



aerospace  
climate control  
electromechanical  
**filtration**  
fluid & gas handling  
hydraulics  
pneumatics  
process control  
sealing & shielding



## Breathable Compressed Air



domnick  
hunter

ENGINEERING YOUR SUCCESS.

# Working safely in hazardous environments

Employers are advised by health and safety legislation to provide Respiratory Protective Equipment (RPE) in addition to Personal Protective Equipment (PPE) wherever there is the possibility of employees or site visitors inhaling hazardous substances.

## Respiratory Health Problems

The inhalation of hazardous substances can cause serious health problems including:

- **Emphysema**  
Lung Disease
- **Chronic Bronchitis**  
Irritation to airways
- **Asthma**  
Attacks of coughing, wheezing and tightness of chest
- **Rhinitis**  
Nasal irritation
- **Conjunctivitis**  
Watery eyes
- **Bronchitis**  
Coughing and shortness of breath
- **Respiratory Sensitization**  
An irreversible allergic reaction

## Typical Hazardous Substances

- **Biological agents** – bacteria and other micro-organisms
- **Dusts** – with high concentration levels (produced during grinding, sanding or milling)
- **Noble gases** – e.g. argon and helium (not directly hazardous but can cause oxygen deficiency)
- **Processed substances** – such as pesticides, medicines chemicals and cosmetics
- **Fumes** – often created during welding, smelting and pouring molten metals
- **Mists** – liquid droplets formed by atomization and condensation processes. Mists can be created by plating, spraying, mixing and cleaning operations
- **Asbestos** – used extensively in buildings from the 1940's to 1960's. Exposure to asbestos fibers can cause asbestosis, lung cancer or mesothelioma
- **Lead poisoning** – lead poisoning is likely to build up slowly over time and can pose serious risks including, brain, nerve and kidney damage

## Applications, Environments and Industries

Hazardous vapors, gases and fumes can be released at various stages within manufacturing applications. Whether the risk is from noxious fumes, particulate or contamination from a compressed air system, effective respiratory protection for the user is essential.

### Application

- Tank cleaning
- Spray painting
- Asbestos removal
- Shotblasting
- Tunnelling
- Confined spaces
- Welding
- Demolition

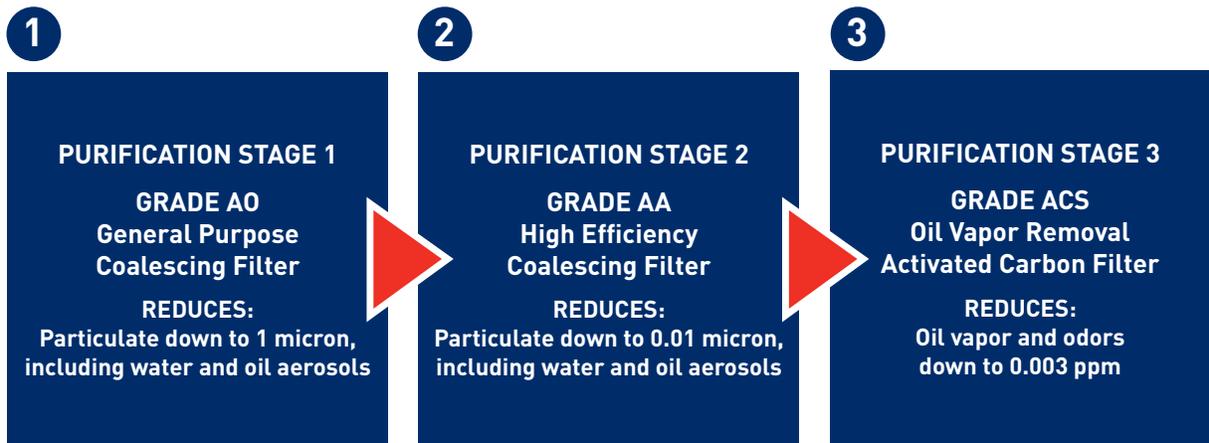
### Environments

- Carbon monoxide
- Carbon dioxide
- Oil vapor & mist
- Airborne particulate & dust
- Vapors, gases & fumes
- Toxic gas & liquid
- Bio-hazards
- Nuclear
- Smoke
- Asbestos
- Biological agents

