

# Vapormatt | Puma

Overview, technical specifications  
and options



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## Overview

The Vapormatt Puma is a highly versatile system designed to allow the component's surface to have full coverage in a compact size footprint. Ideal for surface preparation of components, additional options such as turntables and wheel holding jigs make it a very adaptable machine. Additionally, with flat sides, 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
- 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
- Highly bespoke with a range of options
- Window wash to ensure you always have 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 is suitable for general wet-blasting surface finishing in most industries including:

### Industries

- Jet engine components
- Composites
- Medical implants
- 3D additive manufactured components
- General use

### Applications

- Alloy wheel preparation and repair
- Component cleaning
- Deburring
- Preparation for composite bonding
- MRO
- General cleaning

## Processing description

The Puma wet-blasting machine offers a manual blast station ergonomically designed to assist the operator. The process helps to remove paint, flatten and prepare the surface for re-painting. It can also remove any welding, heat marks, oxides and machining blemishes and gives a consistent surface finish.

As standard, it is fitted with a 10mm (0.4") blast nozzle, air blow-off nozzle and recirculated water system with a diaphragm pump. A side loading swing door with a safety lock allows the operator easy access to the inside of the cabinet. An optional swing arm jig can further assist with the ease of loading and unloading. The jig features a 48mm (1.9") shaft over which a wheel can be located, the back of the wheel rests up against x4 rounds bars and is free to rotate around the central shaft which inclines backwards.

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



## Technical specification

The following features are included with each machine's basic configurations.

Feature	Description
1	Cabinet construction is 2mm (0.08") thick stainless steel; Sump 3mm (0.11")
2	Machine footprint: L1400 x W1200 x H2100mm (55.1 x 47.2 x 82.7") Internal dimensions: L1150 x W700 x H1200mm (45.3 x 27.6 x 47.2") With optional wheel jig removed – excluding chimney Maximum depth for max height with door closed
3	All components for the filtering of abrasives are contained within the footprint of the main cabinet
4	Load bearing sump grids, 50kg (110.2 lbs) max load
5	Sump capacity is 48 L (12.7 gal) of water
6	Abrasive charge is between 6kg - 12kg (13lbs - 26lbs)
7	Designed to take up to a Ø762mm (30") max outer diameter
8	Side loading with a work surface max load of 50kg (110lbs)
9	Abrasive pump – polyurethane
10	Vapormatt blast gun, 10mm (0.4") nozzle, 1.13Nm <sup>3</sup> /min @ 5.5 bar (40SCFM @ 80psi)
11	Manual rinse nozzle
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
17	Clear S-Tank filtration system with reservoir tank
18	Recirculated rinse system
19	Component blow-off nozzle
20	Sump water decant valve, allows partial drain down of machine



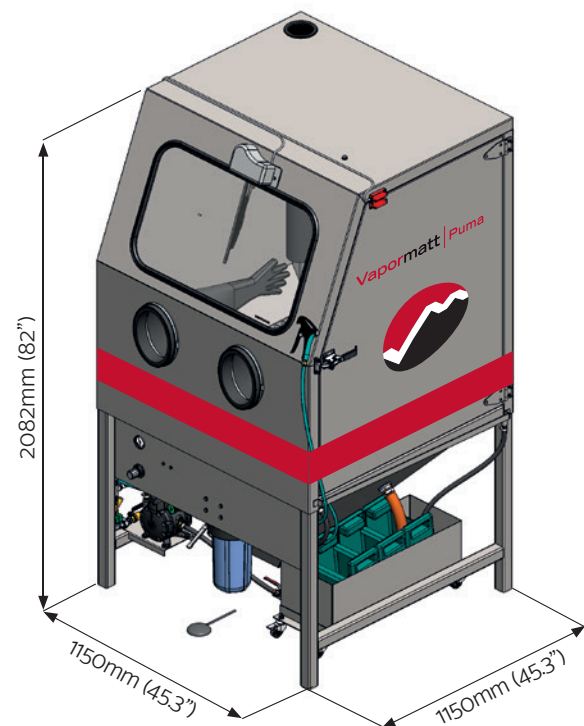
## Optional items

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

Feature	Cabinet enhancements
1A	Labels in non-English
1B	Translation of operation manual

Feature	Component handling
2	Stainless steel turntable on stand (Ø500mm (19.7")), with a maximum load of 50kg (110.2 lbs)
3	Protective polyethylene mat for turntable, Ø500mm (19.7")
4	The car alloy wheel holding jig features an Ø48mm (1.9") shaft over which a car wheel can be located, the back of the wheel rests up against the x4 round bars. The jig arm can swing in and out of the cabinet to assist with loading and unloading
5	Concentrator for PAP media, includes a long series nozzle and HP impellor



## Services to be provided by the customer

The following services are required for the machine to be run correctly.

