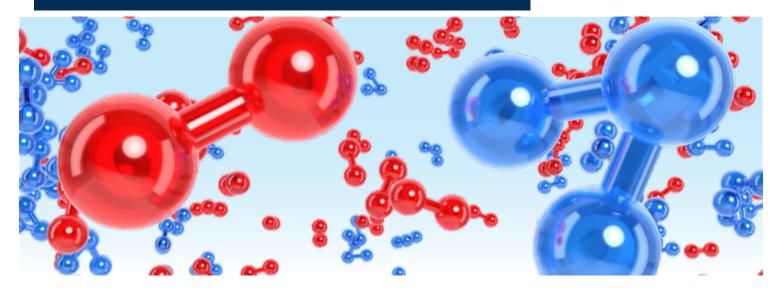


# BAUER COMPLETE AIR TREATMENT SOLUTIONS FOR MEDIUM AND HIGH-PRESSURE COMPRESSORS



# **BENEFITS OF AIR TREATMENT**



Compressed air treatment is crucial for maintaining efficient and reliable operations across various industries. Contaminants such as water, oil, and dirt are common in compressed air systems and can cause significant problems if not properly managed. Effective air treatment protects sensitive equipment, ensures high product quality, enhances operational efficiency, and improves safety. Additionally, many industries must adhere to regulatory standards that mandate specific purity levels for compressed air. Understanding and addressing the importance of clean, treated compressed air is essential for the smooth functioning of industrial processes and achieving long-term cost savings.

For over seven decades, BAUER has been the leading manufacturer of innovative and reliable compressor systems. Our commitment to excellence is reflected in our vertically integrated manufacturing process, which ensures the highest standards at every stage, including the accessories we provide. BAUER air treatment systems exemplify this quality, delivering the performance you need, ready availability of consumable parts, and access to expert service.

BAUER air treatment systems feature filters, water-oil separators, high-pressure dryers, regenerative absorption dryers, and storage solutions to ensure the highest air quality and system efficiency.

#### BENEFITS OF TREATING COMPRESSED AIR CAN INCLUDE:

#### PRODUCT QUALITY

In industries such as food and beverage, pharmaceuticals, and electronics, contaminants in compressed air can compromise product quality and safety. Air treatment ensures that the air used in production processes is clean, thereby maintaining high standards of product quality.

#### PROTECTION OF EQUIPMENT

Contaminants like water, oil, and dirt can damage, clog, and corrode machinery. Proper air treatment removes these impurities, preventing premature wear and extending the lifespan of equipment.

#### **OPERATIONAL EFFICIENCY**

Clean, dry air improves the performance and efficiency of equipment. It reduces the likelihood of breakdowns and malfunctions, which can cause costly downtime and interruptions in production.

## SAFETY

Contaminants in compressed air can pose safety risks to equipment, processes, and personnel. Proper air treatment minimizes these risks, contributing to a safer working environment.

#### REGULATORY COMPLIANCE

Many industries are subject to strict regulations regarding air quality. Implementing air treatment ensures compliance with industry standards and regulations, avoiding potential fines and legal issues.

#### COST SAVINGS

By preventing equipment damage and reducing downtime, air treatment can result in significant cost savings over time. It minimizes maintenance and repair costs, as well as the expenses associated with production delays.



# **P-FILTERS**

The BAUER P-FILTER is our proven solution for providing clean dry air. Our P-FILTERS can be tailored to meet your specific needs and feature a replaceable cartridge that works by absorprtion which safely, efficiently, and effectively removes a variety of contaminants. The replaceable cartridge makes operation and maintenance clean, safe, and simple. The available SECURUS takes the guess work out of cartridge change-outs, allowing you to utilize 100% of the cartridge's life, while keeping your operations safe by providing automatic warnings and shutdown.



## **PX SERIES FILTERS**

When your application depends on critically low tolerances for moisture, oil, and particulates, the PX SERIES has you covered. The PX SERIES is extremely effective at removing particles, aerosols, oil, hydrocarbons, and other contaminants, protecting sensitive machinery and processes to achieve greater air purity and extend the lifespan of your equipment.



### REGENERATIVE ABSORPTION DRYER

SECCANT adsorption dryers have been designed for continuous separation of water vapor from compressed air, thus reducing the dew point. Operation of the dryer requires two columns to operate alternatively. Adsorption takes place under pressure in the first column while the second column regenerates with a portion of the already-dried compressed air at ambient pressure.



#### HIGH-PRESSURE REFIGRIRATED DRYERS

High-pressure refigrirated dryers not only enhance air purity and protect your investments, but they also optimize performance and increase reliability. These dryers remove moisture from the air, preventing complications such as freezing, which can cause blockages and damage in cold environments. This ensures smooth operation and safeguards equipment and personnel.



