

The Borum® Master 5000 provides you with a variety of high capacity road marking machines. The material tank capacity is 450L (119 gal.), 630L (166 gal.) or 780L (206 gal.) for thermoplastic pressurised tanks, 445L (118 gal.) or 585L (155 gal.) or 710L (188 gal.) for thermoplastic non-pressurised tanks, and 2x440L (116 gal.) or 1000L (264 gal.) pressurised tank for cold paint and cold plastic. The possibility for the larger material capacity naturally gives fewer stops during the day for refilling.

Borum® Master 5000 is an excellent choice for road marking jobs with big material tanks in hilly areas. The double speed wheel motors allow a max driving angle of 30%.

Data for Borum® Master 5000, basic machine:

Engine

Water-cooled, 4-cylinder Kubota Turbo Diesel engine 3800 cm³ (232 cu.in.)
74kW (99,2 HP) @ 2600 RPM.

Compressor

Screw compressor, capacity from 1800 to 3600 L/min. @ 10 bars.(63,5 to 127 cfm @ 143 psi)
Automatic air-flow controlling system. Integrated oil-cooling system. Air-cooler incl. water separator.

Chassis

Stable double profile frame construction. Engine, compressor and hydraulic pump in one unit mounted on vibration dampers.

Power steering

Dual torque steering with improved control for directional stability. Direct steering during marking and full servo assistance when manoeuvring the machine
Turning radius 4.90 m. (193 in)

Pointer

Stabilised against vibrations and adjustable in all directions. Easy handling, telescopic system. Fixed to frame or turning with wheels.

Transmission

Hydrostatic, transmission consisting of piston pump with variable output, controlled from the operators seat. Connected to high-torque hydraulic piston motors with integrated full-torque electrohydraulic disc brakes. Electrically operated low speed shift giving either 0-24 km/h (0-7,5 mph) or 0-12 km/h.(0-7,5 mph)
Manual pump for release when no engine power.
Max driving angle with total weight of 7210 kg (15985 lb.): 30% (16°) at low speed.

Hydraulic system

Triple pump for 3 hydraulic circuits. Pumps are driven by the power take-off of the diesel engine.

Hydraulic tank

93 Litres (24,6 gal.) tank with level and temperature indicator. Hydraulic oil cooler mounted outside the engine room.

Fuel tank

180 Litres (2 x 90 L) (47,6 gal. (2 x 23,8 gal.))

Pressurised bead tanks

Bead capacity 330 L. (87,2 gal.)
Tank divided in two separate tanks. Individual or single outlet. Pressure max 3 bar (42,9 psi). Prepared for vacuum filling.

Operator section

Suspended two seat driver section – quick and easy slideable from left to right without the use of any tools. Steering wheel and computer panel mounted on 3D adjustable rod, which ensures perfect ergonomic positioning for the operator. For machines with spray equipment the atomizing air and tank pressure can be adjusted from the operators seat.

Gauges

Air pressure
Water temperature
Fuel level
Manometer for air pressure in glass bead tanks
Working hour counter

Electrical system

12 V/130 Amp alternator. Warning lights, rear lights, front lights, battery and relays.

Borum® LineMaster computer:

Control unit for line marking

The Borum LineMaster allows you efficient control of all road marking tasks, from line application and pre-marking to reporting and invoicing. Speed proportional control of road marking sequence when using pump solution, including material feed, material pattern and thickness.
• An 8" display which is visible in sunshine as well as in the dark

- Easy adjustment of all important parameters during marking
- Transfer of the daily marking report to an office computer via a USB stick
- Optional GPS module, allowing recording of the line marking positions
- Storage of up to 99 different line types– arranged in up to 30 marking programs
- A choice of language as per request
- Incl. foot switch

Engine bonnet

Easy access for service in left and right side.

Paint

Standard: RAL 1007.
Other colours available on request.

Main dimensions + weight

L : 5350 mm (210 5/8")
W : 1300 mm (51 1/4") + equipment.
H : 2250 mm (88 5/8")
incl. rotating warning light.
Weight: 3500 kg (7717 lbs) up to 4560 kg (10053 lbs) without material

Application Methods:

Borum® Master 5000 is developed to work with one of the following application methods. Equipment to be mounted on the machine according to your specific need

Click on your choice below to see the data:

[Thermoplastic Extruder \(T\)](#)

[Thermoplastic Extruder with Dot'n Line \(DL\)](#)

[Thermoplastic Extrusion with Dot'n Line & Spray \(SP DL\)](#)

[Dot'n Line & Spray \(Pump\)\(SP P DL\)](#)

[Thermoplastic Spray with Pump \(SP/P\)](#)

[Thermoplastic Spray with Pressure Tank \(SP\)](#)

[Thermoplastic Spray with Pressure tank and Extruder \(SP/T\)](#)

[Thermoplastic Spray with Pump and Extruder \(SP/P/T\)](#)

[Thermoplastic Extruder and Pressurised Cold Paint \(T/C\)](#)

[Pressurised Cold Paint – 1 tank or alternatively 2 tanks \(C\)](#)

[Cold Paint – Airless \(CA\)](#)

[Thermoplastic Screed box \(RL\)](#)

[2-component cold plastic \(CP\)](#)



Borum International A/S
Højvangsvej 10
Hadbjerg
DK-8370 Hadsten

Phone +45 8761 3213
Fax +45 8761 3214

info@borum.as
www.borum.as



2-component cold plastic, Airless (CP A)

Options:

Bead gun system

Please see data sheet on guns [Guns and bead guns](#)

Cruise Control System

The stable marking velocity ensures a uniform quality of the road marking – layer thickness and constant pattern. Possibility for two preset memory settings.

