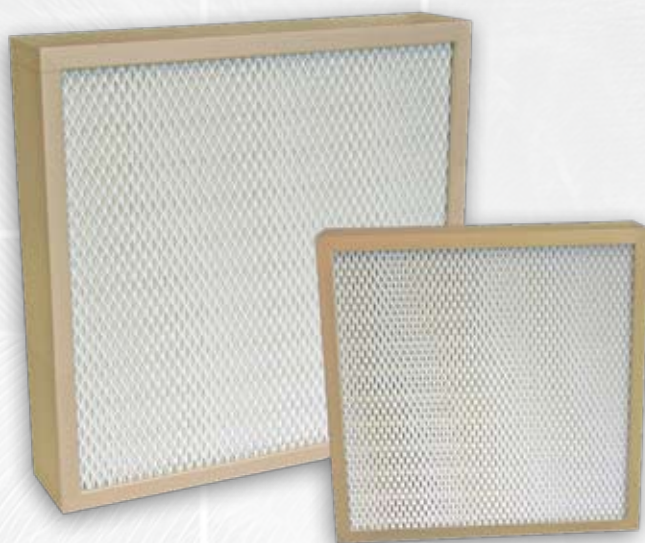


HEPATEX CR-WS

SETTING THE QUALITY STANDARD



- Optimised velocity distribution
- Scan test certificates available
- Mechanically stable
- Solid wood frame
- Optional face guards available
- Low pressure drop reduces energy consumption

Hepatex CR-WS filters are high-efficiency submicron particulate air filters designed to protect people, equipment and processes from airborne particulate contamination.

Application:

Hepatex CR-WS filters are used in situations requiring high levels of air purity. They are primarily designed as intake filters for low turbulence displacement (or laminar flow) clean room ceilings and clean workbenches.

Typical applications can be found in medical, chemistry, pharmacy, microbiology, hospital, laboratories and the food industry.

Hepatex CR-WS filters offer high efficiencies and are designed for a wide range of different "clean" air applications. **CR-WS** filters are suitable for the highest Clean Room requirements up to class 1 (ISO 16 644-1) and for class A sterile pharmaceutical zones.

CONSTRUCTION

A filter medium constructed from various grades of micro glass fibre paper is folded into a pack designed with the optimum pleat height and density for the specific operating conditions. Hotmelt or continuous thread separators support the individual pleats and impart great stability to the whole pack. The pack is entirely sealed into the frame.

PRE-FILTRATION

The service life of **Hepatex CR-WS** filters can be prolonged by efficient pre-filtration for which we would recommend the higher grades of the **Compatex FP** filter range.

QUALITY POLICY

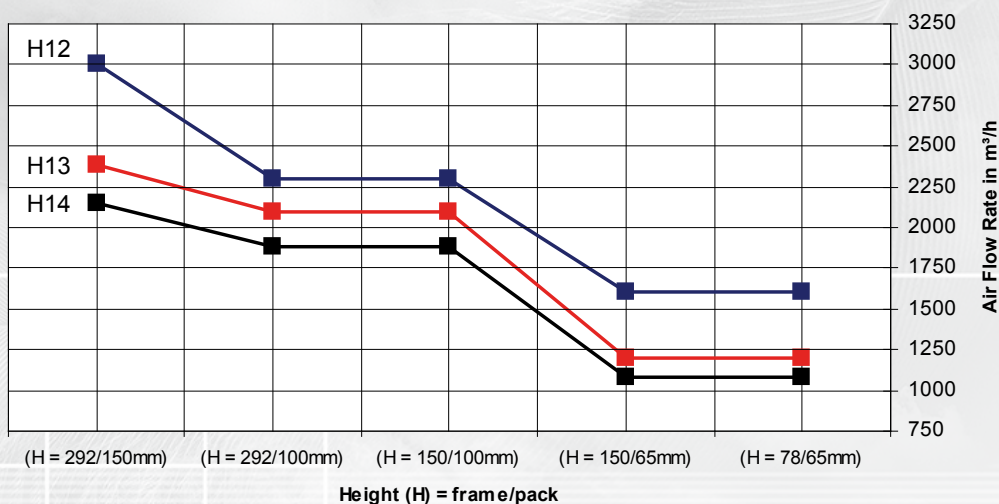
At Vokes-Air Group we are committed to the design and production of filter equipment which is fit for its stated purpose, is of the highest quality, consistent in its performance and offers safety and reliability.

