



PHOTOS MAY SHOW OPTIONAL OR CUSTOMISED EQUIPMENT.



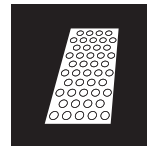
Double basic line



Double basic line



Dots



Dot'n line



Edgeflex



Longflex

## THERMOPLASTIC EXTRUSION AND COLD PAINT APPLICATION

The BM 5500 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 5500 DL C is a combination machine that can be used for applying both thermoplastic and cold paint markings in various widths.

Equipped with a new Deutz diesel engine, the BM 5500 meets the EU Stage IV final (Stage V ready) and US Tier 4 emissions standards. The engine room is also designed to offer you easy access and servicing of the machine through large doors to the engine room.

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

# KNOWING THE BM 5500

## OPERATOR SECTION

Quick and easy change from side to side for marking left and right. Dual torque steering - good directional stability.

## 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.

## EFFICIENT SCREW COMPRESSOR

Hydraulically driven. Positioned behind the operator for quick access. Possibility to turn compressor ON/OFF.

## 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

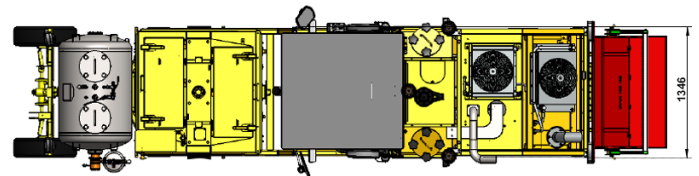
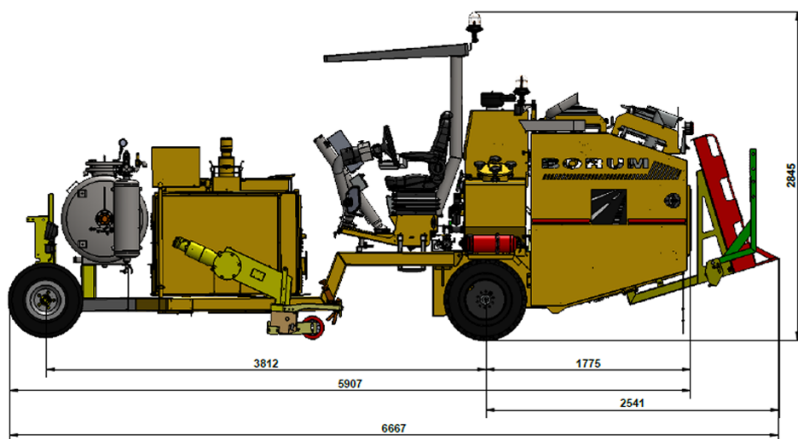
Tank divided in two chambers. Individual or single outlet (2 in 1). Low filler necks for easy refill.

## WHEEL MOTOR

2-speed wheel motor. Allows working uphill.

