

MAP Application Solutions

Background

In virtually all paint spraying and powder coating applications the presence of water, oil and particulate matter, commonly found in compressed air, often causes blemishes such as fisheyes, blistering, caking or globbing. These blemishes result in costly and time-consuming stripping and rework for the blemished pieces. The aesthetic imperfections and associated rework cause disruptions and delays in the manufacturing process resulting in the expenditure of additional labor and material, as well as delayed shipments of finished products.



Application

The installation of a Parker Balston Membrane Air Dyer for paint and powder coating applications will eliminate 99.99% of all water, oil and particulate contaminate from the air resulting in flawless applications of paint or powder coats. Oil and water is coalesced and automatically drained from the prefilter while the membrane removes all water vapor to +35°F dewpoint. The removal of all water vapor completely eliminates the possibility

of condensation post-filter resulting in 100% defect-free application. This process purifies the compressed air without the need for electricity, refrigerants, or moving parts. The Parker Balston membrane dryer system ensures blemish-free and full adhesion application of paint or powder and eliminates maintenance to the gun and coating system, reworking costs, and production disruptions.

Case Study

Furniture Design Manufacturing (FDM) was experiencing issues with paint blemishes in the production process. The company installed a basic filtration system and still saw intermittent fisheyes which resulted in costly, time consuming stripping and reworking. The paint blemishes disrupted the entire manufacturing process and required additional labor and material for rework. FDM soon installed a Parker Balston complete air drying and purification system in one paint booth which immediately resulted in the elimination of paint blemishes. The new Balston system eliminated 99.99% of all water, oil and particulates while the membrane removed all water vapor from the compressed air. Furniture Design Manufacturing soon purchased 20 additional systems and has seen significant increases in their productivity, and quality while realizing increased profits by eliminating costly rework.



MAP

Application Solutions



Model IT1000-35XX

Features and Benefits

- Decreases production disruptions by eliminating fisheyes, blistering, caking, globbing and other aesthetics blemishes
- Reduces costly rework of product by eliminating all oil, water and other contaminants from compressed air supply
- Removes all water vapor which may condense post-filter and cause defects
- No moving parts or electricity needed
- Environmentally safe requiring no refrigerants or freons, silent operation
- Easy to install, requiring minimal maintenance

Principal Specifications

Model #	IT0010-35	IT0030-35	IT0080-35	IT0150-35	IT0250-3560	IT0250-3500	IT0500-3560	IT0500-3500	IT1000-3560	IT1000-3500
Flow Rate	1 SCFM	3 SCFM	8 SCFM	15 SCFM	25 SCFM	25 SCFM	50 SCFM	50 SCFM	100 SCFM	100 SCFM
Min/Max Inlet Air Temp.	40°F/120°F 4°C/49°C	40°F/120°F 4°C/49°C	40°F/120°F 4°C/49°C	40°F/120°F 4°C/49°C	40°F/120°F 4°C/49°C	40°F/120°F 4°C/49°C	40°F/120°F 4°C/49°C	40°F/120°F 4°C/49°C	40°F/120°F 4°C/49°C	40°F/120°F 4°C/49°C
Min/Max Ambient Air Temp.	40°F/120°F 4°C/49°C	40°F/120°F 4°C/49°C	40°F/120°F 4°C/49°C	40°F/120°F 4°C/49°C	40°F/120°F 4°C/49°C	40°F/120°F 4°C/49°C	40°F/120°F 4°C/49°C	40°F/120°F 4°C/49°C	40°F/120°F 4°C/49°C	40°F/120°F 4°C/49°C
Min/Max Inlet Pressure	60/150 psig 4.1/10 barg	60/150 psig 4.1/10 barg	60/150 psig 4.1/10 barg	60/150 psig 4.1/10 barg	60/100 psig 4.1/6.9 barg	101/150 psig 6.9/10 barg	60/100 psig 4.1/6.9 barg	101/150 psig 6.9/10 barg	60/100 psig 4.1/6.9 barg	101/150 psig 6.9/10 barg
Max. Pressure Drop	3 psid	3 psid	3 psid	3 psid	5 psid	5 psid	5 psid	5 psid	5 psid	5 psid
Inlet Port Size	1/4" NPT	1/4" NPT	1/4" NPT	1/2" NPT	1/2" NPT	1/2" NPT	1" NPT	1" NPT	1" NPT	1" NPT
Outlet Port Size	1/4" NPT	1/4" NPT	1/4" NPT	1/2" NPT	1" NPT	1" NPT	1" NPT	1" NPT	1" NPT	1" NPT
Dimensions (cm)	17.5"Lx8"Wx2.5"D 44.5 x 20.3 x 6.3	18.1"Lx10"Wx4"D 45.2 x 25.4 x 10.2	24"Lx11.1"Wx4"D 61 x 28.2 x 10.2	25"Lx16"Wx4.5"D 63.5 x 40.6 x 11.4	26"Lx18"Wx6"D 66 x 45.7 x 15.2	26"Lx18"Wx6"D 66 x 45.7 x 15.2	39"Lx21"Wx6"D 99 x 53.3 x 15.2	39"Dx21"Wx6"D 99 x 53.3 x 15.2	47"Lx28"Wx7"D 119 x 71 x 18	47"Lx28"Wx7"D 119 x 71 x 18
Shipping Wt	1.62 lbs (.73 kg)	6.68 lbs (3 kg)	6.68 lbs (3 kg)	14.88 lbs (6.75 kg)	24.5 lbs (11.11 kg)	24.5 lbs (11.11 kg)	36.5 lbs (16.55 kg)	36.5 lbs (16.55 kg)	52 lbs (24 kg)	52 lbs (24 kg)

Ordering Information

For assistance, call 1-800-343-4048, 8AM to 5PM EST

Model #	IT0010-35	IT0030-35	IT0080-35	IT0150-35	IT0250-3560	IT0250-3500	IT0500-3560	IT0500-3500	IT1000-3560	IT1000-3500
Replacement Prefilter Cartridges										
Stage 1	PS403	PS702	PS702	PS802	PS802	PS802	PS802	PS802	PS802	PS802
Stage 2	---	---	---	5/100-12-DX	5/100-18-DX	5/100-18-DX	5/100-19-DX	5/150-19-DX	5/150-19-DX	5/150-19-DX
Stage 3	5/050-05-BX	5/100-12-BX	5/100-12-BX	5/100-12-BX	5/100-18-BX	5/100-18-BX	5/150-19-BX	5/150-19-BX	5/150-19-BX	5/150-19-BX



Parker Hannifin Corporation
 Filtration and Separation Division
 242 Neck Road, P.O. Box 8223
 Tel: 800-343-4048 or 978-858-0505
 Fax: 978-556-7501
www.parker.com/balston

MAP Spray Painting-A.1
 Reprinted in U.S.A. May 2008
 Copyright© Parker Hannifin Corporation 2006, 2008

ENGINEERING YOUR SUCCESS.