This is achieved by operating and maintaining a comprehensive quality control system based on ISO 9001. Vokes-Air Group concentrates on the quality assurance of the filter medium, production process and finished filter element.

Hepatex CR-WS filters are manufactured and tested in accordance with an established and audited procedure.

FILTER SELECTION DIAGRAM

Maximum Air Flow Rate for CR-WS-610x610 mm @ 250 Pa.



Filtration Efficiencies	Units	H11	H12	H13	H14
EN 1822 integral value (typ. for CR) ¹⁾	%	97	99.8	99.98	99.998
with MPPS-DEHS-aerosol (min.) ¹⁾	%	≥ 95	≥ 99.5	≥ 99.95	≥ 99.995
EN 1822, MPPS-DEHS, local value ¹⁾	%	–	≥ 97.5	≥ 99.75	≥ 99.975
Filter class to EN 1822	–	H11	H12	H13	H14

Specifications	
Filter Frame	Wooden construction – 46, 54, 69, 75, 78, 150, 292 mm deep ⁴⁾
Filter medium	Water repellant micro-glass-fibre paper, pleated in a regular V-pattern
Face guards	Optional on both sides of the pleat pack, expanded sheet steel, powder coated in white (RAL 9010)
Sealing Compound	Fire-resistant, white two-component polyurethane
Gasket	Various options available
Maximum Operating Temperature	70°C
Fire Classification	K2/F2 to DIN 53438

Maximum air flow rates for CR-WS-610x610 mm @ 250 Pa					
Height (mm)		Air Flow Rate (m³/h)			
Frame	Pack	H12	H13	H14	
78	65	1600	1200	1080	
150	65	1600	1200	1080	
150	100	2300	2095	1885	
292	100	2300	2095	1885	
292	150	3000	2385	2150	
Differential pressure (Pa) ^{2) 3)}		250	250	250	

Important note: H10 and H11 available upon request in pack height 65, 100 and 150 mm.

Standard External Dimensions (mm) ⁴⁾		Weight inc. frame (kg)
Length	Width	
305	305	2.0
457	457	3.4
557	557	4.2
610	305	3.3
610	610	4.9
1220	610	8.2

NOTES

¹⁾ DEHS = DieEthylHexylSebacat
MPPS = Most Penetrating Particle Size

²⁾ Tolerance: ± 10%

³⁾ Maximum final pressure drop: ≤ 600 Pa

⁴⁾ Other dimensions available upon request

S U M M A R Y

Hepatex CR-WS ultra filters consist of a multi-layer wood or a MDF frame with a high-quality glass fibre paper medium folded into a 'V' formation. Hotmelt or optional textile thread spacers provide exceptional stability and the filter pack is secured in place with a two-component polyurethane sealant. PU foamed, flat or U profile gasket types are available, and one or two-sided face guards are offered as an option to protect the filter media and provide additional stability.

TECHNICAL DATA

Filter Class (to EN 1822)		H10	H11	H12	H13	H14
Face Guard	One Side (clean side)					
	Two Sides					
Frame Dimensions (W x H x D)						
Pack Depth	65 mm					
	100 mm					
	150 mm					
Gasket	PU Foamed					
	Flat					
	U-Profile					
Air Flow Rate		m³/h				
Maximum Operating Temperature		°C				
Maximum Relative Humidity		% r. F.				
Manufacturer		Vokes-Air Group, Type: CR-WS				