



domnick hunter



**FILTRATION** > the clear liquid or gas obtained after filtration.  
verb (filtrated, filtrating) tr & intr to filter. filtration noun.  
ETYMOLOGY: 17c: from Latin *filtrare* to filter.

**FILTRATION - PURIFICATION - SEPARATION**

**PURIFICATION** > 1. to make or become pure. 2. to cleanse  
something of contaminating or harmful substances. 3. to rid  
something of intrusive elements.  
ETYMOLOGY: 14c: from Latin *purificare*, from *purus* pure.

**SEPARATION** > 1. the act of separating. 2. the state or process of being  
separated. 3. a point where there is a division.  
the separator.  
ETYMOLOGY: 15c.

## OIL-Xplus Type WS

High Efficiency Compressed Air  
Water Separators

[www.domnickhunter.com](http://www.domnickhunter.com)

## The Problem

Bulk water which exists in all compressed air systems causes problems - corrosion of piping, permanent damage to valves, cylinders, pneumatic tools, machinery and reducing the effectiveness of aftercoolers/heat exchangers.



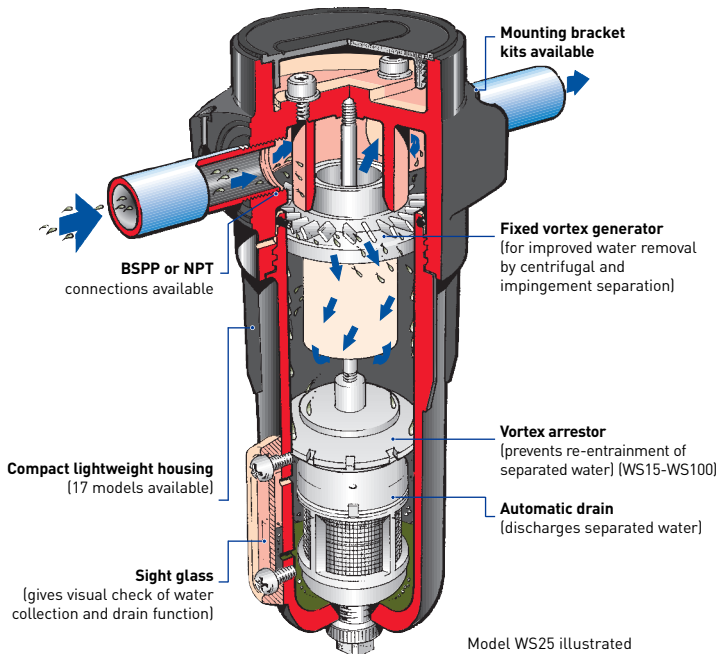
Corrosion of piping



Damaged pneumatic tools

## The Simple Solution

Over 99% of bulk water can be easily and economically removed by installing a domnick hunter Type WS High Efficiency Water Separator. Now, your compressed air system will operate much more efficiently with reduced downtime and maintenance costs. This new, patented technology will also improve the effectiveness of aftercoolers, refrigerant dryers, filters and other downstream equipment.



## Benefits are obvious:

- 99% efficient
- Cost effective
- Low maintenance
- Proven patented design
- High flow rates
- Very low differential pressure
- Automatic drainage
- Removes rust and pipe scale
- Lifetime guarantee

## Options:

- Available with automatic or manual drain
- External electronic drain valves
- 50 bar g (725 psi g) versions
- Fabricated steel range



Rapid corrosion of untreated aluminium



No corrosion with Alocrom treatment

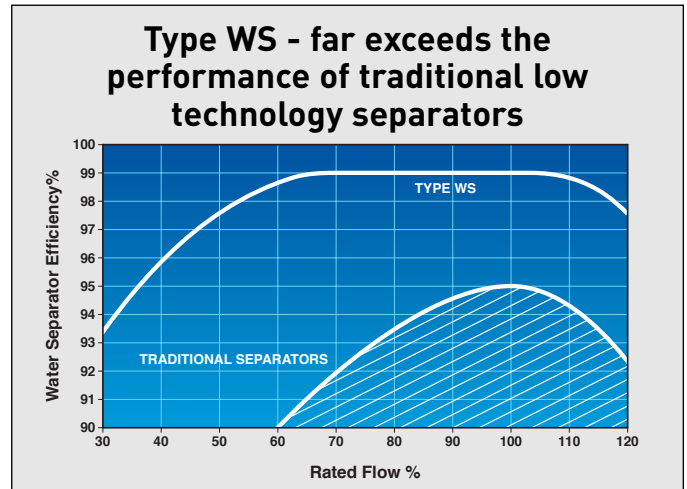
## Lifetime Gaurantee

Corrosion protected inside and out with Alocrom treatment then a tough epoxy paint finish is baked on to give extra long life. Note the convincing results of a 150 hour salt spray test.