### Industries

- Agriculture
- Aviation
- Chemical
- Construction
- Electrical Utilities
- Fire Service
- Food & Beverage Production
- Gas Utilities
- Hazmat
- Iron/Steel Production
- Manufacturing
- Marine / Shipyard
- Mining
- Nuclear
- Oil & Gas Production
- Petrochemical
- Pulp & Paper
- Pharmaceutical & Labs
- Public Works
- Water Treatment
- Welding

# Breathing Air Purifiers without CO /CO<sub>2</sub> reduction



**PARKER DOMNICK HUNTER Breathing Air Purifiers PROVIDE AIR  
1,000,000 CLEANER THAN THE AIR WE NORMALLY BREATHE**

**WARNING: THESE PRODUCTS WILL NOT REMOVE CARBON MONOXIDE OR CARBON DIOXIDE**

# Breathing Air Purifiers without CO / CO<sub>2</sub> reduction

To reduce the following contaminants	Solid Particles	✓	Water Aerosols	✓
	Oil Aerosols	✓	Water Vapor	×
	Oil Vapor	✓	Carbon Monoxide	×
	Odors & Fumes	✓	Carbon Dioxide	×



## BAF010 – BAF015

The Parker domnick hunter BAF010 and BAF015 two stage point of use breathing air filter sets combine high efficiency coalescing pre-filtration with activated carbon oil odor and vapor removal filtration. These filter sets include a pressure regulator/gauge to allow airline pressure adjustment to users' requirements and mounting brackets for ease of installation.



## BAP015

To facilitate breathing air applications for three personnel, the Parker domnick hunter BAP015 is a portable breathable air purification package consisting of a high efficiency coalescing filter and an activated carbon filter to remove oil vapor and odors. These sets include a pressure regulator/gauge, all mounted in a lightweight, stable framework.



## BAS2010

The Parker domnick hunter BAS-2010 is a very robust and weatherproof portable breathing air purifier. Consisting of a high efficiency coalescing filter and an activated carbon filter to remove oil vapor and odors, this purifier includes a pressure regulator / gauge and can facilitate up to four users simultaneously.



