXTRUDER

PRESSURIZED BEAD TANK

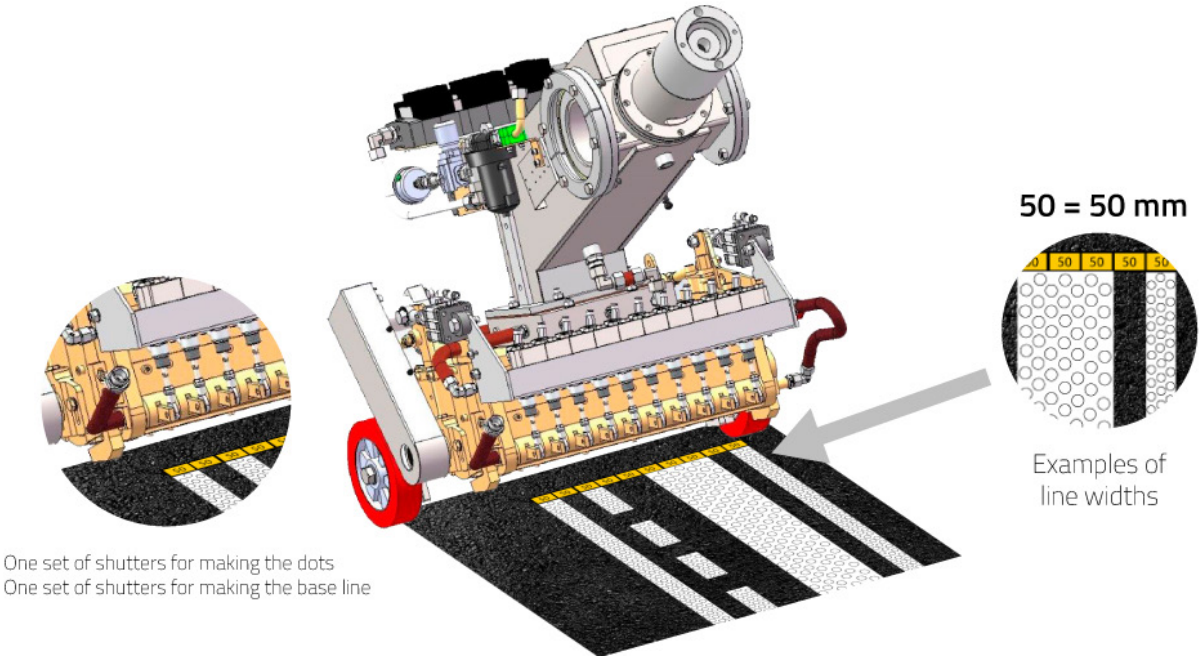


TECHNICAL SPECIFICATIONS

ENGINE	
Manufacturer	Deutz
Cooling	Water
RatedPower	55 kW
Cylinder	4 stroke 2900 cm^3
Type	Turbo (Diesel)
Approval	EU Stage V (TIER 4)
COMPRESSOR	
Compressor Capacity	Screw compressor 2400 L/min @ 10 bar. Integrated oil-cooling system. Air-cooler incl. water separator.
FILLING CAPACITIES	
Fuel tank capacity	2x 60 L
Hydraulic tank size	88 L
Bead capacity	140 L/224 kg. Pressurized (max 1.5 bar)
DRIVING PROPERTIES	
Drive angle	15° / 27%
Turning radius	3.45 m
Steering	Hydraulic dual torque steering
TRANSMISSION	
Hydrostatic transmission	For variable speed, forward/backwards
Speed	0-17 km/h
ELECTRICAL SYSTEM	
Electrical system	24 V / 100 Amp
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	Borum Yellow (Other colours available on request)
DIMENSIONS	
Length	4750 mm
Width	1180 mm without equipment
Height	2520 mm

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 a unique combination of lines and dots.



In the drawing, you can see examples of different shutters set-ups giving different widths. The equipment's width can be up to 40 cm. The line width starts at 5 cm and can be built up to 40 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 ø18 and ø 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.

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.

