



## **OIL-Xplus Type WS**

High Efficiency Compressed Air
Water Separators

### The Problem

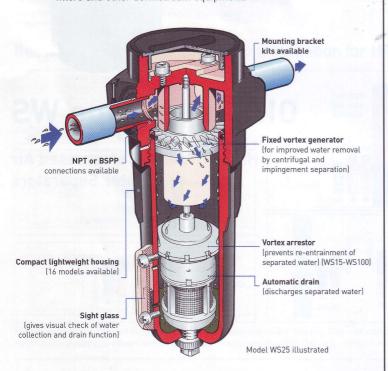
Bulk water which exists in all compressed air systems causes problems - corrosion of piping, permanent damage to valves, cylinders, pneumatic tools, machinery and reducing the effectiveness of aftercoolers/heat exchangers.





### 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
- 725 psi g (50 bar g) versions
- Fabricated steel range



Rapid corrosion of untreated aluminum



No corrosion with Alocrom treatment

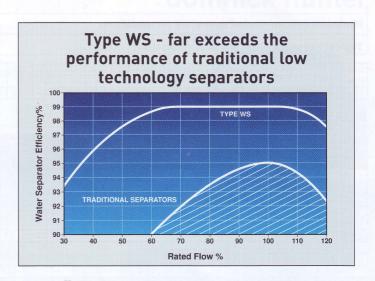
### **Lifetime Gaurantee**

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

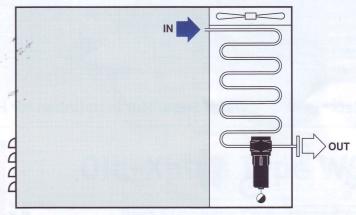
domnick hunter works hand in hand with many well known Original Equipment Manufacturers to improve performance and reduce costs.

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 minimized 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.

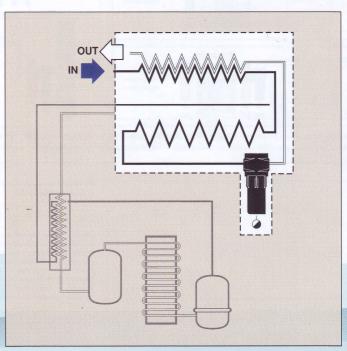


Compressor with aftercooler

### **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 1.8°F (+1°C) above the lowest temperature. (e.g. lowest temperature 35.6°F (+2°C) then outlet pressure dewpoint 37.4°F (+3°C)).



Refrigerant Dryers

### **Technical Specifications**

Maximum operating pressure:	WS5 to WS1000	232 psi g (16 bar g)			
	WS800F to WS7200F	260 psi g (18 bar g)			
Maximum recommended operating temperature:	WS5 to WS1000 WS800F to WS7200F	150°F (66°C) 200°F (94°C)			
Minimum recommended operating temperature:	Pamprossas	35°F (1.5°C)			
Typical pressure differential at rated flow:	0.3 - 0.9 psi (20 - 60 m bar)				

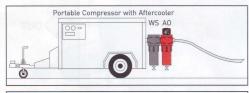
Line	psi g	15	29	44	58	73	87	100	116	131	145	160	174	189	203	218	232
Pressure	bar g	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Correction	Factor	0.38	0.53	0.65	0.76	0.85	0.93	1.00	1.07	1.13	1.19	1.25	1.31	1.36	1.14	1.46	1.51

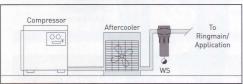
### **Product Range**

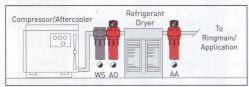
MODEL* PIPE SIZE	DIDE		FLOW RATES	;		WEIGHT				
	620000000000000000000000000000000000000	a 1	00 psi g (7 ba	THE RESIDENCE OF THE PARTY OF T	Α	В	С	D	lbs (Kg)	
	SIZE	scfm	Nm³/hr	Nm³/min				,	tos (itg)	
WS5	¼" NPT	21	36	0.60	3.0 (76)	1.2 (31.5)	5.4 (136)	2.4 (60)	1.1 (0.5)	
WS10	%" NPT	32	54	0.90	3.0 (76)	1.2 (31.5)	5.4 (136)	2.4 (60)	1.1 (0.5)	
WS15	½" NPT	85	144	2.40	3.5 (89)	1.7 (42)	6.2 (158)	2.4 (60)	2.2 (1.0)	
WS25	¾" NPT	127	216	3.60	3.5 (89)	1.7 (42)	7.6 (194)	2.4 (60)	2.4 [1.1]	
WS50	1" NPT	159	270	4.50	3.4 (85)	0.9 (23)	7.8 (197)	2.4 (60)	2.4 [1.1]	
WS100	1½" NPT	318	540	9.00	4.7 [120]	2.3 (58)	9.9 (251)	3.2 (80)	6.0 (2.7)	
WS250	2" NPT	742	1260	21.00	6.3 [160]	2.6 (67)	20.1 (511)	3.9 (100)	13.0 (5.9)	
WS700	2½" NPT	1483	2520	42.00	8.0 (202)	3.0 (77)	23.8 (605)	3.9 (100)	28.4 [12.9]	
WS800	3" NPT	1695	2880	48.00	8.0 (202)	3.0 (77)	23.8 (605)	3.9 (100)	28.4 [12.9]	
WS1000	4" NPT	2119	3600	60.00	12.3 (312)	3.2 [82]	39.1 (993)	9.8 (250)	90.4 (41.0)	
WS800F	3" Flg	1700	2888	48.00	14.5 (369)	8.1 (206)	43.9 (1118)	**	112 (51)	
WS1000F	4" Flg	2100	3568	60.00	17.8 (451)	10.0 (254)	46.8 (1188)	**	180 (82)	
WS1800F	6" Flg	3780	6422	107.00	22.8 (578)	12.4 (315)	53.2 (1351)	**	257 (117)	
WS3000F	8" Flg	6300	10704	178.00	29.5 (750)	12.3 (312)	54.3 [1379]	**	554 (252)	
WS4800F	10" Flg	10080	17126	285.00	34.0 (864)	13.1 (333)	55.1 [4400]	**	711 (323)	
WS7200F	12" Flg	15120	25689	428.00	39.4 (1001)	15.1 (384)	61.2 (1555)	**	913 (415)	

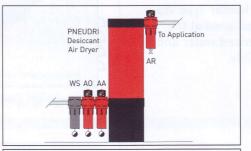
<sup>\*</sup>For BSPP connections suffix Model No. with BSPP. Larger sizes on request

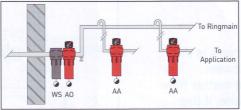
### **Recommended Water Separator Installation for High Performance**



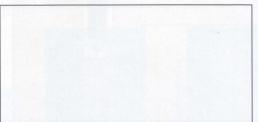








AO = OIL-Xplus Grade AO General Purpose Filter • AA = OIL-Xplus Grade AA High Efficiency Filter • AR = OIL-Xplus Grade AR Dust Filter Special technical paper (The efficient removal of water from compressed air systems) available - ask for Publication Reference 17 400 4533.

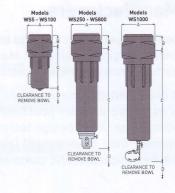


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<sup>\*\*</sup>Dependent upon type of drain installed