## BAS3015

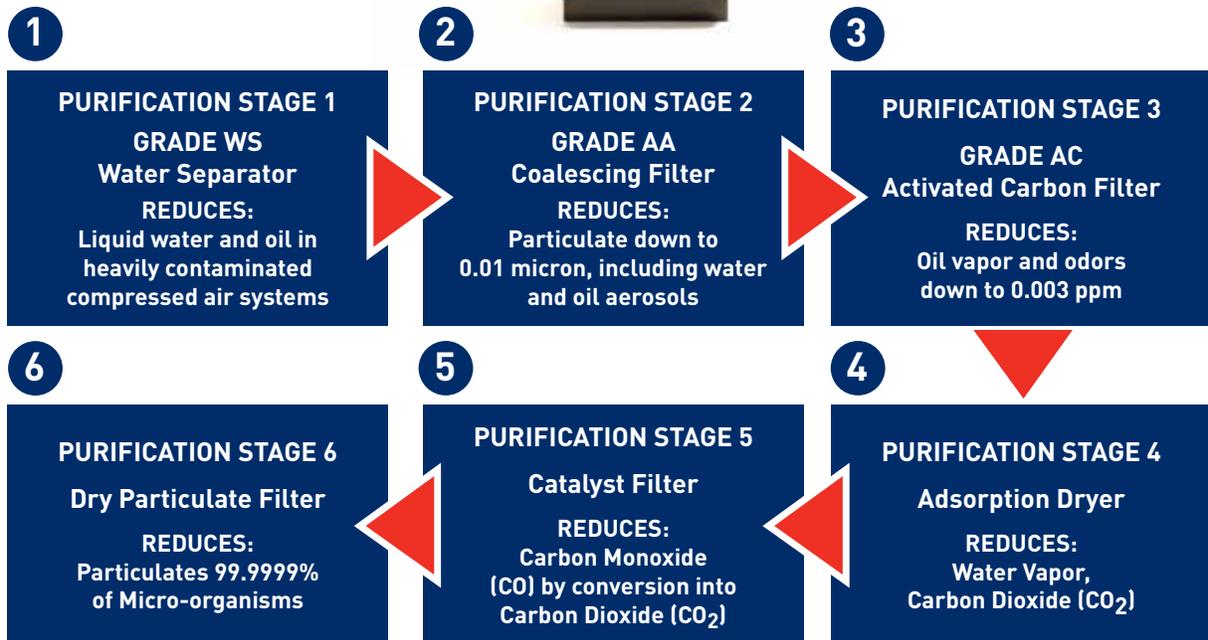
The Parker domnick hunter BAS-3015 is a portable breathing air purifier housed in a compact, weatherproof, impact resistant case. Consisting of a general purpose pre-filter, a high efficiency coalescing filter and an activated carbon filter to remove oil vapor and odors, this purifier includes a pressure regulator/ gauge and can facilitate up to five users simultaneously. The BAS-3015 is also available with an optional CO monitor (BAS-3015M).

Features	BAF010-BAF015	BAS3015	BAS2010	BAP015
Purification Stages	2	3	2	2
Integral pressure regulator		•	•	•
Portable	•	•	•	•
Use with any compressed air supply	•	•	•	•
Integrated CO Monitor (optional)		•		
Wall mounted	•			
Pressure gauge	•	•	•	•

# Breathing Air Purifiers with CO /CO<sub>2</sub> reduction



Model shown BA-DME012



## International breathing air standards

Contaminants	OSHA Grade D	CSA Z180.1	European Pharmacopoeia	Parker domnick hunter BA-DME/BAM range*
Water		Pressure dewpoint of 41°F (5°C) below lowest system temperature	67 ppm = -49°F (-45°C) atmospheric dewpoint)	14 ppm = -72.4°F (-58°C) atmospheric dewpoint)
Oil / Lubricant	5 ppm	< 1 ppm	0.1 ppm	0.003 ppm
Carbon Dioxide (CO <sub>2</sub> )	< 100 ppm	< 500 ppm	< 500 ppm	< 500 ppm
Carbon Monoxide (CO)	< 10 ppm	< 5 ppm	< 5 ppm	< 5 ppm
Nitrogen Oxides (NO + NO <sub>2</sub> )			< 2 ppm	< 2 ppm
Sulphur Dioxide (SO <sub>2</sub> )			< 1 ppm	< 1 ppm

Figures are based on compressed air inlet containing standard ambient levels of CO<sub>2</sub> 300 to 600ppm and CO 10ppm. At higher levels the system will provide incident protection only.

\*Independently tested for Parker domnick hunter by

**PATTINSON**  
 SCIENTIFIC SERVICES

# Breathing Air Purifiers with CO / CO<sub>2</sub> reduction

To reduce the following contaminants	Solid Particles	✓	Water Aerosols	✓
	Oil Aerosols	✓	Water Vapor	✓
	Oil Vapor	✓	Carbon Monoxide	✓
	Odors & Fumes	✓	Carbon Dioxide	✓

These models are recommended for hazardous applications that require an uninterrupted breathing air supply where carbon monoxide or carbon dioxide may be present.

Using a catalyst, carbon monoxide (CO) is converted, by oxidization into breathable levels of carbon dioxide (CO<sub>2</sub>). The catalyst is kept active by using an adsorption dryer to maintain a low pressure dewpoint.