## CHASSIS

Solid double-frame construction

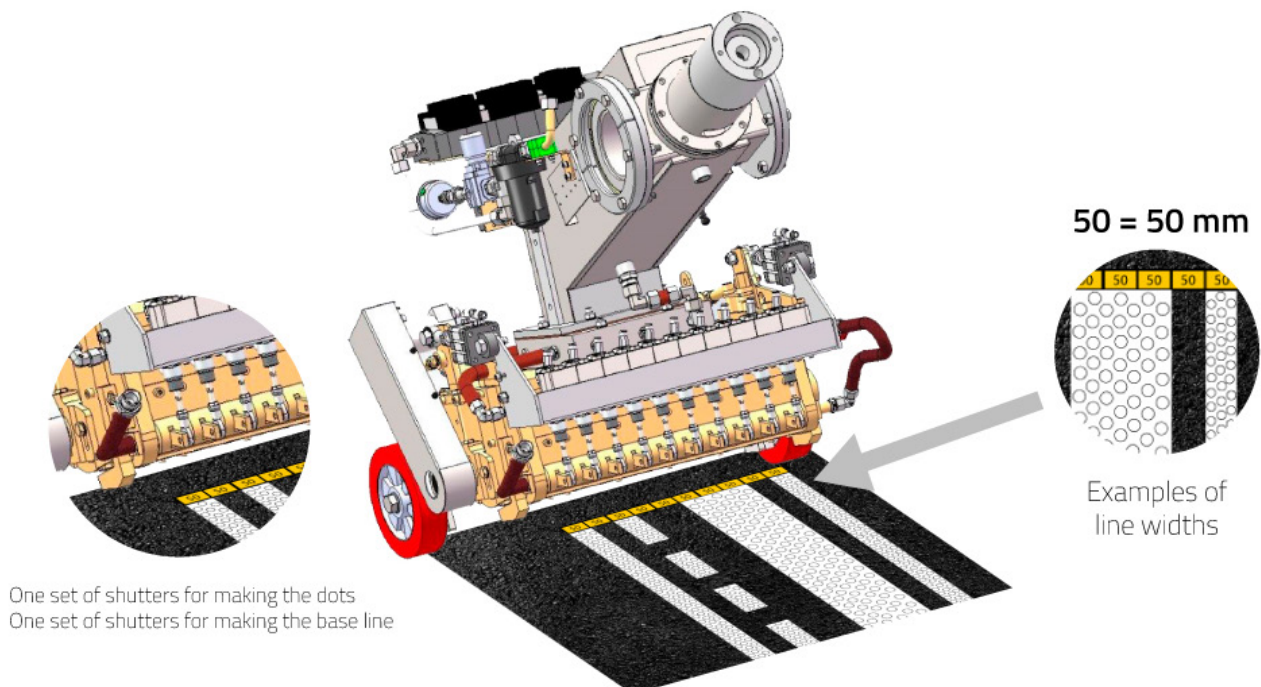


# TECHNICAL SPECIFICATIONS

ENGINE		
Cooling	Water	
RatedPower	90kW / 121HP @ 2300rpm	
Manufacturer	Deutz TCD 3.6 L4	
Cylinder	4 cylinder, 3600cm3	
Approval	EU Stage IV final ( Stage V ready) – US Tier 4. CRT + SCR, AdBlue	
Type	4 stroke, common rail diesel with turbo and intercooler	
COMPRESSOR		
Compressor Capacity	Hydraulic driven, air screw 2400 or 4500 L/min @ 10 bar. Integrated oil system with external oil cooler. Water separator.	
FILLING CAPACITIES		
Bead capacity	330 L (2 x 165 L). Pressurized (max 3 bars)	
Hydraulic tank size	126 L	
Fuel tank capacity	159 L (78 +81 L)	
MATERIAL TANK		
Material Tank	585 L and 440 L	
DRIVING PROPERTIES		
Turning radius	4.90 m.	
Steering	Dual torque steering	
Drive angle	8° or 14% at 21 km/h, 17° or 30% at 11km/h	
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	
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		
Height	2250 mm (Without Beacon)	
Length	5904 mm	
Width	1346 mm (dimensions are without equipment)	

# 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 retro-reflection.

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 minimized 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.

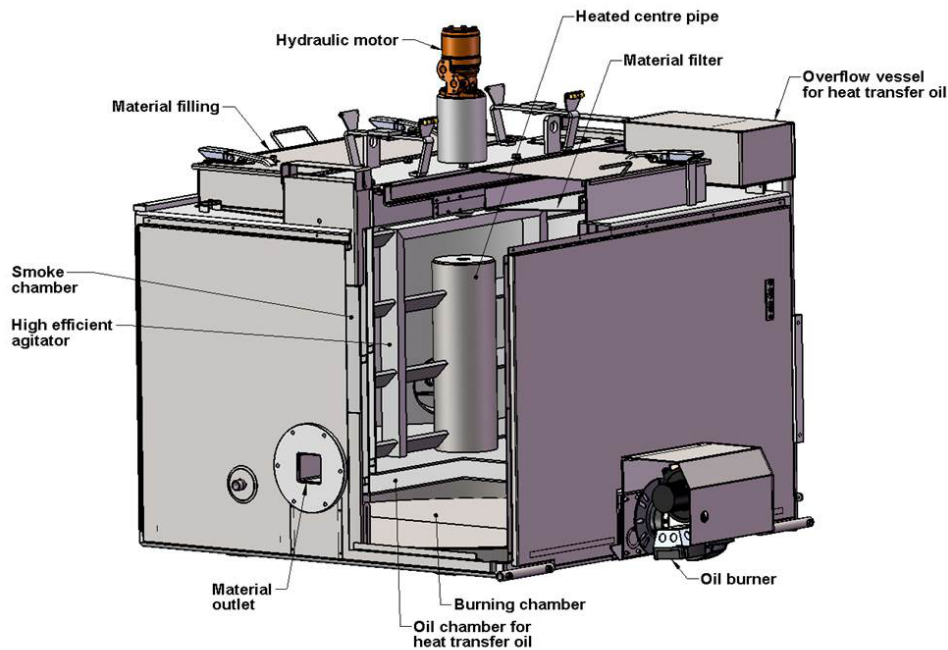
## AUGER SCREW PUMP WITH CONTINUOUS RECIRCULATION SYSTEM

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.

# PRESSURIZED COLD PAINT EQUIPMENT

Air spray with atomizing air is a method of marking that uses a pressure tank for the material and compressed air to atomize and spray the paint onto the road surface.



For all Borum spray machines, the equipment is mounted on a sliding retainer frame as standard that allows you to quickly slide the equipment from one side to another. You can have 1-3 paint guns, depending on the set-up of the machine, and 1-3 bead guns are attached.