By a push on a button the speed is adjustable:

1) ± 0.1 km/h (0,063 mph)(up and down) in the interval 0-3 km/h (0-1.975 mph)

2) ± 0.3 km/h (0,188 mph)(up and down) in the interval 3-6 km/h (1,88 - 3,75 mph)

3) ± 0.5 km/h (0,31 mph) (up and down) from 6 km/h (3,75 mph) and up

Hydraulic lifting of pointer

Lifting and lowering of pointer is controlled from operator's seat.

Premark system

Electronically controlled premark system with telescopic foundation and ground distance wheel.

Cone Rack

For traffic management equipment. With our without seat.

Ejector filling of bead tank

Heater for cold paint

Rack for mounting of flashing arrow

Sun roof

Hydraulic broom or air knife

For sweeping the road prior to marking; mounted just before the marking unit.

Modification rights reserved.



Borum International A/S
Højvangsvej 10
Hadbjerg
DK-8370 Hadsten

Phone +45 8761 3213
Fax +45 8761 3214

info@borum.as
www.borum.as



- it's straightforward

Borum Motorway, Thermoplastic Extrusion with Dot'n Line

Borum® Master 5000 DL

Borum® Master 5000 DL is a Borum Motorway model for thermoplastic extrusion with Dot'n Line application. Borum offers two different Dot'n Line heads; the Dot'n Line Basic and the Dot'n Line Advanced.

Dot'n line equipment

Different patterns and applications

The Dot'n Line equipment is very flexible and can apply thermoplastic for both types 1 and 2 road marking. In this way the Dot'n line system is able to focus on either day time visibility (QD), night time retro-reflection (RI) or combinations. To be able to achieve these requirements, the dot'n line system offers a three-in-one solution:

- * Extruded base line (flat lines)
- * Dots
- * Unique combinations of base lines with dots (Dot'n Line)

When using the dot-function the number of dots per meter can vary from 15 up to 35 dots per meter, by varying the rpm of the Dot head. The rpm is set on the computer. You can get a larger dot diameter by choosing a drum with larger holes.

The holes in the standard drum are 12 mm, which will result in dots on the road ranging from typically 20-25 mm diameter and a center-to-center distance of the dots of typically 25 mm.

Thermoplastic tank

445 L, 585 L or 710 L tank indirectly heated by heat transfer oil. Thermostatically controlled oil and material temperature.

Vertical agitator (mixer)

Hydraulically driven agitator. The agitator turns both clock- and counter clockwise for a perfect homogenising of the thermoplastic. Stable construction with foundation and bearings at the top of the material tank.

Burner system

Diesel burner for heating of the thermal oil.

Heat transfer oil pump

Hydraulically driven.

Screw pump with recirculation system

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

Rotor drive

Speed proportional control of the

DOT-pattern and size.

Dot'n Line heads

Thermoplastic extruder head ranging from 30-50 cm width fitted with 5 cm standard valves (Alternative valve dimensions in the range of 5-10 cm.) Choose between the Dot'n Line Basic and the Dot'n Line advanced.

Dot'n Line Basic

The basic model is provided with one set of shutters. The unit is primarily designed for making dots without baseline.

Dot'n Line Advanced

The Dot'n Line Advanced is provided with 2 sets of shutters; one set for making the baseline and one set for making the dots. The pressure can be controlled separately for each of these functions. A pause function with constant recirculation of the thermoplastic prevents setting of the material.

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.

Lifting cylinder

Pneumatic lifting cylinder for lifting the equipment, controlled from operator's seat.

Main dimensions

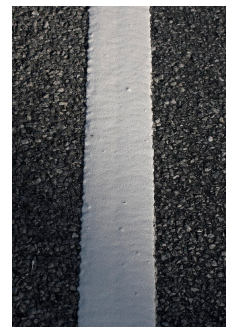
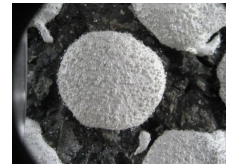
L: 5350 mm
W: 1300 mm + Equipment
H: 2250 mm
incl. rotating warning light.
Weight: From 2600 up to 3800 Kg.

Raw materials

The Dot'n line requires special types of premium thermoplastic material that fulfils the demands for thermal stability and viscosity; Contact your material supplier for advise.

[Read our guideline](#)

Modification rights reserved.



Borum International A/S
Højvangsvej 10
Hadbjerg
DK-8370 Hadsten

Phone +45 8761 3213
Fax +45 8761 3214

info@borum.as
www.borum.as



- it's straightforward