## BA-2010

The Parker domnick hunter BA-2010 is a fully pneumatic, portable Breathing Air Purifier designed to provide complete protection for up to four personnel. Five purification stages will ensure the highest quality air that is free from particulate dusts, vapors, odors, carbon dioxide (CO<sub>2</sub>) and carbon monoxide (CO). The flow rate is easily adjustable from a pressure regulator and monitored by inlet/outlet pressure gauges on the front facia. The BA-2010 is housed in an extremely strong and robust lockable case for total security.



## BA-DME012-080

The Parker domnick hunter BA-DME range of Breathing Air Purifiers is ideal for point of use multiple personnel protection at medium flow rates. At the inlet, a first stage water separator removes bulk water, followed immediately by a second stage high efficiency coalescing filter to reduce oil and water content and a third stage activated carbon filter to remove oil vapor and odors. The fourth stage adsorption dryer, reduces the water vapor content of the compressed air (to -40°F (-40°C) pdp) and CO<sub>2</sub>, NO and NO<sub>2</sub> levels to below the legal permissible limits. Downstream of the adsorption dryer, a catalyst converts carbon monoxide to carbon dioxide, again, to below the legal limits. A final dust filter captures any particulates carried over from the adsorption materials.



## BAM 102 -110

The Parker domnick hunter BAM Breathing Air Purifiers consist of six purification stages mounted on a portable skid for high-capacity multiple personnel breathing air applications. At the inlet, a first stage water separator removes bulk water, followed immediately by a second stage high efficiency coalescing filter to reduce oil and water content and a third stage activated carbon filter to remove oil vapor and odors. The fourth stage adsorption dryer, reduces the water vapor content of the compressed air (to -40°F (-40°C) pdp) and CO<sub>2</sub>, NO and NO<sub>2</sub> levels to below the legal permissible limits. Downstream of the adsorption dryer, a catalyst converts carbon monoxide to carbon dioxide, again, to below the legal limits. A final dust filter captures any particulates carried over from the adsorption materials.

## The Parker domnick hunter BA-DME and BAM ranges comply with the European Pharmacopoeia medical air standard

Features	BA-2010	BA-DME	BAM
Purification Stages	5	6	6
Integral pressure regulator and gauge	•		
Portable	•		
Hours run meter	•		
Pneumatic Control	•		
Use with any compressed air supply	•	•	•
Intraged CO Monitor			•
Electrical supply required		•	•

# Selecting the correct purifier

Parker domnick hunter Breathing Air Purifiers are designed to reduce the concentration of potential contaminants, identified as hazardous to the human respiratory system, to acceptable levels (detailed in published International Breathing Air Standards).

Where a potential inhalation hazard exists, it is essential that a full assessment of the risk to the user is carried out. This should not only identify the risk of contamination to the breathing air supply, but also the level of contamination. In the event of being unable to either remove or control the contamination

risk, it is the employers' responsibility to introduce measures to ensure that the breathing air supply complies with the required air quality standard.

The air quality used in a breathing air system must be controlled under all operating conditions, including the possibility of a plant or process failure.

In addition to conforming with the required compressed air quality, the delivered air flow rate must be sufficient to meet the foreseeable needs of the total number of users at their maximum work rate consumption.

## Breathing air standards

The Parker domnick hunter Breathing Air Purifiers are designed to comply with the following international standards;

- **USA** CGA G7.1-1997  
OSHA-Grade D
- **Canada** Z180.1-00
- **UK** BS4275 : 1997
- **Europe** EN12021
- **Australia** AS/NZS 1715 : 1994
- **New Zealand** AS/NZS 1715 : 1994

Typical peak inhalation rates for fit young persons at various work rates are shown below. Higher inhalation rates may be generated by less fit or heavier users or for wearers of heavy personal protective equipment.