### CONDENSATE WATER-OIL SEPARATORS

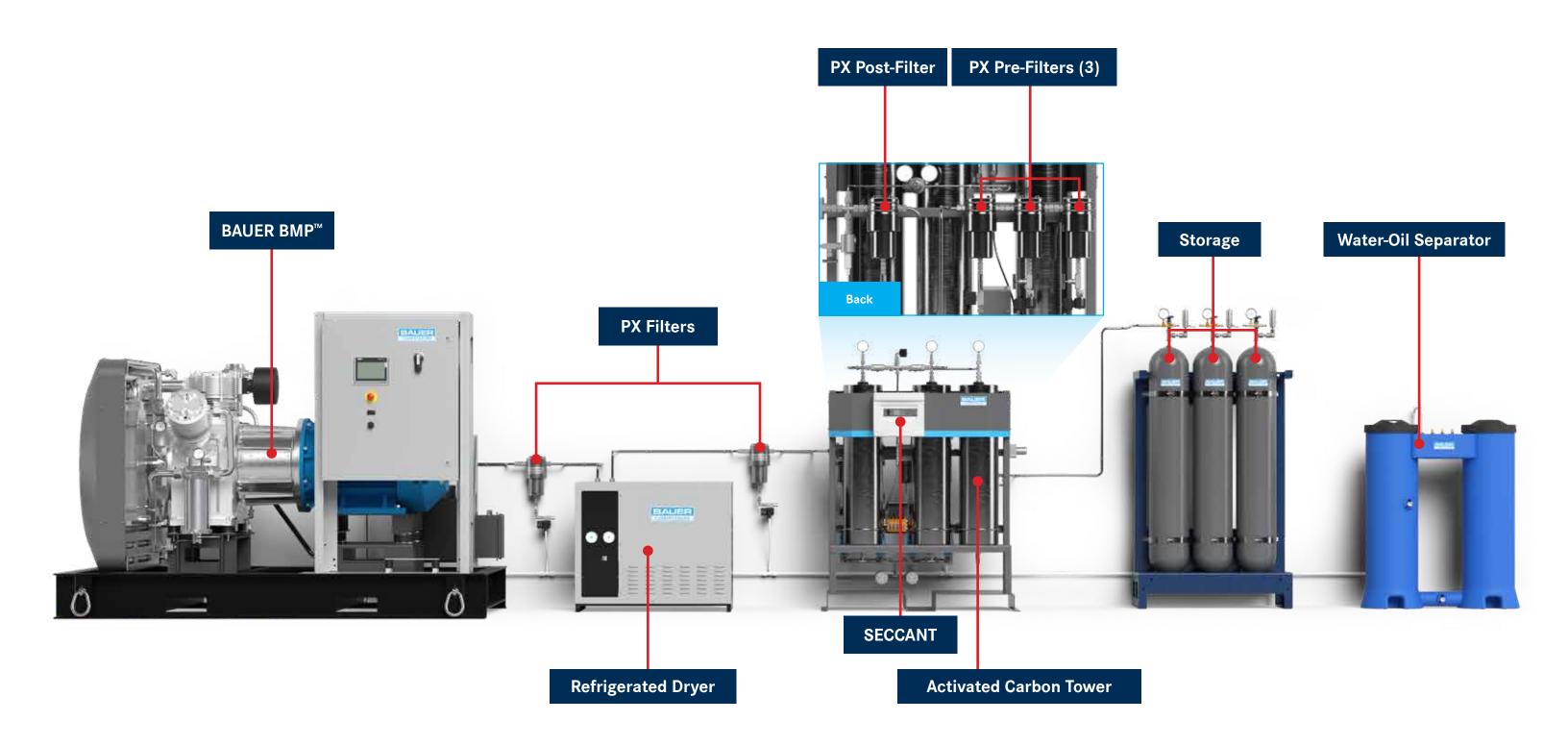
Water in compressed air systems can cause rust and corrosion, while oil can degrade seals and gaskets. Water-oil separators help achieve higher air purity, extend equipment lifespan, and optimize operation, leading to increased energy efficiency.



#### HIGH-PRESSURE STORAGE

BAUER offers a wide selection of storage options tailored to meet your specific needs. Whether you require bulk, bank, or cascading storage, our solutions help you manage compressed air demands efficiently. Proper storage protects your equipment by preventing sharp pressure changes within the system.

# BAUER'S TOTAL AIR TREATMENT SOLUTION



# **P-FILTERS**

A P-filter system, if required, can be installed downstream of the final separator and available BAUER IHP refrigerant dryer. P-filter systems can be tailored to remove a variety of contaminants and can guarantee pressure dew point of -4° F (-20°C). These systems work by the process of absorption which is safe, effective, efficient, and economical. P-FILTER systems use replaceable cartridge(s) that makes operation and maintenance clean, safe, and simple.

P-filter systems have no moving parts, do not require power or lose any of the compressed medium for purging. The only required maintenance is to replace the cartridge(s) after their service life has expired. P-filter Systems are available for operating pressures between 1300 to 7000 psig. The higher the discharge pressure, the more efficient and the longer the life of the cartridge.

All BAUER cartridges process the compressed medium to comply with the quality requirements for industrial air and gases according to ISO 8573-1 Class 2 for oil content and Class 3 for moisture content. All separator and filter chambers are made of a high-strength, fatigue and corrosion-resistant material. All machining is done in-house to assure the closest tolerances and highest quality. The final product is stamped with material lot and production numbering for traceability.