## OEM Service - to Compressor, Aftercooler and Refrigerant Dryer Manufacturers

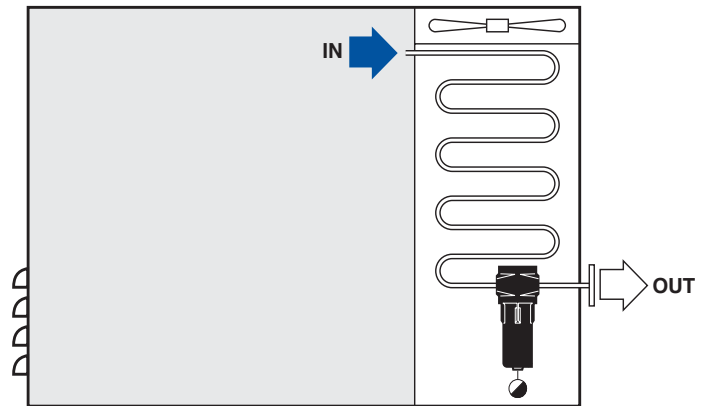
domnick hunter works hand in hand with many well known Original Equipment Manufacturers to improve performance and reduce costs.

A dedicated engineering team with many years of expertise provides specialist water separation advice. The latest design technology linked to purpose built development laboratories ensures the best technical and commercial solution.



## Compressors and Aftercoolers

In compressors, condensation occurs between compression stages, and unless effectively removed, causes inefficiency and potential damage. At the aftercooler stage, water will also condense and reduce its ability to achieve maximum air density and minimised power loss. domnick hunter Type WS High Efficiency Water Separators positioned at the point of discharge will remove condensed water and improve overall efficiency and reliability.

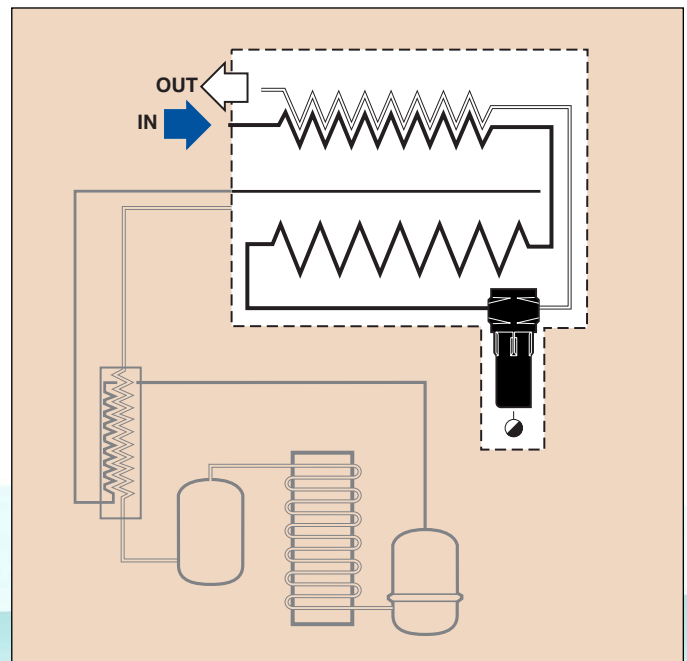


Compressor with aftercooler

## Refrigerant Dryers

The difficulty with refrigerant based dryers is that water will always condense after the lowest temperature in the heat exchanger. No matter how efficient the heat exchanger can be made, if this condensed water is not removed from the compressed air stream, it will re-evaporate and significantly reduce the dewpoint efficiency.

**By installing a domnick hunter Type WS High Efficiency Water Separator at the lowest temperature in the heat exchanger, the best possible outlet pressure dewpoint will be achieved. Typically +1°C (1.8°F) above the lowest temperature. (e.g. lowest temperature +2°C (35.6°F) then outlet pressure dewpoint +3°C (37.4°F)).**



Refrigerant Dryers

# Technical Specifications

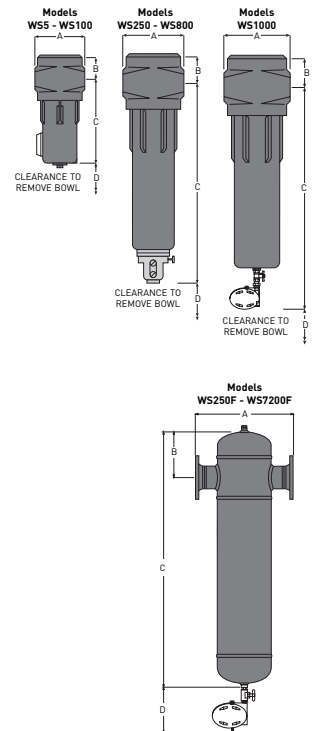
<b>Maximum operating pressure:</b>	16 bar g (232 psi g)
<b>Maximum recommended operating temperature:</b>	66°C (150°F)
<b>Minimum recommended operating temperature:</b>	1.5°C (35°F)
<b>Typical pressure differential at rated flow:</b>	20 - 60 m bar (0.3 - 0.9 psi)

