



PHOTOS MAY SHOW OPTIONAL OR CUSTOMISED EQUIPMENT.

LINE TYPES



Basic Line
(Continuous)



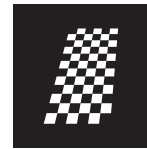
Basic Line
(Interrupted)



Edgeflex



Longflex



Chess



Agglomerate

THERMOPLASTIC EXTRUSION AND AGGLOMERATE APPLICATION

From city areas to urban and interurban roads, the Borum® Master 2000 can handle both smaller jobs and longer road stretches.

The BM 2000 T AG is an agile machine with excellent load abilities and a turning radius of only 3.2 m. It allows for material tank capacity of 265 L.

The BM 2000 has a one-seat slidable drive and operator section for flexible working on the left or right side.

The thermoplastic Borum extruder can apply lines of 5 – 40 cm width depending on the set-up. The extruder may be used for the application of various types of plain and profiled lines, single and double lines of different widths, as well as for simultaneous application of continuous and interrupted lines.

KNOWING THE BM 2000

OPERATOR SECTION

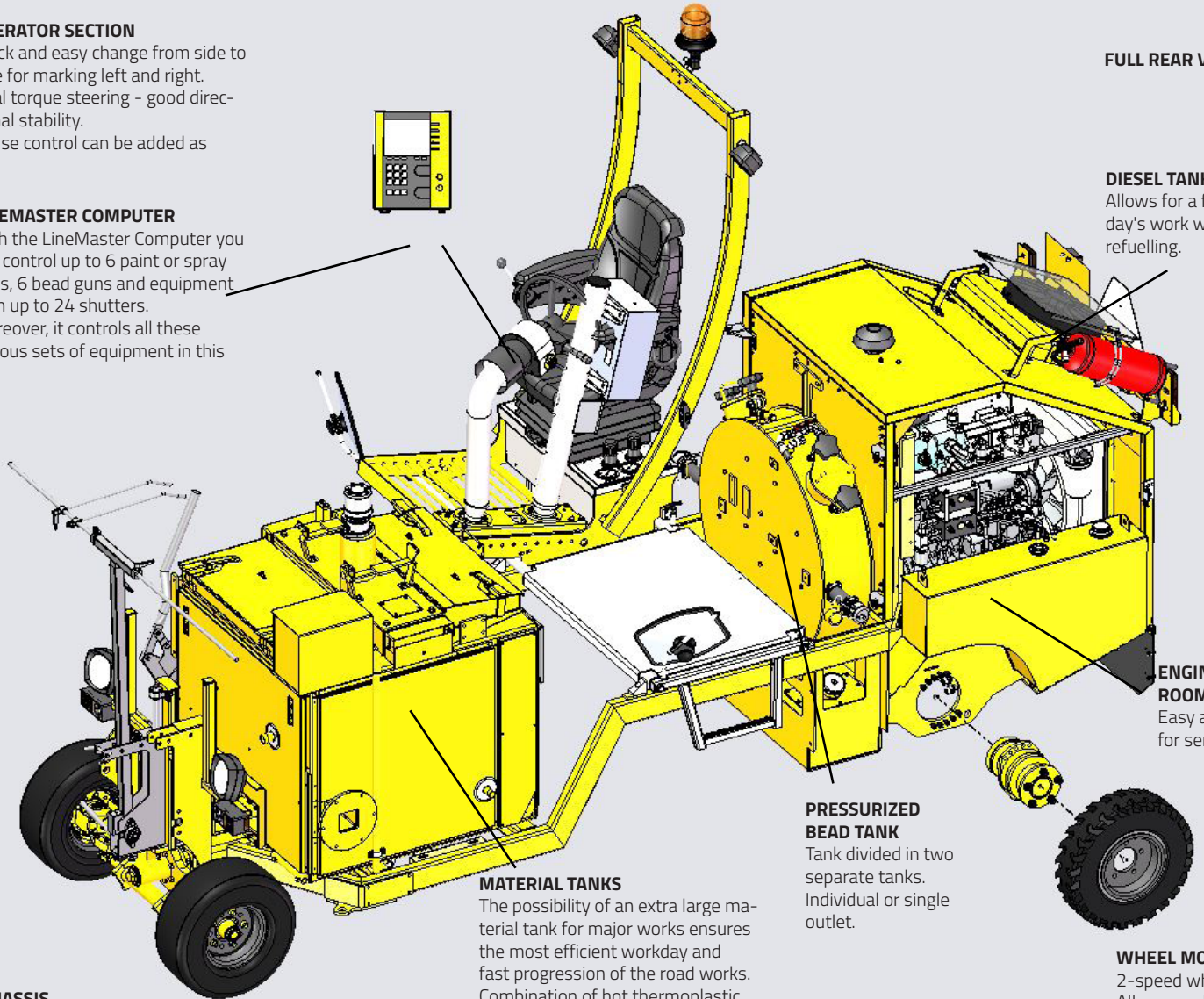
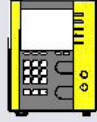
Quick and easy change from side to side for marking left and right. Dual torque steering - good directional stability. Cruise control can be added as

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

CHASSIS

Solid double-frame construction



FULL REAR VIEW

DIESEL TANKS

Allows for a full day's work without refuelling.