) P10S

# TECHNICAL DATA





) PO TRIPLEX



> P31 SUPER TRIPLEX

# **SECURUS**

SECURUS ensures 100% utilization of the air processing cartridges, because the moisture sensor is embedded directly in the molecular sieve. The SECURUS cartridge, with its moisture sensor, is the last cartridge in the air processing system. SECURUS is powered by the compressor's PLC Control System and provides for automatic warning at 90% saturation and shutdown when the SECURUS cartridge becomes saturated. The SECURUS can be mounted locally to the SECURUS cartridge chamber or to the compressor's control panel. SECURUS is available for working pressures from 2000–6000 psig and flow rates to 125 scfm.

#### **WORLDWIDE LEADER:**

- Compressors
- Purification and filtration

#### > ANODIZED ALUMINUM FILTER CARTRIDGE:

- Filter cartridge end caps are machine crimped
- Eliminating glues/friction welding

#### > ANODIZED ALUMINUM FILTER CHAMBERS:

 Each chamber and plug assembly are serialized to assure system traceability







#### TECHNICAL DATA

Purification <sup>1</sup>	Number an	Number and Type of Cartridges		
	Purification	SECURUS	(ft) <sup>3</sup>	
P0 <sup>2</sup>	Combined	-	3200	
P31 <sup>2</sup>	Combined	-	11,760	
P2 SECURUS	-	1	67,000	
P5 SECURUS	-	1	150,000	
P10 SECURUS	-	1	230,000	
P12 SECURUS	-	1	420,000	
P14 SECURUS	-	1	650,000	

- 1) Air Processing Capability based on standard inlet conditions, 68° F, a Pressure of 14.70 psig and a relative humidity of 36% (0.0750 density).
- 2) 5000 psig Maximum Pressure, Triplex Design is not incorporated on a panel.

# PX SERIES FILTERS

The PX Series Filters are designed for the highly efficient removal of solid particles, water, oil aerosols, hydrocarbons, and other vapors from various gases, including air, nitrogen, helium, argon, and mixtures containing up to 21% oxygen.

These filters are highly versatile and can be installed in conjunction with the P-Series Filters, Regenerative Dryers, or IHP Series Refrigerated Dryers to meet specific requirements for particulate size and oil carryover.

To achieve a required compressed gas quality, the appropriate filter element must be installed into the PX filter housing.

#### OPERATING TEMPERATURE1:

14 °F - 248 °F  $(-10 \, ^{\circ}\text{C} - 120 \, ^{\circ}\text{C})$ 

### **OPERATING PRESSURE:**

0 - 1450, 3625, 6000 PSI 0 - 100, 250, 414 BAR



# FILTER ELEMENT TYPES

Filter Designation	Filter Type	Filter Material	ISO 85	573:2010	) class	Residual Oil Content*	Particle Retention	Operating Temperature Range
			Particle	Water	Total oil		Nominal	
Р	Prefilter	Borosilicate micro fibres	3	-	-	-	99,9999% (1 μm)	+1.5+80°C
M	Microfilter	Borosilicate micro fibres	2	_	_	< 0,1 mg/m <sup>3</sup> *	99,9999% (1 μm)	+1.5+80°C
F	Finefilter	Borosilicate micro fibres	1	_	_	< 0,01 mg/m <sup>3</sup> *	99,9999% (1 μm)	+1.5+80°C
А	Activated Carbon	Borosilicate micro fibres, activated carbon	1	-	1**	< 0,005 mg/m <sup>3</sup>	_	+1.5+45°C

) PX05

# FILTER FOOTPRINT

PX05:

DIMENSIONS H1 X W1 X H2 X W2 inches (mm)

7.2" x 3.9" x 1.2" x 4" (183.5mm x 98mm x 31mm x 104mm)

PX07:

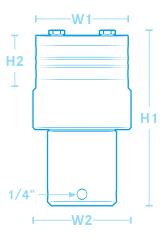
DIMENSIONS H1 X W1 X H2 X W2 inches (mm)

) 9" x 4.6" x 1.7" x 5" (230mm x 118mm x 44mm x 129mm)

PX10:

DIMENSIONS H1 X W1 X H2 X W2 inches (mm)

10" x 4.6" x 1.7" x 5" (254mm x 118mm x 44mm x 129mm)



# **MAINTENANCE**

Replace the filter element at least every 12 months or follow the instructions for the specific filter element. For detailed maintenance instructions, please follow the installation and operating manual.

# TECHNICAL DATA

Model	Pipe Size	Filter Element	Flow C	apacity	Volume
	in		scfm	m³/h	1
PX05	3/8	F05	494.4	840	0.20
PX07	1/2	F07	918	1560	0.40
PX10	3/4	F10	1380	2340	0.48

Flow capacity at 100 – 420 bar(g), 20 °C Standard is BSP pipe connection, other pipe connection on request.