Line	bar g	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Pressure	psi g	15	29	44	58	73	87	100	116	131	145	160	174	189	203	218	232
Correction Factor		0.38	0.53	0.65	0.76	0.85	0.93	1.00	1.07	1.13	1.19	1.25	1.31	1.36	1.44	1.46	1.51

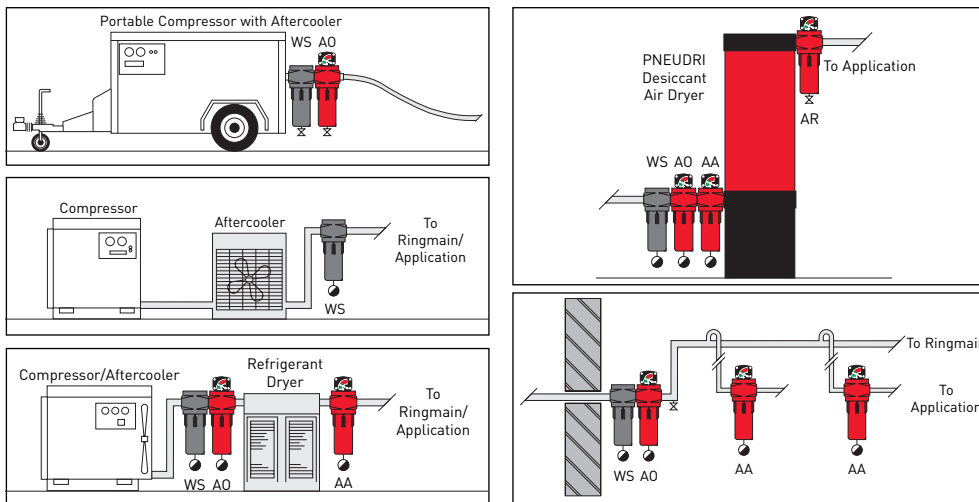
## Product Range

MODEL*	PIPE SIZE	FLOW RATES (@ 7 bar g (102 psi g))			Dimensions mm				WEIGHT Kg
		Nm <sup>3</sup> /min	Nm <sup>3</sup> /hr	scfm	A	B	C	D	
WS5	G½	0.60	36	21	76	31.5	136	60	0.5
WS10	G½	0.90	54	32	76	31.5	136	60	0.5
WS15	G½	2.40	144	85	89	42	158	60	1.0
WS25	G½	3.60	216	127	89	42	194	60	1.1
WS50	G1	4.50	270	159	85	23	197	60	1.1
WS100	G1½	9.00	540	318	120	58	251	80	2.7
WS250	G2	21.00	1260	742	160	67	511	100	5.9
WS700	G2½	42.00	2520	1483	202	77	605	100	12.9
WS800	G3	48.00	2880	1695	202	77	605	100	12.9
WS1000	G4	60.00	3600	2119	312	82	993	250	41
WS250F	DN 40	21.00	1260	742	304	172	727	220	32
WS800F	DN 80	48.00	2880	1695	370	225	1199	285	70
WS1000F	DN 100	60.00	3600	2119	450	248	1241	340	105
WS1800F	DN 150	108.00	6480	3814	580	334	1424	460	200
WS3000F	DN 200	180.00	10800	6357	750	410	1687	635	400
WS4800F	DN 250	288.00	17280	10171	862	469	1821	700	540
WS7200F	DN 300	421.50	25920	14885	1000	533	1910	815	700

\*For NPT connections suffix Model No. with NPT. Larger sizes on request



## Recommended Water Separator Installation for High Performance



A0 = OIL-Xplus Grade A0 General Purpose Filter • AA = OIL-Xplus Grade AA High Efficiency Filter • AR = OIL-Xplus Grade AR Dust Filter  
Special technical paper (The efficient removal of water from compressed air systems) available - ask for Publication Reference 17 400 4533.



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**domnick hunter limited**  
 Dukesway, Team Valley Trading Estate,  
 Gateshead, Tyne and Wear,  
 England NE11 0PZ  
 Tel: +44 (0)191 402 9000  
 Telefax: +44 (0)191 482 6296  
<http://www.domnickhunter.com>

[www.domnickhunter.com](http://www.domnickhunter.com)

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