# SPRAY BOOTH FILTER PAPER Standard, Super ECO and Super Efficiency Filter Paper



Outlasts other filters three to five times

Manufactured from 100% Recycled Paper

Up to 98.1% filtration for Standard, Super ECO and ECO filter paper

Up to 99.76% filtration efficiency for Super filter paper

Stapled and glued construction for extra strength and longer life

Bright White Face - Improves spray booth lighting conditions

High Loading Capacity – longer working life – Low pressure drop

**Expansion Strapping Ensures Optimum Performance** 

Concertina Design Reduces, Storage and Transport Costs

Self supporting heavy duty high grade paper

Reduces your running cost "less energy, filter changes and disposal costs"

The superior design has established Binks as the market leading producer around the world. The filter paper range includes Standard, Super ECO, ECO and Super Efficiency.

#### **Filter Construction**

Binks disposable filters consist of two pieces of heavy kraft,100% recycled paper, which is manufactured to the highest technical standard. The accordion style structure, is not only glued, but stapled together during the manufacturing process, to provide additional strength and rigidity, no other filter manufacturer offers this type of construction.

Binks Filters feature a unique expansion strap on the rear that ensures the correct spacing of 8 corrugations to every running foot (30.4cm) importantly this guarantees optimum and superior spray booth filtering performance.

The large air openings in the filter allow high volumes of air to be exhausted without loss of efficiency as the media "loads", resulting in a much longer working life than other systems.

#### Applications

Binks Filters can be used on any liquid overspray in the General Finishing Industry.

#### Certification

Binks filters are supported by a full technical data report, they are ATEX approved, backed up with Finishing Brands ISO credentials. Full performance certification is available on request.





*Standard, Super ECO, ECO and Super Efficiency Filter Paper* 

### **Binks Spray Booth Filter Paper Overview**



Binks filters utilise a combination of impingement and inertia separation to capture the overspray droplets suspended in the airstream passing through it.

The larger droplets tend to impinge and be retained by the front V shaped surface of the filter, preventing the bounce back effect

of overspray. Whilst the accelerating air stream carries the overwhelming majority of the mid and smaller sized droplets through the network of circular holes distributed across the face of the filter.



The forward momentum of the rapidly moving droplets separates them from the air stream which makes four quick and violent directional changes and so, deposits the droplets into the deep interior V pockets formed by each pleat.

Our filter delivers important benefits to spray booth operators applying

most industrial coatings and adhesives. Because the accordion style, stapled pleated construction captures overspray efficiently, last three to five times longer than ordinary dry filters and contributes to an improved, brighter working environment.



One of the common problems experienced with traditional mesh filters occurs when they are used for slow drying coatings. During the time they take to dry, the constant airflow can drag out the still wet particles trapped in the mesh and re-launch them to migrate through the system.

The Binks filter design has in effect created a blind alley into once the droplets are driven; they are permanently trapped and cannot be re-launched into the air stream.

Another added benefit to our filter is its high capacity for overspray holding. This results in a lower frequency of filter change, lower booth maintenance, meaning that fewer filters are required to be in stock, making them more cost effective.

The holding capacity is a direct result of the size and depth of the filter pocket, a full 6cm deep.



The opposing picture shows the Binks filter construction, which includes on the rear side an expansion strap to ensure the correct spacing of 8 corrugations to every foot (30.4cm) guaranteeing optimum and superior filter performance.

Additionally, because the superior

ability of the Binks filters to hold a high capacity of overspray, the fluctuation in resistance to airflow is absolutely minimal over the life of the filter.



Consequently the static pressure increases only slowly with the accumulation of paint, enabling a uniform airflow around the parts that are being coated, and more importantly clean air environment for the sprayers.

The construction of the Binks filter consists of two pieces of strong

recycled cardboard, formed in to an accordion structure, stapled together for strength and rigidity throughout the assembly.

The stapled assembly, coupled with the tight folds and crisp cutting of the holes promotes the optimum airflow through the filter, whilst obtaining the best entrapment of overspray.

Finally the rigidity of the structure and the precise arrangement of the holes along the middle of the front face, the sides of the rear face, and with the deliberate misalignment of the two, combine to create a product of true benefit.

# The only brand to retain its original GSM (grams per square metre) paper weight, offering best life expectancy.

#### **ECO Filter**

2 layers of bright white paper, punched, pleated, fitted with expansion straps, then stapled together. For superior strength and longer working life.