ENGINE ROOM

Easy access for service.

PRESSURIZED BEAD TANK

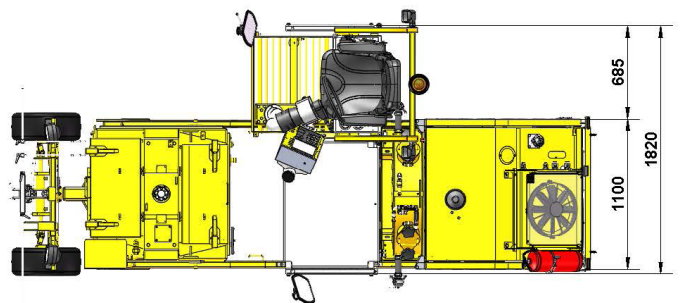
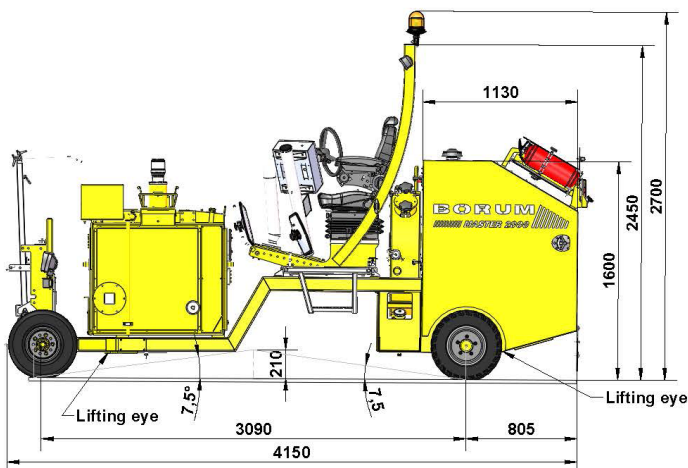
Tank divided in two separate tanks. Individual or single outlet.

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. Combination of hot thermoplastic and cold paint is also possible on an extended chassis.

WHEEL MOTOR

2-speed wheel motor
Allows working uphill

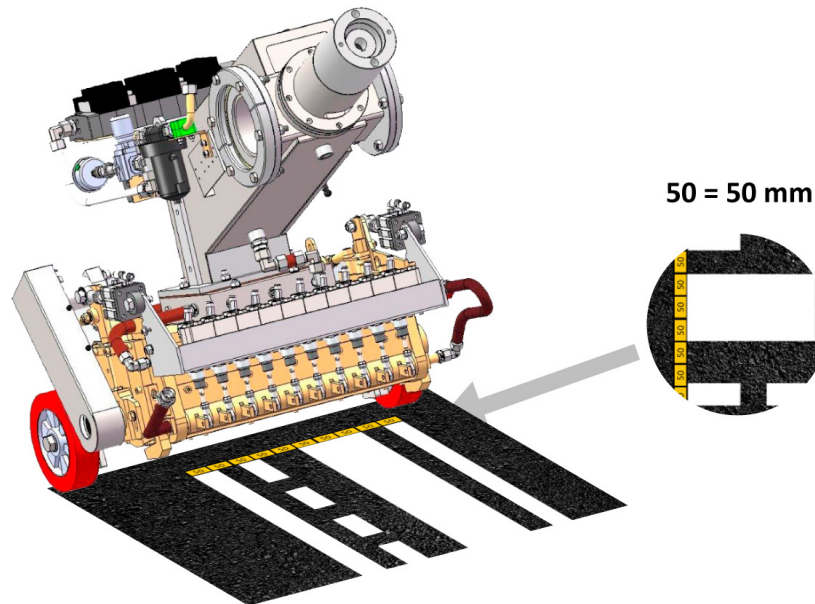


TECHNICAL SPECIFICATIONS

ENGINE		
Manufacturer	Kubota	
Type	Turbo	
Cooling	Water	
Cylinder	4 stroke 2400 cm ³	
RatedPower	44 KW	
Approval	EU stage IIIA (type V2403-M-T-)/US Interim TIER 4	
COMPRESSOR		
Compressor Capacity	Screw compressor. 1800 L/min @ 10 bar Integrated oil-cooling system. Air-cooler incl. water separator.	
FILLING CAPACITIES		
Fuel tank capacity	50+5 L	
Hydraulic tank size	55 L	
Bead capacity	115 L/170 kg. Pressurised (max 2.1 bars)	
MATERIAL TANK		
Material Tank	265 L	
DRIVING PROPERTIES		
Turning radius	3,2 m	
Steering	Dual torque steering	
TRANSMISSION		
Hydrostatic transmission	For variable speed, forward/backwards	
Speed	0-16 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. See more detailed info.	
COLOUR		
Colour	RAL 1007 (Other colours available on request)	
DIMENSIONS		
Length	4150 mm	
Width	1100 mm	
Height	2465 mm	

THERMOPLASTIC EXTRUDER

The working principle of the extruder lies in the extrusion of the ready hot thermoplastic material through the extruder valves onto the road surface. Glass beads can be automatically applied. The thickness of the line is controlled by the slot gap and the speed of the machine, coupled to the thermoplastic feed rate.



