

Borum City machines are specially developed for road marking in the city, in connection with minor highway jobs and in very hilly or mountainous areas (max driving angle is 46%). BM 2000 has slidable drive and operator section for flexibel working on left and right side.

Data for Borum City BM 2000, basic equipment:

Engine

Water-cooled turbo diesel engine, 4 cyl. 2400 cm³ (146 cu.in), 44 kW/59 hp @2700 rpm.

Compressor

Screw compressor, capacity each 1800 L/min. @ 10 bars (63,5 cfm @ 143 psi). Air safety valve with silencer.

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 4,25m (167 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 operator seat. Connected to high torque hydraulic piston motors with integrated full-torque electrohydraulic disc brakes for parking. 0-16 km/h (0-10 miles/h). Manual pump for release when no engine power.
Max driving angle with weight at 3560 kg (7850 lb) 46% (25°)

Hydraulic pump

Triplex pump for 3 hydraulic circuits.

Wheel motor

High-torque hydraulic piston motors with integrated full-torque electrohydraulic disc brakes.

Hydraulic tank

40 Litres (10,6 gal.) tank with level and temperature indicator. Hydraulic oil cooler mounted.

Fuel tank

50 Litres (13,2 gal)

Pressurised bead tank

Bead capacity 115 L (30 gal.)
Pressure max 1.7 bar (24,3 psi)

Operator section

Suspended two seat driver section – quick and easy slideable from left to right without use of any tools. Steering wheel and computer panel mounted on 3D adjustable rod, which ensures perfect ergonomic positioning for the operator.

Gauges

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

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.

Paint

Standard: RAL 1007.
Other colours available on request (Thermoplastic version)

Application Methods:

Borum City, BM 2000, 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 the below link to see the data:

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

[Thermoplastic spray with pressure tank & Extruder \(SP/T\)](#)

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

[Pressurized Cold Paint - 1 tank \(C\) or alternatively 2 tanks](#)

[Cold Paint - Airless \(CA\)](#)

[Thermoplastic Ribline Box \(RL\)](#)

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

[2-component cold plastic, Airless \(CPA\)](#)

Options:

Bead gun system

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

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

With seat.

Hydraulic broom or air knife

For sweeping the road prior to marking; mounted just in front of the marking unit.

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 (0,063mph)(up and down) in the interval 0-3 km/h (0-1.075 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) in the interval 6 km/h (3,75 mph) and up



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- it's straightforward

Borum City, Thermoplastic Extrusion & Spray

BM 2000 SP T

BM 2000 SP T is a Borum City model for thermoplastic material, equipped with extruder & spray equipment. Only one equipment can be mounted at a time.

Thermoplastic tank

Spray-plastic pressure tank

Pressurised 290 L (76,5 gal) tank oil-jacketed and indirectly heated by heat transfer oil.

Vertical mixer with top foundation and bearings. Thermostatically controlled oil and material temperature.

Vertical agitator (mixer)

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

Agitator transmission

Hydraulic transmission with motor, shaft, safety valve and on/off valve.

Burner system

Diesel or alternatively propane burner system for heating of the thermal oil (and thermoplastic).

Heat transfer oil pump

Hydraulically driven.

Spray-plastic equipment:

Retainer

Basic frame and marker unit for 2 spray guns and 2 bead guns. Indirect heated, oil-jacketed and isolated.

Retainer lifting system

Lifting of retainer from operators seat. Hydraulic cylinder, foundation and hydraulic solenoid valve.

Spray-plastic gun

Automatic high-capacity sprayplastic gun. Consists of an oiljacketed gun body and a pneumatic cylinder. See also data sheet for our different types of guns [Guns and bead guns](#)

Bead gun system

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

Extruder equipment:

Extruder drive

Hydraulic motor with hose system and electronically controlled dose valve with integrated safety valve system.

Thermoplastic extruder

Thermoplastic extruder ranging from 30-50 cm (12-20 in) fitted with 5 cm (2 in) standard valves (Alternative valve dimensions in the range of 4-10 cm (1,5 - 4 in))

The transport of material from tank to extruder is done by a hydraulically driven screw pump. The screw pump has a permanent thermoplastic re-circulation system which ensures a constant flow past the extrusion valves when material is not being extruded.

The extruder valves are cylindrical to achieve maximum working frequency when profiled markings are extruded, and they are mounted with interior hot-oil heating.

Quick cleaning

Pneumatically controlled quick cleaning system for the 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.

Extruder lifting cylinder

Adjustment of extruder height from operator's seat. Pneumatic lifting cylinder, controlled from operators' seat.

Important

When using the extruder equipment the tank must be non-pressurised.

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