Part No	Description	Surface Area	Filter Size Imperial	Filter Size Metric (cms)
207229EF	Eco Filter	10 Sq yds	H 36'' x L 30'	H 90 x L 924
207900EF	Eco Filter	10 Sq mtrs	H 30'' x L 44'	H 75 x L 1346
207901EF	Eco Filter	10 Sq mtrs	H 36'' x L 36'	H 90 x L 1115
207902EF	Eco Filter	10 Sq mtrs	H 39'' x L 34'	H 100 x L 1038
207903EF	Eco Filter (2 Pieces)	10 Sq mtrs	H 19'' x L 34'	H 50 x L 1038

ECO Filter Paper Specification			
Filter Construction	Self supporting, two ply high strength cardboard paper. Bright white finish.		
Air Flow Rates	100-200 feet per minute (0.5 - 1.0 metres per second) Normal 140 fpm (0.7 ms)		
Pressure Differential	Initial @ 0.75 M/S = 30 PA (0.12" SWG) MAXIMUM 130-250 PA (0.52"-1.0" SWG)		
Temperature Range	MAXIMUM 180°C (356°F)		
Expansion Limiter	Expansion limiting straps ensure correct pleat guaranteeing optimum density of 8 corrugations per running foot (30.4cm)		





#### **Standard Filter**

2 layers of bright white paper, punched, pleated, fitted with expansion straps, then stapled together. For superior strength and longer working life.

Part No	Description	Surface Area	Filter Size Imperial	Filter Size Metric (cms)
207229F	Standard Filter	10 Sq yds	H 36'' x L 30'	H 90 x L 924
207900F	Standard Filter	10 Sq mtrs	H 30'' x L 44'	H 75 x L 1346
207901F	Standard Filter	10 Sq mtrs	H 36'' x L 36'	H 90 x L 1115
207902F	Standard Filter	10 Sq mtrs	H 39'' x L 34'	H 100 x L 1038
207903F	Standard Filter (2 Pieces)	10 Sq mtrs	H 19" x L 34'	H 50 x L 1038

Standard Filter Paper Specification		
Filter Construction	Self supporting, two ply high strength cardboard paper. Bright white finish.	
Air Flow Rates	100-200 feet per minute (0.5 - 1.0 metres per second) ormal 140 fpm (0.7 ms)	
Pressure Differential	Initial @ 0.75 M/S = 30 PA (0.12" SWG) MAXIMUM 130-250 PA (0.52"-1.0" SWG)	
Temperature Range	MAXIMUM 180°C (356°F)	
Expansion Limiter	Expansion limiting straps ensure correct pleat guaranteeing optimum density of 8 corruga- tions per running foot (30.4cm)	



#### **Super Efficiency Filter**

2 layers of high grade paper, punched, pleated, fitted with a polyester final stage filtration, with expansion straps, then glued and stapled.

Part No	Description	Surface Area	Filter Size Imperial	Filter Size Metric (cms)
207229SEF	Super Efficient	5.4 Sq mtrs	H 36'' x L 20'	H 90 x L 600
207901SEF	Super Efficient	8.35 Sq mtrs (10 Sq yds)	H 36" x L 30'	H 90 x L 924
207902SEF	Super Efficient	8 Sq mtrs	H 39'' x L 26'	H 100 x L 800

#### Super Filter Paper Specification

Filter Construction	Self supporting, 2 ply high strength cardboard paper. Bright white finish
Air Flow Rates	0.5-1.0 metres per second (100-200 feet per minute) Normal 0.7 m/s (140 FPM)
Pressure Differential	Initial @ 0.75 m/s = 30 Pa (0.12" SWG) Maximum 130-250 Pa (0.52"-1.0" SWG)
Temperature Range	MAXIMUM 100°C
Expansion Limiter	Expansion limiting straps ensure correct pleat
(Guarantees optimum	Density of 8 corrugations per running foot (30.4cm)
performance)	





## BINKS SPRAY BOOTH FILTER PAPER

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#### Filter Extended Life Span explained:-

During the loading phase of the Binks filter, the airflow stays free although the filter is loading with paint.

Unlike mesh filters which will face load quickly, this quite simply means the paint will seal its face, in turn preventing the optimum booth airflow, so the full depth potential of the mesh filter is not utilised.

The graph shows that Binks filters have a substantially longer and flatter curve than the mesh filter. Which demonstrates the superior holding capacity and enhanced air flow stability, throughout the life of the filter.

With the static pressure increasing much slower with the accumulation of paint on the Binks filter, this produces three major advantages:

- Airflow remains evenly distributed over the entire extraction surface of the booth
- The air flow around the parts to be sprayed or coated, stays uniform
- The painter/operator stays in an environment of cleaner air.

Typical values of Binks paper grade:			
Std g/m <sup>2</sup>	250	280	
Moisture Reel Average %	8	8	
Burst kPa	500	550	
Cobb30 g/m <sup>2</sup>	100	100	
Porosity Gurley s/100ml	30	35	
Smoothness ml/min	2300	2500	
Wax Pick	16	16	
SCT CD kN/m	390	440	

#### No waste

For speedy fitting and cutting the filters are marked at 12" (30.4mm) increments on every eighth corrugation, any left over pieces can be stapled or taped together to form new filter lengths.





