

Application Success Stories

Brompton Bicycles invest in a top spec powder coating facility with Gema Magic System and AP01 application technology



BROMPTON

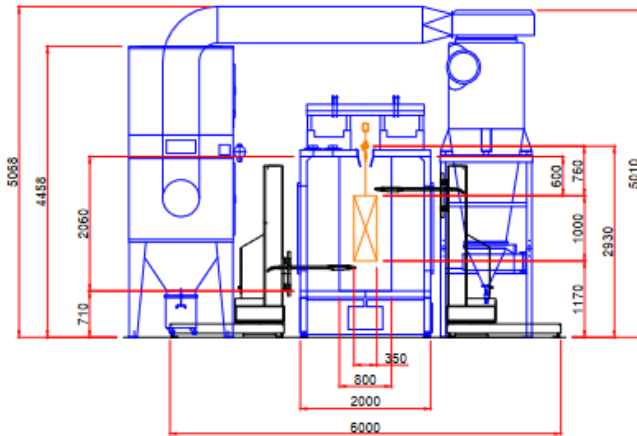
Superb coating
application

Clean operating
environment

Environmentally
friendly

Application Success Stories

Layout

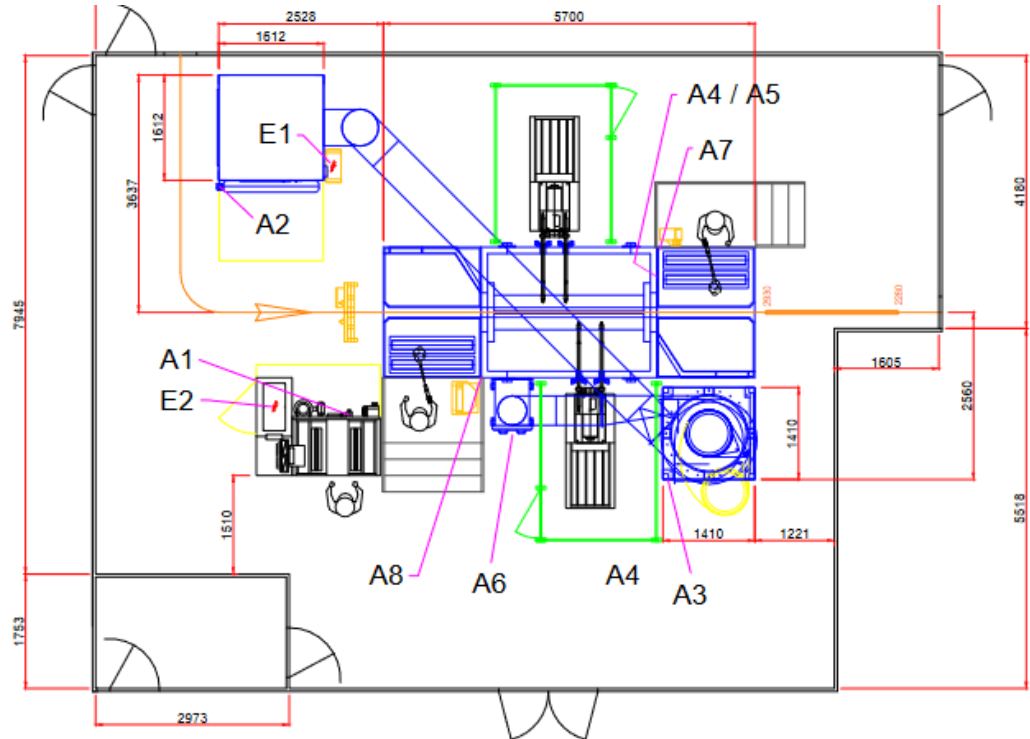


COMPRESSED AIR REQUIREMENTS

MIN. INPUT PRESSURE: 6 Bar
MAX. INPUT PRESSURE: 10 Bar
MAX. WATER VAPOUR: 1.2 g/m³
MAX. OIL VAPOUR: 0.1 mg/m³

MAX. AIR CONSUMPTION: 110 m³/hr
TYP. AIR CONSUMPTION: 33 m³/hr

AIR CONSUMPTION DURING CLEANING PROCEDURE OF UP TO MAX. 350 m³/hr (SHORT DURATION AIR PULSES)
INSTALLATION OF AN AIR RESERVOIR MAY BE REQUIRED ON SYSTEMS WITH LESS THAN A 2" RING MAIN
OR WITH FLUCTUATING PRESSURES DUE TO DEMANDS FROM OTHER EQUIPMENT.
(RECOMMENDED RESERVOIR CAPACITY: 2000 Ltr)



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Installation Key Data

Parts:

High end bicycle frames

Production data:

- 1000mm high
- 250mm wide
- 1m per min

System Type:

- MagicCompact® BA04 booth
- 12,000m³/h
- 4 OptiGun GA03 automatic guns
- 2 manual stations
- OptiSpray AP01 application pumps
- OptiCenter® powder management
- MagicControl CM30 control system
- Product recognition
- X & Y reciprocation



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Company Profile: The unique Brompton folding bike was designed and built in London in 1975 by Andrew Ritchie in his flat in South Kensington opposite the Brompton Oratory. Still made in London today, Brompton is making over 45,000 bikes per year and is the UK's largest bike manufacturer.

The Investment: As part of a significant investment program Brompton Bicycle has installed a complete powder coating line at their new manufacturing facility in Greenford London. The new facility is central to Brompton's drive to double output of the folding commuter bikes which carry its name.

The factory will support Brompton's ambition to increase their production capability to around 100,000 folding bikes per year.

The Brompton company is a rare example of a UK bicycle manufacturer that has succeeded in competing with brands produced in Asia.

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Customer feedback:

Tony Hobbs, Brompton's Factory Manager explains their decision to invest: 'Vertically integrating the product finishing process has been a significant step for Brompton as we work to expand our in-house manufacturing capabilities. The investment was considerable in terms of size and capital cost, so identifying and engaging with the right supply partners has been pivotal in achieving today's outcome, something which forms part of our growing success story'. As a premium and globally recognised brand, Brompton bicycles require premium automotive standard finishes, and come with a set of demanding requirements in terms of process flexibility,

repeatability, durability and performance.

A critical part of this investment is the sophisticated electrostatic powder coating system, Tony went on to explain 'To identify and select the right equipment for our new facility we conducted an extensive market evaluation, from this it became clear that Gema Europe was the right choice for Brompton when it came to the powder application system. As well as the innovations and build quality available from the Gema product we valued their after-sales support structure, something that was important as we transitioned in to developing product finishing as a core competence at our new factory'.

Tony concluded 'we have been operating the facility for almost 12 months, during this time we have put the Gema system through its paces and we can confirm that the equipment lives up to expectations. We have been leveraging the innovations from Gema's coating technology, this has supported our R&D to develop new custom colour schemes, and exciting capability that will expand our colour range and special edition bikes. We are delighted with the equipment's operation, reliability and performance, and would strongly recommend Gema to anyone who is investing in powder coating equipment'.