The ground distance is maintained by a retainer wheel to ensure a constant road marking width. Lifting of retainer is pneumatic and done from the operator's seat.

Paint filter with cut-off valve for easy maintenance.

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

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

## BM C6 COLD PAINT GUN

High-performance spray gun. with a 6 mm nozzle set for water-based, solvent-based and high solid paints. The BM C 6 gun can work with paint marking pressure up to approx. 8 bar.

Air capacity of 300-700 L/min. is needed per gun.

Possibility to apply lines in widths from 8 to 20 cm with one gun depending on work conditions, nozzle size, application speed, and layer thickness. Line thickness is typically between 0.25 mm to 0.80 mm.

# PRESSURIZED BLACK STEEL TANK



## PRESSURIZED COLD PAINT TANK

Pressurized black steel tank for solvent - 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.

## STAINLESS TANK (OPTION)

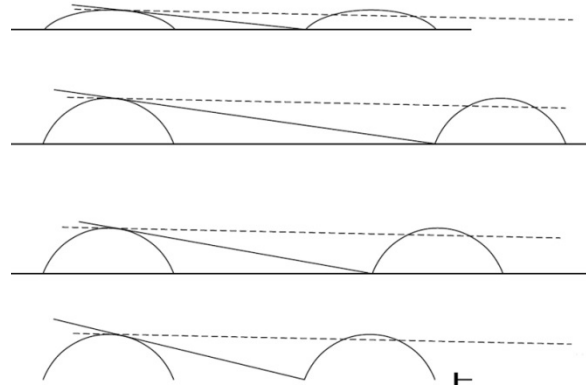
Pressurized material tank and filters in stainless steel for water and ammonium based paints.



## 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.

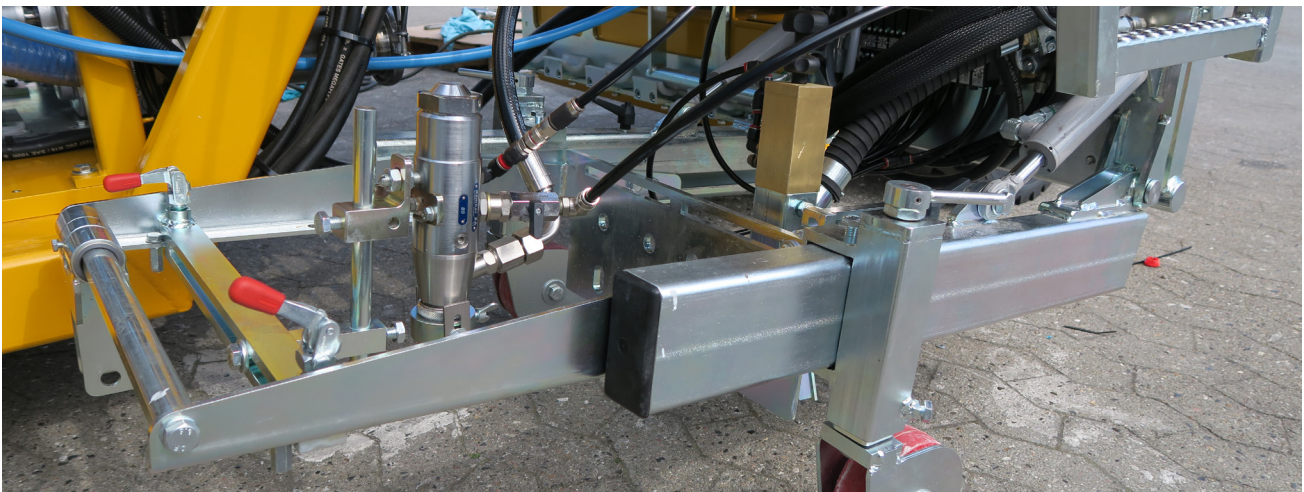
This is possible because of the structure that allows the water to drain. Furthermore, the profiled nature of the road marking produces a noise when driven over that will warn the driver against driving off the road.



## COLD PAINT FEATURES

Cold paint material is a cost-effective solution for executing flat markings over all types of pavements and for use in repairs. Flat lines are mainly used in well-illuminated areas as urban roads for e.g. where the lines do not need high retroreflectivity levels.

Although drying time different between types of paints, it is usually quite long and cones and traffic management might be needed.



### 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.



**Pre-marking system with paint can**



**Cone holder**



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



**Sunshade with 1 rotating light**



**Remote control for BM Lin-eMaster**



**BORUM Online**



**Air drier for bead tank**



**Bead alarm mounted on bead gun**



**Pointer turning with steering**  
With hydraulic lifting system



**Pre-marking system with paint gun**



**Airknife**



**Fixed pointer**  
With hydraulic lifting system



**Ejector filling of bead tank**



**Hydraulic broom**



**Quick shift**



**Hand paint gun**