# SYSTEM AIR QUALITY SPECIFICATIONS AT SYSTEM DISCHARGE

ISO8573- 1:2010 CLASS		Solid F	Particulate		Water		Oil
	Maximum n	number of particle	s per m³	Mass Concentration	Vapor Pressure Dewpoint	Liquid	Total Oil (aerosol liquid and vapor)
	0.1 - 0.5 micron	0.5 - 1 micron	1 - 5 micron	mg/m³		g/m³	mg/m³
As specified by the	e equipment user	or supplier and ı	more stringent	than Class 1			
0	≤ 20.000	≤ 400	≤ 10	_	<u>≤</u> -70	_	0.01
1	≤ 400.00	≤ 6.000	≤ 100	-	<u>≤</u> -40	-	0.1
2	_	≤ 90.00	≤ 1.000	_	≤-20	_	1
3	-	_	≤ 10.000	-	<u>≤</u> +3	-	5
4	_	_	≤ 100.000	_	≤ +7	_	_
5	_	_		_	≤ +10	-	_
6	_	_	_	≤ 5	_	_	_
7	_	_	_	5-10	_	≤ 0.5	_
8	_	_	_	_	_	0.5 - 5	_
9	_	_	-	_	-	5 - 10	-
Χ	-	_	-	> 10	_	> 10	> 10

(1) Actual operating temperature depends on sealing material and type of filter element.

<sup>\*</sup>Elements M and F do not remove oil vapor; values, therefore, are only valid for droplets and aerosols.

<sup>\*\*</sup>Filter element A with activated carbon: For removing small residual amounts of oil vapor, e.g. downstream SECCANT-A or P filter (with activated carbon cartridge). Max. input concentration 0.1 mg/m3 oil vapor and max. 0.01 mg/m3 oil droplets and oil aerosols. It should not be used if the gas is saturated with oil vapor. Regular replacement of the element is necessary after 6 months at the latest. Use a separate activated carbon filter for oil vapor removal from normally saturated gases.

# **REGENERATIVE ABSORPTION DRYER**

SECCANT adsorption dryers have been designed for continuous separation of water vapor from compressed air, thus reducing the dew point. Operation of the dryer requires two columns to operate alternatively. Adsorption takes place under pressure in the first column while the second column regenerates with a portion of the already-dried compressed air at ambient pressure. The robust design enables efficient and reliable operation, fast installation, and simple maintenance.



### STANDARD SCOPE OF SUPPLY

- 2 drying filters with molecular sieve
- 3 × Pre-filter (with automatic condensate drain) and 1 × after filter (PX-filter)
- Automatic switchover device with pressure compensation
- > Solenoid valves, pressure gauge
- Silencer for noise reduction at the regeneration air outlet
- > Electronic control Siemens Logo
- Power supply: 230 V, 50/60 Hz
- > Pressure vessel with activated carbon for oil removal (option)

# **AVAILABLE OPTIONS**

#### ) Oil removal

Additional pressure vessel with activated carbon to remove hydrocarbons (oil vapor) from the dried air

#### Dew point sensor

Dew point sensor with measurement chamber

#### ) Interface module plus

Modbus TCP/IP, Profinet TCP/IP, Web service access, and 4-20 mA output of the dew point sensor (only in combination with an added dew point sensor)

- > Start up device (Pressure maintaining valve)1
- 3/8" (refer to outlet connection dryer)
- 1/2" (refer to outlet connection dryer)

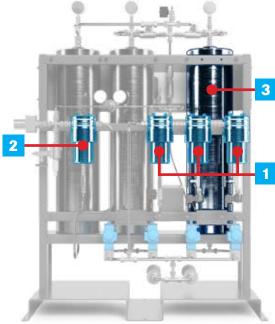
#### Safety valve

To be mounted on site upstream of the SECCANT, if not already present (e.g. on the compressor)



