

Vapormatt | Puma XL

Overview, technical specifications
and options



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Overview

The Vapormatt Puma XL manual wet blasting machine is highly versatile and operator friendly as it offers a large envelope for a wide range of components to fit, making it ideal for their surface preparation. A side-loading swing door with a safety lock allows the operator easy access to the inside of the cabinet whilst achieving the best results using the advanced Vapormatt wet blasting process. Additionally, with a flat rear side, the machine can be placed against a wall to optimise space.

Key features include:

- High-quality stainless steel construction
- Ergonomically designed for operator comfort and maintenance
- Large cabinet dimensions and wide opening door to help with the loading of large heavy components
- Stainless steel swing out turntable with 250kg (551lb) UDL loading capacity.
- Designed with ease of use and maintenance in mind
- Powerful blast gun with adjustable pressure to prevent damage to fragile components
- Hand-operated water and air nozzles for rapid post-process rinsing and drying
- Window wash to ensure visibility of the blast process
- S-Tank filtration system to help keep running costs to a minimum by cleaning and recirculating water for rinsing and window wash

Industries and applications

The Puma XL is suitable for general wet-blasting surface finishing in most industries including:

Industries

- Aerospace
- Composites
- Additive manufacturing
- Automotive
- General use

Applications

- Component cleaning
- Deburring
- Paint stripping
- Peening
- Preparation for composite bonding
- Preparation for coating



Processing description

The Puma XL wet blasting machine uses the Vapormatt advanced pump and nozzle system and can work with a wide scope of abrasive media. The machine offers a manual blast station ergonomically designed to assist the operator.

As standard, it is fitted with a 10mm (0.4") blast nozzle, air blow-off nozzle and recirculated water system with a diaphragm pump.

The process helps to remove paint, flatten and prepare surfaces for re-painting, remove welding, heat marks, oxides and machining blemishes, clean, degrease and give a consistent surface finish. Depending on blast air pressure, media type and size, the process finish can be altered for each application.

The processing time and coverage can be changed via a pressure regulator and abrasive concentration.

Optional configurations

Plastic-media processing

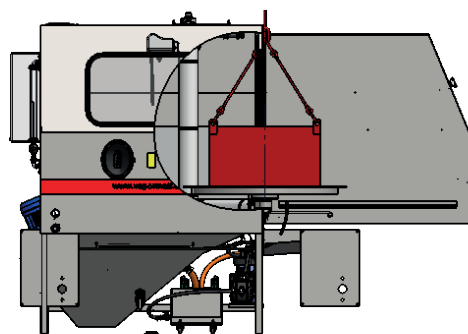
The Puma XL machine can be fitted with the plastic-media processing kit, designed for efficiently paint stripping components. This optional feature includes a slurry concentrator enricher, long series nozzle, pump with high pressure impeller, a sump heater and a moving bed paper filter. Additional information regarding this option can be found under 'Optional items'.



Technical specification

The following features are included within the machine's basic specification.

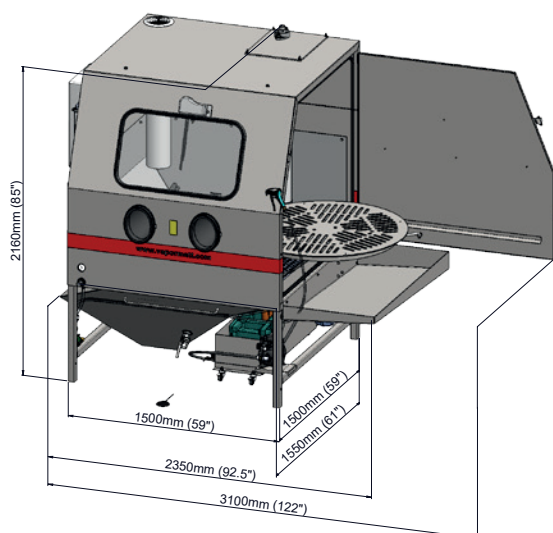
Feature	Description
1	Cabinet construction is 2.5mm (0.08") thick stainless steel
2	Machine footprint: 2350 x 1550 x 2200mm (92 x 61 x 86"); length with door open = 3100mm (122") Internal dimensions: 1460 x 1490 x 1080mm above turntable (57 x 59 x 43")
3	All components for the filtering of abrasives are contained within the footprint of the main cabinet
4	Sump capacity is 200L (44 gal) with overflow
5	Abrasive pump – polyurethane
6	1100mm (43.3") Stainless steel swing out turntable, the turntable swings about halfway out of the cabinet for ease of loading. The maximum loading capacity is 250kg (551lb) UDL.
7	Load bearing sump grids, 50kg (110lb) max load
8	Vapormatt Mk7 blast gun, 10mm (0.4") nozzle, 1.13Nm ³ /min @ 5.5 bar (40SCFM @ 80psi)
9	Manual rinse nozzle
10	Side loading door
11	Stainless steel drip tray fitted at the machine door
12	Toughened safety glass window unit
13	Window wiper and wash bar
14	Footswitch for machine operation
15	Integral LED unit
16	Process handling gloves fitted to the access ports easily replaced from outside of machine
17	Air pressure regulator and gauge mounted on machine front panel.
18	Rubber sheet lining
19	Clear S-Tank filtration system with reservoir tank
20	Recirculated rinse system
21	Component blow-off nozzle
22	Abrasive level sight glass
23	Sump water decant valve, allows partial drain down of the machine