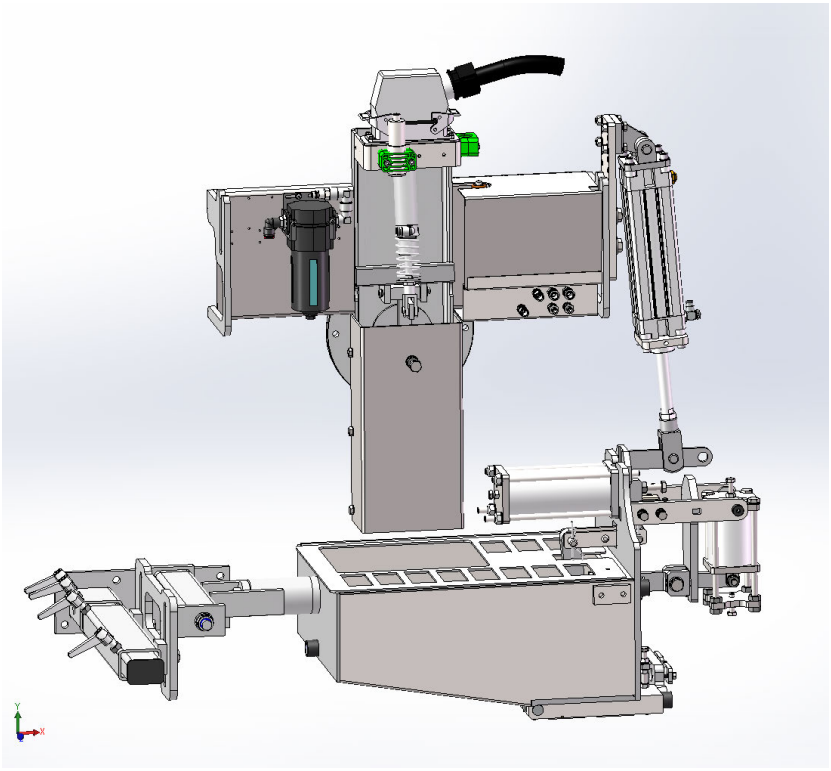
AUGER SCREW PUMP WITH CONTINUOUS RECIRCULATION SYSTEM

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.

THERMOPLASTIC SCREED BOX WITH RIB FUNCTION

The screed box can apply flat lines, long flex, and ribs over a line in one pass. The Borum thermoplastic screed box is available in the following widths: 10, 12, 15, 20, 24, 25, 30 cm.



LINE TYPES

Flat line

Interrupted flat line

Long flex

Ribs over line

With this type of screed application, the box is dragged with constant contact to the surface. The contact points determine the line width. The material pressure is by gravity only and this is how the material is poured in the marking box. The material coming out of the box will fill up any holes, pores, or other types of road imperfections. This means that material consumption will depend on the road surface.

The screed box equipment is mounted directly on the side of the material tank.

The Borum thermoplastic screed box is available in the following widths: 10, 12, 15, 20, 24, 25, 30 cm. Other sizes are available upon request.

The equipment is constructed with one main application box covering a range of line widths, either 0 - 20 cm or 20 - 30cm. If you do not need to switch the line widths often, you have the option to only change the application opening based on your width requirements instead of changing the whole box! This makes the application equipment more cost-efficient!

The thickness for the application of flat lines is usually between 2 - 4 mm.

The usual application speed for applying ribs over a flat line is 1-3 km/h, while for screed application of flat lines it is up to 5 km/h.