Work Rate	Peak Inhalation Rate	
	cfm	l/min
Low	3.6	100
Medium	5.3	150
High	7.1	200
Very High	8.9	250

Source BS4275 : 1997.

All peak inhalation rates are given as a guide only, the actual breathing air requirement should be calculated, where possible from the total requirement of the personal protection equipment, ie. mask/hood/suit.

In order to ensure that a suitably selected breathing air purifier is reliably operated and maintained, it is essential that correct training and supervision is provided to the user.

## Parker domnick hunter Breathing Air Purifiers provide the following levels of protection when using a general compressed air supply:

	Solid Particles	Oil Vapor	Oil Odors	Pressure Dewpoint	CO	CO <sub>2</sub>	NO+NO <sub>2</sub>	SO <sub>2</sub>
<b>Purifiers without CO/CO<sub>2</sub> reduction</b>	0.01ppm	0.003ppm	None present	N/A	N/A	N/A	N/A	N/A
<b>Purifiers with CO/CO<sub>2</sub> reduction</b>	0.01ppm	0.003ppm	None present	-40°F (-40°C)	<5ppm	<500ppm	N/A	N/A

### NOTE:

Parker domnick hunter CO & CO<sub>2</sub> reduction purifiers provide breathable air that meets all International Respiratory Air Standards, purifiers without CO & CO<sub>2</sub> reduction stages should not be used in an environment where CO or CO<sub>2</sub> has been identified as a potential inhalation risk.

# Technical Specifications

		BAF010, BAF015, BAS3015, BAS2010, BAP015	BA-DME012 - 40	BA-DME050 - 080	BAM102 - 110
Operation Pressure	Maximum	145 psi g (10 bar g)	232 psi g (16 bar g)	189 psi g (13 bar g)	152 psi g (10.5 bar g)
	Minimum	58 psi g (4 bar g)	58 psi g (4 bar g)	58 psi g (4 bar g)	58 psi g (4 bar g)
Recommended Operating Temperature	Maximum	86°F (30°C)			
	Minimum	35°F (1.5°C)			

For flow rates at other pressures, apply the factor shown

Line Pressure	psi g	58	73	87	100	116	131	145	160	174	189	203	218	232
	bar g	4	5	6	7	8	9	10	11	12	13	14	15	16
Correction Factor		1.60	1.33	1.14	1	0.89	0.80	0.73	0.67	0.62	0.57	0.54	0.5	0.47

Product code	Connections		Flowrate @ 100 psi g (7 bar g)				Dimensions						Weight (approx.)	
	Inlet (NPT)	Outlet (NPT)	Inlet		Height		Width		Depth		lbs	kg		
			cfm	l/s	ins	mm	ins	mm	ins	mm				
BAF010	1/4	3/8	13	6	13.5	343	8.15	207	5.35	136	3.1	1.4		
BAF015	3/8	3/8	27	13	17.2	436	8.82	224	5.67	144	4.2	1.9		
BAS2010*	1/2" Hose safety coupler	4x 1/4	21	10	16.2	410	18.1	460	9.7	246	18	8		
BAS3015*	1/2" Hose safety coupler	5x 1/4	42	20	18.5	470	11.8	600	23.6	300	22	10		
BAP015*	1/2" Hose safety coupler	3x 3/8	42	20	15	380	15	380	10.7	272	12	5.45		