2 PX Post-filter

3 Activated Carbon Tower



TECHNICAL DATA

Model	Connection <sup>4</sup>	Inlet	Flow <sup>1</sup>	Outle	t Flow²			Foot	print			Wei	ght	Volume <sup>3</sup>	Filter
						ŀ	4	١	N	[	)				
	in	SCFM	Nm³/h	SCFM	Nm³/h	in	mm	in	mm	in	mm	lbs	kg	L	
25 PSIG (50 BAR)															
SECCANT 055/50	G 3/8"	35	55	33	53.3	47.2	1200	31.5	800	22.8	580	287	130	3.2	PX 07
SECCANT 110/50	G 3/8"	69	110	66	106.7	49.2	1250	31.5	800	22.8	580	331	150	6.7	PX 07
SECCANT 165/50	G 3/8"	102	165	100	160	61	1550	31.5	800	22.8	580	375	170	10.4	PX 07
SECCANT 275/50	G 3/8"	171	275	166	266.7	66.9	1700	37	940	27.6	700	573	260	17.4	PX 07
SECCANT 385/50	G 1/2"	240	385	233	373.4	66.9	1700	37	940	27.6	700	705	320	25.3	PX 07
SECCANT 550/50	G 1/2"	342	550	332	533.5	75.6	1920	37	940	27.6	700	904	410	32.4	PX 10
SECCANT 715/50	G 1/2"	445	715	432	693.5	88.6	2250	37	940	27.6	700	1014	460	44.2	PX 10
450 PSIG (100 BAR)															
SECCANT 055/100	G 3/8"	35	55	33	53.3	49.2	1250	31.5	800	22.8	580	276	125	1.6	PX 05
SECCANT 110/100	G 3/8"	69	110	66	106.7	53.2	1350	31.5	800	22.8	580	375	170	3.6	PX 05
SECCANT 165/100	G 3/8"	102	165	100	160	65	1650	31.5	800	22.8	580	441	200	5.1	PX 05
SECCANT 275/100	G 3/8"	171	275	166	266.7	61	1550	31.5	800	23.6	600	463	210	8.3	PX 05
SECCANT 385/100	G 1/2"	240	385	233	373.4	57.5	1460	37	940	26.8	680	595	270	11.8	PX 07
SECCANT 550/100	G 1/2"	342	550	332	533.5	66.9	1700	37	940	26.8	680	639	290	16.8	PX 07
SECCANT 715/100	G 1/2"	445	715	432	693.5	70.9	1800	37	940	27.6	700	838	380	22	PX 0
SECCANT 880/100	G 1/2"	548	880	531	853.6	72.8	1850	37	940	26.8	680	1058	480	28	PX 07
625 PSIG (250 BAR)															
SECCANT 055/250	G 3/8"	35	55	33	53.3	39.4	1000	31.5	800	17.7	450	209	95	0.8	PX 05
SECCANT 110/250	G 3/8"	69	110	66	106.7	53.5	1360	31.5	800	17.7	450	298	135	1.6	PX 0
SECCANT 165/250	G 3/8"	102	165	100	160	63	1600	31.5	800	17.7	450	320	145	2.2	PX 0
SECCANT 275/250	G 3/8"	121	275	166	266.7	59.1	1500	31.5	800	17.7	450	397	180	3.6	PX 0
SECCANT 385/250	G 1/2"	240	385	233	373.4	55.1	1400	37	940	25.6	650	551	250	5.2	PX 0
SECCANT 550/250	G 1/2"	342	550	332	533.5	59.1	1500	37	940	25.6	650	661	300	7	PX 07
SECCANT 715/250	G 1/2"	445	715	432	693.5	59.1	1500	37	940	25.6	650	882	400	9.3	PX 02
SECCANT 880/250	G 1/2"	548	880	531	853.6	61	1550	37	940	25.6	650	1014	460	11.7	PX 0
SECCANT 1100/250	G 1/2"	635	1100	665	1067	63	1600	37	940	25.6	650	1279	580	14.5	PX 07
SECCANT 1320/250	G 1/2"	822	1320	998	1280	61	1550	39.4	1000	27.6	700	1367	620	17.6	PX 07
SECCANT 1540/250	G 1/2"	960	1540	931	1494	65	1650	39.4	1000	27.6	700	1367	620	21.5	PX 02
000 PSIG (414 BAR)															
SECCANT 110/420	G 3/8"	69	110	66	106.7	44.1	1120	31.5	800	17.7	450	265	120	1	PX 0:
SECCANT 165/420	G 3/8"	102	165	100	160	53.5	1360	31.5	800	17.7	450	298	135	1.6	PX 0
SECCANT 275/420	G 3/8"	171	275	166	266.7	57.1	1450	31.5	800	22.8	580	419	190	2.5	PX 05
SECCANT 385/420	G 1/2"	240	385	233	373.4	53.2	1350	37	940	22.8	580	595	270	3.3	PX 0
SECCANT 550/420	G 1/2"	342	550	332	533.5	54.3	1380	37	940	25.6	650	683	310	4.5	PX 0
SECCANT 715/420	G 1/2"	445	715	432	693.5	57.1	1450	37	940	25.6	650	970	440	6.1	PX 0
SECCANT 880/420	G 1/2"	548	880	531	853.6	48.4	1230	37	940	25.6	650	937	425	7.4	PX 0
SECCANT 1100/420	G 1/2"	685	1100	665	1067	57.1	1450	37	940	25.6	650	1323	600	10	PX 0
SECCANT 1320/420	G 1/2"	822	1320	798	1280	57.1	1450	39.4	1000	35.4	900	1874	850	11.4	PX 0
SECCANT 1540/420	G 1/2"	960	1540	931	1494	59.1	1500	39.4	1000	35.4	900	1764	800	14.3	PX 07
0200MIN 1070/720	0 1/2	,00	1040	/01	1777	07.1	1000	07.4	1000	00.4	,00	17 04	000	17.0	1 / 0/

<sup>(1)</sup> Refers to 1bar(a) and 20°C, at max. operating pressure, inlet temperature 35°C and pressure dew point at outlet -20°C.

<sup>(2)</sup> Purge air requirements depend on actual operating conditions.
(3) Volume is the net volume of a single column.