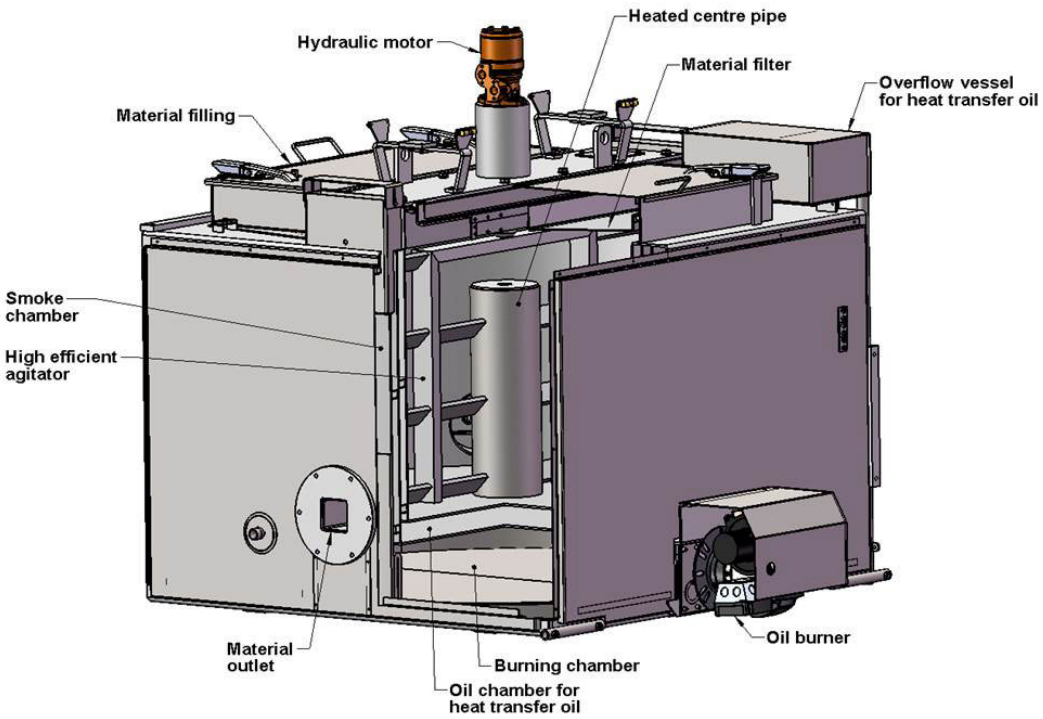
RIB LINE FUNCTION

The screed box is also equipped with a rib function. This allows you to apply ribs over a line in one pass. The total height of line with rib is usually between 8 to 15 mm depending on the material. The base line is recommended to be as thin as possible when combined with ribs (approx. 1,5 - 2 mm).

LASER SENSOR FOR MEASURING AND REFILLING MATERIAL

The equipment is supplied with a laser that constantly measures the material level in the application box. If the material level becomes lower than 50%, the application box will be automatically refilled.

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

BURNER SYSTEM

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

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.

FEATURES OF LINEMASTER AND MACHINEMASTER

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.

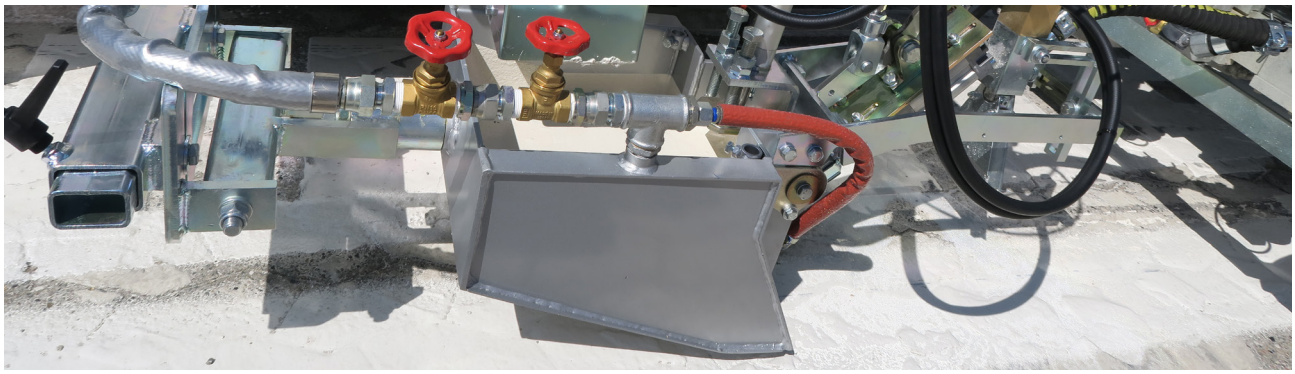
It is possible to store up to 99 different line types, and to arrange these in up to 30 different marking programs. You are also able to pre-set line widths, line types and different combinations to have them ready for marking, and can instantly adjust them on the go.

In the MachineMaster computer, 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.

THERMOPLASTIC MATERIAL ADVANTAGES

Thermoplastic material has a long-life duration with high retro-reflectivity capabilities due to being able to pre-mix glass beads in the material. Thermoplastic markings cure quickly and adhere strongly to the road surface. Generally, thermoplastic is recommended for areas with high traffic density and/or areas with low lighting as e.g. highways.

The rib line equipment is a good solution if you are only going to work with flat fixed-line width markings and rib line application.



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:

Dot'n line is generally used on roads with high traffic and low night visibility as highways and motorways.

Rib Line is typically used on the edge of roads in order to alert drivers running off course.

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.

Quick shift

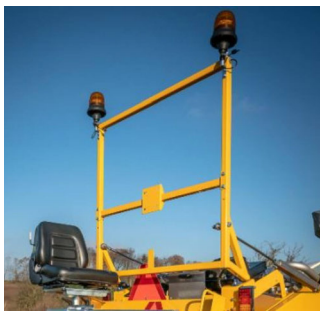
Ejector filling of bead tank

Sunshade with 1 rotating light

Cruise control

BM Online

Bead alarm mounted on bead gun



Bar with pneumatic lift for mounting warning lights

(Comes without lights)

Pre-marking system with paint gun

Cone holder

Pointer turning with steering

With hydraulic lifting system

Remote control for BM LineMaster

Air drier for bead tank

Fixed pointer

With hydraulic lifting system

Pre-marking system with paint can

Airknife

Hydraulic broom