Service	Requirement
Electricity	400V AC, 3 phase, 50/60Hz, 10amp Must be protected by a residual current device (RCD or "Earth trip") and isolation switch within reach of the machine.
Air supply	Connection: Rp 0.5 (1/2" BSP) External pressure regulator recommended Pressure 2 - 7 bar (30 - 100psi) Flow 1.13 Nm <sup>3</sup> /min (40 SCFM) Quality DIN ISO 8573-1 class 5.6.4
Water supply	Connection: Rp 0.5 (1/2" BSP) Max pressure 7 bar (100psi) Flow intermittent 13 L/min (approx. 3 gpm)
Weight	350kg (772lb) (includes filter unit) The weight is approximate and will be confirmed at shipping time.
Packed size	1450 x 1250 x 2300mm (57 x 49.2 x 90.6")

## Dedicated project management and the Vapormatt Promise

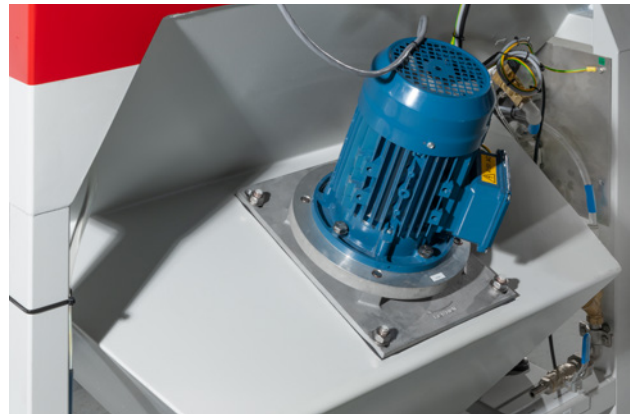
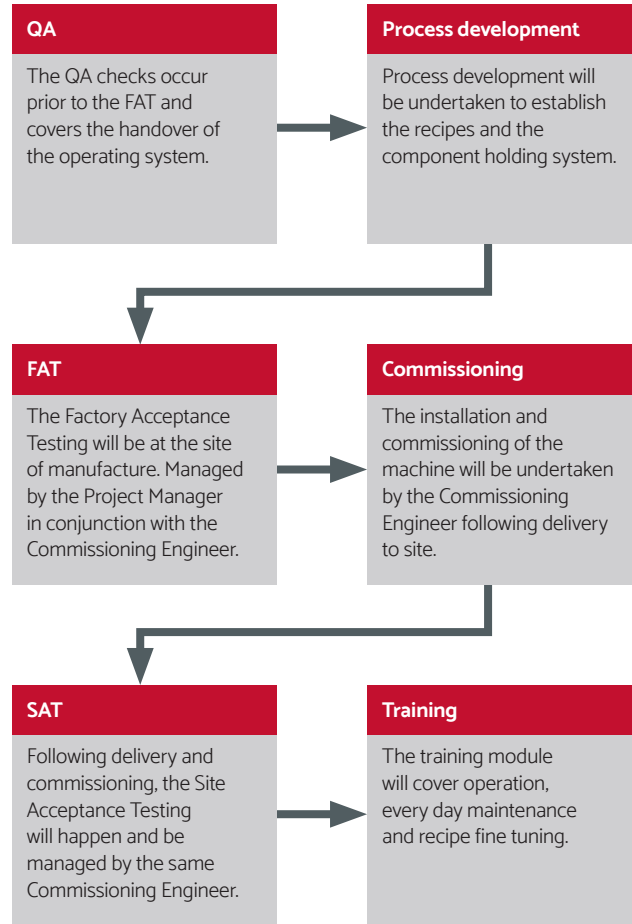
We always ensure our machines operate to the specification agreed with the customer, that's the Vapormatt Promise.

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 up time.

## Technical acceptance process



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