<sup>(4)</sup> Threads of the drver are female

Dimensions and weight are valid for standard configurations without optional oil removal (AC)

<sup>(1)</sup> Recommended option to provide minimum operating pressure inside the dryer. Otherwise, in case of lower pressure downstream, the dryer can not reach the confirmed air/gas quality

# BAUER IHP SERIES HIGH-PRESSURE REFRIGIRATED DRYERS

The IHP Series dryers are an energy-efficient solution incorporating an innovative design which features a tube-in-tube heat exchanger paired with a centrifugal separator, which removes over 98% of moisture from the compressed air. For many applications, this dryer provides a complete solution on its own. However, it can also be used as an effective pre-treatment for the P-Series Dryer. It can however work seamlessly as a pre-treatment to the P-Series Dryer. By removing a large concentration of water from compressed air before it reaches the P-Series purification system, the IHP Series helps ensure that the P-filter cartridge lasts longer, reducing operating costs, and increasing overall efficiency allowing for longer uninterrupted operation and reduced filter cartridge consumption.

- PRESSURE:400 to 6000 PSIG(27.6 BAR to 414 BAR)
- FLOW RATE: 0 up to 275 SCFM





# ) IHP-60-6000

# STANDARD SCOPE OF SUPPLY

- > Stainless steel tube-in-tube heat exchanger
- Refrigerant suction pressure gauge standard
- Discharge gauge
- Inlet pressure gauge
- Inlet temperature gauge
- > High-efficiency separator and condensate drain
- R-134a refrigerant
- NEMA 1 standard
- > Heavy-duty industrial powder coated cabinet with access panel

# **AVAILABLE OPTIONS**

- Various voltage options
- Water cooled condenser
- Condenser cleaner assembly
- Low ambient temperature protection¹
- NEMA 4
- NEMA 4X

# TECHNICAL DATA

Model	Air Flow Rate	Wei	ght			Foot	print		
	Max				Н	,	N		D
	scfm	lbs	kg	in	mm	in	mm	in	mm
1450 PSIG (100 I	BAR), 5000 PSIG (345 B	AR), 6000 PSI	G (414 BAR)						
IHP-20	20	71	32	22	559	24	610	18	457
IHP-30	30	78	35	22	559	24	610	18	457
IHP-40	40	102	46	22	559	24	610	18	457
IHP-60	60	124	56	22	559	24	610	18	457
IHP-100	100	162	73	30	762	36	914	25	635
IHP-125	125	240	109	30	762	36	914	25	635
IHP-200	200	345	156	30	762	36	914	25	635
IHP-275	275	567	257	45	1143	34	864	45	1143

 $<sup>^{\</sup>mbox{\tiny 1}}$  Low ambient package brings ambient temperature down to 32  $^{\circ}\text{F}$ 

# **BAUER WOS SERIES CONDENSATE WATER-OIL SEPARATORS**

The WOS Series water oil separators are versatile and adaptable. They have been specifically developed to separate lubricant oil from condensate and compressed air systems. If you require separation for any other technical gas, please contact us or your local distributor for further assistance.

The WOS separators efficiently remove oil from condensate, ensuring clean and safe drainage. Treated condensate can be drained into public sewers, provided local directives and laws are adhered to. Always check local regulations before draining cleaned condensate. Our separators can handle any type of oil and work seamlessly with any type of condensate drain, meeting your specific requirements.



35 - 113°F (max. 149°F)<sup>1</sup> (1.5 - 45°C (max 65°C))

#### • OPERATING MEDIA:

Condensate (air, water, oil); Non-aggressive; Not suitable for emulsion

# > RESIDUAL OIL CONTENT:

Less than 10ppm





#### MAINTENANCE

It is recommended, that you do a test once per week to evaluate water quality (residual oil content). Instructions are attached in test set. Replace filter elements when oil content in water becomes too high or at least every twelve months. Before installing new filter elements, interior of the device must be cleaned.

(1) Max. operating temperature is 65°C, but when temperature is over 45°C, performance may decrease. (2)Max. operating temperature is 65°C, but when temperature is over 45°C, performance may decrease.

# SERVICE INTERVAL

When first of the following parameters appears:

- ▶ 4000 operating hours of compressor<sup>2</sup>
- ▶ 12 months regardless compressor operating hours
- ) Oil concentration in outlet reaches concentration determined with local directives and laws.

## HOUSING FOOTPRINT

#### **WOS-4:**

DIMENSIONS L X W X H inches (mm)

) 9.6" x 16.4" x 16.2" (243mm x 416mm x 411mm)

#### **WOS-8:**

DIMENSIONS L X W X H inches (mm)

13.5" x 28.7" x 26.8" (343mm x 730mm x 680mm)

#### WOS-20:

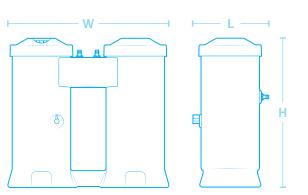
DIMENSIONS L X W X H inches (mm)

14.4" x 32.3" x 37" (366mm x 820mm x 940mm)

#### WOS-35:

DIMENSIONS L X W X H inches (mm)

15.2" x 37.8" x 44.8" (386mm x 960mm x 1137mm)