Thermoplastic extruder set-up ranging up to 30 or 40 cm total line width, built-up with 5 cm standard valves (alternative valve dimensions in the range of 4-10 cm for alternative line widths).

Hot-oil heated equipment for optimal performance.

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

Pneumatic lifting cylinder for up/down function, operation controlled from operator's seat.

The shutters do not touch the high tensile steel drum and therefore the lifetime is long.

Pneumatically controlled quick cleaning function for the removal of solids left in the extrusion slots can be activated while extrusion is in process.

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

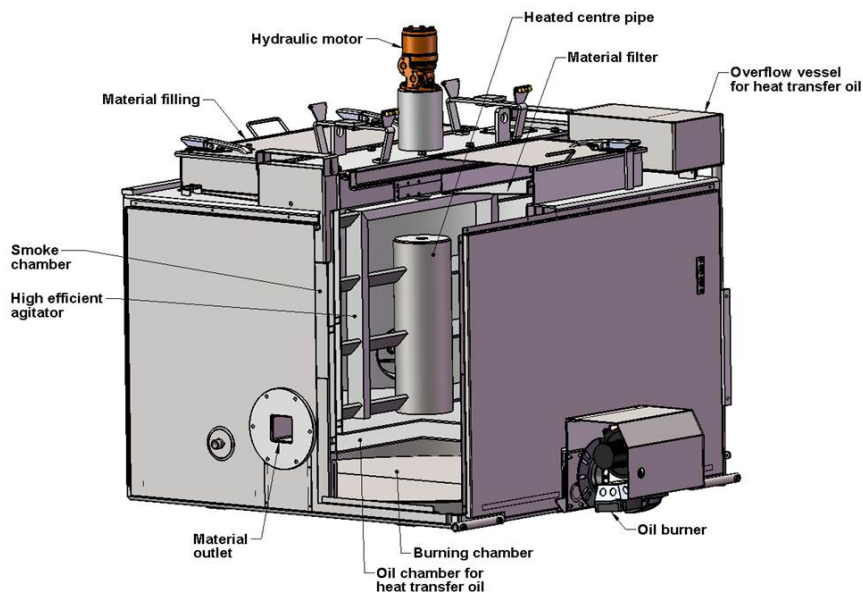
The application speed goes up to 8-10 km/h. Speed-dependent settings possible.

SCREW PUMP WITH CONTINUOUS RECIRCULATION SYSTEM

The transport of material from tank to extruder head is done by a hydraulically driven screw pump, which is electronically controlled. The screw pump has a permanent thermoplastic recirculation system which ensures a constant flow past the in-active extrusion valves, keeping these clean and ready for opening.

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

NON-PRESSURISED THERMOPLASTIC TANK



THERMOPLASTIC NON-PRESSURIZED TANK:

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

BURNER SYSTEM

Diesel burner system for heating of the thermal oil (and thermoplastic). Propane burner 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.

LINEMASTER FEATURES

The Borum LineMaster allows you efficient control of all 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, colours and combinations to have them ready for marking, and can instantly adjust them on the go.

CRUISE CONTROL

For your convenience we recommend use of cruise control. Read more about the cruise control in the Borum Knowledge Lab on www.borum.as.

QUICK CLEANING

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

RAW MATERIALS

We recommend using a high quality application material. Please contact your material supplier for further advice on choosing the right material.

FEATURES THERMOPLASTIC EXTRUDER:

Extrusion applied thermoplastic road markings are available in various levels of Luminance, Skid Resistance & Reflectivity.

- Audible linemarking that is used on road edges.
- The raised marking produces a sound when a vehicle drives over it.
- Immediate retroreflectivity.
- Durable thermoplastic and long lasting markings.



Depending on the set-up of the extruder, lines of 30 – 50 cm width can be applied. The extruder may be used for the application of various types of plain and profiled lines, single and double lines of different widths, as well as for simultaneous application of continuous and intermittent lines.



TYPICAL USES:

Thermoplastic is generally used on roads with high traffic and low night visibility as highways and motorways.



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.



Quick shift



Ejector filling of bead tank



Air drier for bead tank



Fixed pointer
With hydraulic lifting system



Remote control for BM Lin-eMaster



Cone holder



Pointer turning with steering
With hydraulic lifting system



Sunshade with 1 rotating light



Cruise control



GPS system



Bead alarm mounted on bead gun



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



Pre-marking system with paint gun



Airknife



Pre-marking system with paint can



Hydraulic broom