Optional items

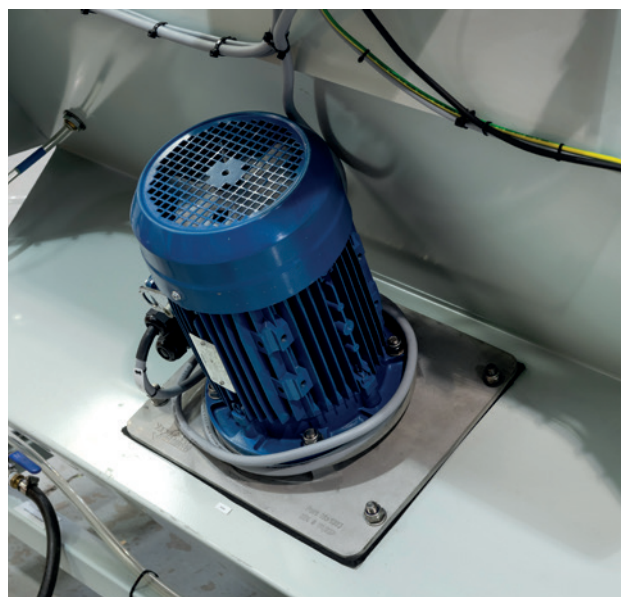
The following features can be added to the machine's basic specification.

Feature	Description
1	Translation of operation manual and labels in non-English
Feature	Loading and component handling
2	Protective polyethylene turntable mat - Ø1100mm (43")
Feature	Slurry system enhancement
3	Concentrator for plastic media - includes a long series nozzle and pump with high pressure impellor. Also includes immersion heater and manually operated moving bed paper filter.
4	Sump immersion heater with thermostat
Feature	Filtration and re-circulation
5	Manually operated moving bed paper filter. Paper width 685mm (27"). Low-level base tank, overflow to drain, connected to closed-loop recirculating rinse package.
6	Automatic moving bed paper filter. Paper width 685mm (27"). Low-level base tank, overflow to drain, connected to closed-loop recirculating rinse package



Services to be provided by the customer

Service	Requirement
Electricity	400/480V AC, 3 phase, 50/60Hz, 7amp (dependent on options selected) Must be protected by a residual current device (RCD or "Earth trip") and isolation switch within reach of the machine.
Air supply	Connection: DN15 (1/2" BSP) External pressure regulator recommended Pressure 2 - 7 bar (30 - 100psi) Flow 1.13 Nm ³ /min (40 SCFM) Quality DIN ISO 8573-1 class 5.6.4
Water supply	Connection: DN15 (1/2" BSP) Max pressure 7 bar (100psi) Flow intermittent 13 L/min (approx. 3 gpm)
Weight	700kg (1543lb) (includes filter unit) The weight is approximate and will be confirmed at shipping time.
Packed size	1800 x 1600 x 2350mm (71 x 63 x 93")



Dedicated project management and the Vapormatt Promise

We always ensure our machines operate to the specification agreed upon with the customer, that's the Vapormatt Promise.

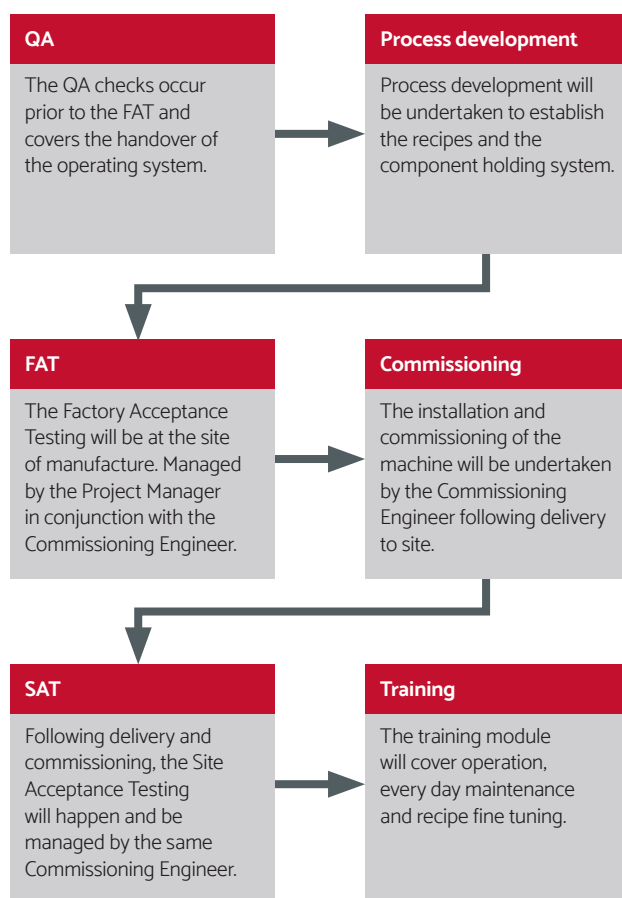
To achieve this every customer is assigned a dedicated project leader from order to installation.

Project management includes our detailed technical acceptance process, see opposite, a key part of which is our factory acceptance testing (FAT). This is where the customer's wet blasting system is extensively tested, often with the actual components the customer will be regularly processing before it leaves us.

Vapormatt support doesn't end there, our aftermarket support includes spares, servicing and Vapormatt 4.0, our Industry 4.0 solution, to ensure maximum production uptime.



Technical acceptance process



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