# TECHNICAL DATA

Model	Max Oil Adsorption	Max	FAD	Max Condensate Flow
	kg	scfm	Nm³/min	l/h
Cold Climate Zone 15°C	60%RH			
WOS-4	2.89	170.22	4.82	2.3
WOS-8	6.01	353.55	10.01	4.7
WOS-20	14.64	861.73	24.4	11.4
WOS-35	25.4	1495.07	42.34	19.8
Mild Climate Zone 25°C	60%RH			
WOS-4	2.43	142.8	4.04	3.4
WOS-8	3.4	296.6	8.4	7.1
WOS-20	12.28	722.92	20.47	17.2
WOS-35	21.31	1254.24	35.52	29.8
Hot Climate Zone 40°C	100%RH			
WOS-4	1.23	72.32	2.05	6.3
WOS-8	2.55	150.21	4.25	13.1
WOS-20	6.22	366.12	10.37	32
VOS-35	10.79	635.21	17.99	55.6

Model	Number of inlet connections	Number of outlet connection	Number of Polypropylene (PP) element(s)	Number of Active Carbon (AC) element(s)
Connection Type: Hosetai	l for pipe Ø int. 10 mmv			
WOS-4	1	1	1	1
WOS-8	2	1	1	1
WOS-20	2	1	1	1
WOS-35	4	1	2	2

(1) Max condensate volume per condensate drain single discharge is 0.250 ltr.

# BAUER WOSM SERIES CONDENSATE WATER-OIL SEPARATORS

WOSm water oil separators have been specifically developed to separate lubricant oil from condensate generated in compressed air systems. Due to patented technology, regular service can be done in 30 seconds without cleaning. Separation begins in the cyclonic depressurization chamber and continues in the filter cartridge. When the filter cartridge is fully saturated, you unscrew the complete cartridge and replace it with a new one. All oil from condensate stays in the cartridge, and all remaining condensate can be drained into sewage while complying with the environmental laws. Worn cartridges can be sealed with a plastic cover and disposed of according to local directives and laws.

#### **OPERATING TEMPERATURE:**

35 - 113°F (max. 149°F) (1.5 - 45°C (max 65°C) <sup>1</sup>

#### **OPERATING MEDIA:**

Condensate (air, water, oil); Non-aggressive; Not suitable for emulsion

# > RESIDUAL OIL CONTENT:

Less than 20ppm





WOS m2

## **MAINTENANCE**

It is recommended that you do a test once per week to evaluate water quality (residual oil content). Instructions are attached in test set. Replace filter elements when oil content in water becomes too high or at least every twelve months. Before installing new filter elements, interior of the device must be clean.

# SERVICE INTERVAL

When first of the following parameters appears:

- ▶ 4000 operating hours of compressor<sup>2</sup>
- ▶ 12 months regardless compressor operating hours
- Oil concentration in outlet reaches concentration determined with local directives and laws.

(2) At compressor oil carryover 2,5mg/m3. Lower/higher oil carry over means proportionally longer/shorter lifetime (e.g. if oil carryover is 5mg/m3 lifetime reduces to 2000 operating hours).

# **CONNECTION POINTS**

Model	Number of inlet connections	Number of outlet connection
Connection Type	: Push-in fitting for hose 8n	ım
WOSm1	1	1
WOSm2	1	1

### HOUSING FOOTPRINT

#### WOSm 1:

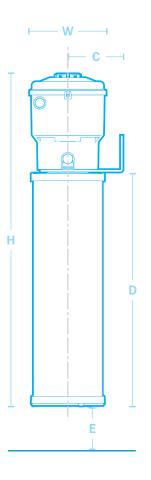
#### DIMENSIONS H X W X C X D X E inches (mm)

) 19" x 4.17" x 3.15" x 13.2" x 1.97" (483mm x 106mm x 80mm x 335mm x 50mm)

#### WOSm2:

#### DIMENSIONS H X W X C X D X E inches (mm)

13.5" x 4.17" x 3.15" x 26.4" x 1.97" (816mm x 106mm x 80mm x 670mm x 50mm)



# TECHNICAL DATA

Model	Max Oil Adsorption	Ma	x FAD	Max Condensate Flow <sup>1</sup>
	g	scfm	Nm³/min	l/h
Cold Climate Zone 15°C	C 60%RH			
WOSm1	740	43.05	1.23	0.57
WOSm2	1520	88.9	2.54	1.19
Mild Climate Zone 25°C	C 60%RH			
WOSm1	650	37.8	1.08	0.90
WOSm2	1340	78.05	2.23	1.87
Hot Climate Zone 40°C	100%RH			
WOSm1	370	21.9	0.62	1.91
WOSm2	770	45.2	1.28	3.96

> WOS m1

# HIGH-PRESSURE STORAGE

When an application requires storage, either in the form of a single cylinder or multiple cylinders, arranged either for bulk or banks of cascading, a properly sized storage system offers many benefits to the compressed air/gas system.

The purpose of storage is to serve as a reservoir to handle constant, sudden or unusually high demands for air/gas that can exceed the capacity of the compressor.

Storage protects the compressor from the direct demand of the system as well as serving to dampen or eliminate pressure pulsations to the system. Contact BAUER for sizing storage with multiple banks for cascading.