Product code	Connections		Flowrate @ 100 psi g (7 bar g)				Dimensions						Weight (approx.)	
	Inlet (NPT)	Outlet (NPT)	Inlet		Outlet		Height		Width		Depth		lbs	kg
			cfm	l/s	cfm	l/s	ins	mm	ins	mm	ins	mm		
BA-2010	1/2	3x 1/4	24	11	19	9	24.0	610	17.7	450	10.6	270	82	37
BAP-2010	1/2	3x 1/4	24	11	19	9	37.3	947	16.4	416	18.1	460	110	50
BA-DME012	1/2	3/8	24	11	19	9	37.5	952	18.7	476	11.9	302	84	38
BA-DME015	1/2	3/4	32	15	25	12	47.7	1211	19.3	490	11.9	302	95	43
BA-DME020	1/2	3/4	42	20	33	15	54.2	1376	19.3	490	11.9	302	106	48
BA-DME025	1/2	3/4	53	25	42	20	60.7	1541	19.3	490	11.9	302	117	53
BA-DME030	1/2	3/4	65	31	52	24	67.2	1707	20.5	521	11.9	302	128	58
BA-DME040	3/4	3/4	88	42	70	33	77.2	1960	28.8	732	17.6	447	164	74
BA-DME050	1	1	106	50	84	40	68.9	1750	15.8	400	47.2	1200	466	211
BA-DME060	1	1	130	61	104	49	75.4	1916	15.8	400	47.2	1200	494	224
BA-DME080	1	1	176	83	140	66	81.7	2076	29.3	745	47.2	1200	615	279
BAM102	1 1/2	2	160	76	134	63	70.1	1780	35.9	912	53.2	1352	979	444
BAM103	1 1/2	2	240	113	202	95	70.1	1780	35.9	912	53.2	1352	1078	489
BAM104	2	2	320	151	269	127	70.1	1780	35.9	912	57.6	1462	1237	561
BAM105	2	2	400	189	337	159	70.1	1780	35.9	912	61.5	1562	1319	598
BAM106	2	2 1/2	480	227	404	190	70.1	1780	35.9	912	70.9	1800	1519	689
BAM107	2	2 1/2	560	264	471	222	70.1	1780	35.9	912	74.8	1900	1645	746
BAM108	2	2 1/2	640	302	539	254	70.1	1780	35.9	912	78.7	2000	1828	829
BAM110	2 1/2	2 1/2	800	378	674	318	70.1	1780	35.9	912	86.6	2200	2225	1009

# How clean is your breathing air ?

## Breathable Air Purity Test Kit

Air quality testing for compressed air systems

The Parker domnick hunter Breathing Air Purity Test Kit (APTK1) allows for a convenient 'on the spot' indication of compressed air quality. This comprehensive test kit is compact and easy to use, to indicate the level of contamination, both upstream and downstream of purification equipment.

The APTK1 is supplied complete with oil aerosol, water vapor CO and CO<sub>2</sub> test tubes to allow immediate multiple testing.

In addition to the detection of compressed air contaminants listed below, the Parker domnick hunter APTK1 also features an oxygen analyzer, allowing for constant real-time display of the oxygen content within the compressed air system.

The Parker domnick hunter APTK1 is not only suitable for industrial compressed air testing but also, the additional O<sub>2</sub> analyzing feature enables compressed air lines that supply Breathing Air / Respiratory Protection Equipment (RPE) to be tested to the latest national and international standards.



### Air Content Measurables

- Oxygen
- CO
- CO<sub>2</sub>
- Water Vapor
- Mineral Oil

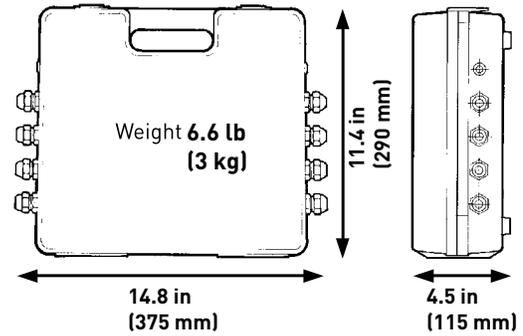
### Features / Benefits

- Lightweight and portable test kit in a robust carry case
- Digital oxygen content monitoring
- Allows simultaneous testing of upstream and downstream air purity
- Testing quality of breathing air to national and international standards
- Can be used at compressed air pressures up to 145 psi g (10 bar g)
- Factory set for use with 'Gastec Ltd' detection tubes