BAUER is knowledgeable in the application of storage to medium and high pressure applications. We offer storage systems that meet the code requirements of the ASME Section VIII, Division 1 latest edition for non-corrosive service only and ISO/UN.



## BULK STORAGE

Bulk storage for limiting the number of compressors starts to 4 times per hour can be calculated by the following formula:

#### $VR = 58 \times (QC / \Delta P)$

- > VR = Volume of storage, cubic feet water volume
- QC = Capacity of the compressor, standard cubic feet per minute (scfm)
- $\triangleright$   $\triangle P$  = Approximate dead band of the final pressure switch, pounds per

Multiple cylinders can be used for applications that require a large volume of

Contact BAUER for sizing storage with multiple banks for cascading.



ASME Storage

# TECHNICAL DATA

Model	Pressure Ratings	Water '	Volume	Air Capacity At Working Pressure	Dimensions*		Weight
	Working/Test				Outer Diameter	Length	
	psig	in³	ft³	ft³	in		lbs
ASME							
ASME 5000	5000/10500	2590	1.47	439	9.62	54	400
ASME 6000	6000/10500	2590	1.47	491	9.62	54	400
ASME 7000	7000/10500	2590	1.47	571	9.62	54	400
ISO/UN							
ISO/UN 4350	4350/6525	4893	2.83	758	11.25	62.5	245
ISO/UN 4500	4500/6750	2750	1.59	444	9.31	55	144
ISO/UN 5000	5000/7500	2750	1.59	472	9.38	55	158
ISO/UN 6000	6000/9000	2640	1.53	509	9.28	55	188

<sup>\*</sup> Dimension includes cylinder valve on ISO/UN cylinders.

# LIFECYCLE PERFORMANCE

BAUER is committed to the lifecycle performance of its customers

### **PARTS**





#### QUALITY AND RELIABILITY

Our factory-original replacement parts assure you that when maintenance or repair is performed, you are restoring the unit to its original specifications and performance.

#### PARTS: COMPATIBILITY

We configure our designs with interchangeability and our end user in mind. You can count on parts being available for all BAUER models.

PartsSales@BauerComp.com or 1-(844)-500-5822



- 1. Purification
- 2. Gaskets and Seals
- 3. Lubricants
- 4. Fill Hose and Assemblies
- 5. Valves
- 6. Air Intake Filters
- 7. All 10,000+ Parts

# **BAUER HELPDESK**





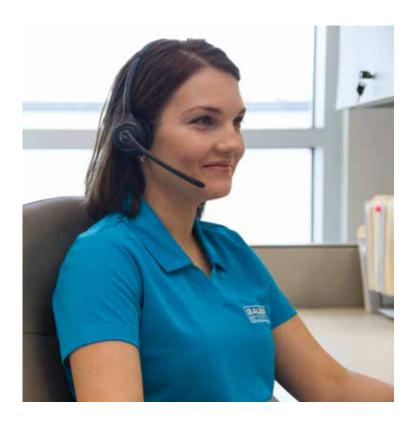
#### TRAINING TOPICS

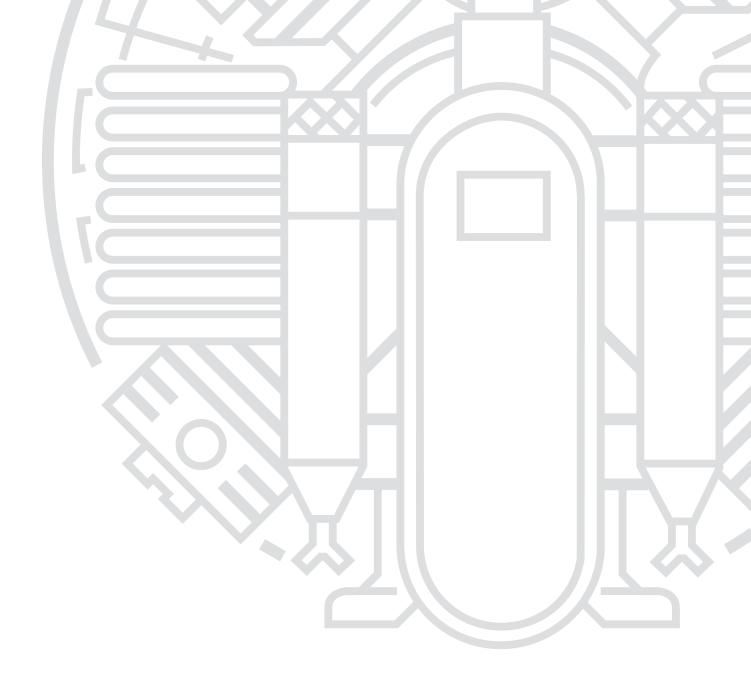
Total customer satisfaction is our top priority. BAUER provides 24-7 phone tech and troubleshooting support at our BAUER Helpdesk. Our support continues throughout our warranty period and beyond.

>>> For BAUER Helpdesk please email:

CustomerService@BauerComp.com or call at:

1-(844)-500-5822







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