# Technical Specification

## Air Purity Test Kit

Maximum inlet pressure:	145 psi g (10 bar g)
Analysis operating pressure:	43.5 psi g (3 bar g) - Factory set
Maximum inlet temperature:	104°F (40°C)
Minimum inlet temperature:	59°F (15°C)
Flow accuracy:	±4% outlet
Air flow rate range at outlet:	30 - 2500 cc/min
Hose connections:	6mm - 1/4 " push in adaptor
Approved detector tubes:	Calibrated for: Gastec Ltd detector tubes



## Air Contaminant / Content Analysis

Model	Measurable	Sample rate	Test Duration	Total Volume
APTK1 (60 603 5050)	CO	100 cfm	1.5 minutes	150 ml
	CO <sub>2</sub>	100 cfm	3 minutes	300 ml
	Water Vapor	100 cfm	10 minutes	1 liter
	Oil Mist (Mineral)	1000 cfm	60 minutes	60 liters
	Oxygen	50 cfm	Real-time Display	n/a

NB. All flow rates are factory set to allow immediate testing.

## Consumable Parts

Replacement Gas Detection Tubes / O <sub>2</sub> Analyser	
Contaminant	Kit Part No.
Carbon Monoxide (CO)	608200465
Carbon Dioxide (CO <sub>2</sub> )	608200464
Water Vapor (H <sub>2</sub> O)	608200462
Oil Mist	608200463
O <sub>2</sub> Analyser	606035300

The Parker domnick hunter Air Purity Test Kit (APTK1) is supplied complete with oil aerosol, water vapor, CO and CO<sub>2</sub> test tubes (in packs of 10) to allow immediate multiple testing.

		COMPRESSED AIR FOR BREATHING - WORLD STANDARDS			
		USA 29 CFR 1910.134	CANADA CSA Z180.1-00	EUROPE BS EN12021	AUSTRALIA AS/NZS 1715 : 1994
<b>SUBSTANCE</b>	<b>OXYGEN</b>	19.5% - 23.5%	20% - 22% BY VOLUME (DRY AIR)	21% (+/-1%)	19.5% - 22%
	<b>CARBON DIOXIDE</b>	NOT MORE THAN 1000ppm	NOT MORE THAN 500ppm	NOT MORE THAN 500ppm	NOT MORE THAN 800ppm
	<b>CARBON MONOXIDE</b>	NOT MORE THAN 10ppm	NOT MORE THAN 5ppm	NOT MORE THAN 15ppm	NOT MORE THAN 10ppm
	<b>OIL MIST / Vapor</b>	NOT MORE THAN 5ppm	NOT MORE THAN 1ppm	NOT MORE THAN 0.5ppm	NOT MORE THAN 1ppm
	<b>Odor / TASTE</b>	WITHOUT SIGNIFICANT Odor OR TASTE	WITHOUT SIGNIFICANT Odor OR TASTE	WITHOUT SIGNIFICANT Odor OR TASTE	WITHOUT SIGNIFICANT Odor OR TASTE
	<b>WATER (LIQUID)</b>	THERE SHOULD BE NO FREE WATER	THERE SHOULD BE NO FREE WATER	THERE SHOULD BE NO FREE WATER	THERE SHOULD BE NO FREE WATER
	<b>WATER (Vapor)</b>	39°F (4°C) pdp @ 50 psig (3.4 barg)	The pressure dewpoint of the compressed breathing air shall be at least 9°F (5°C) below the lowest temperature to which any part of the compressed breathing air pipeline or the accepted respirator may be exposed at any season of the year.	"Air for compressed air line breathing apparatus shall have a dewpoint sufficiently low to prevent condensation & freezing. Where apparatus is used and stored at a known temperature pressure dewpoint shall be at least 9°F (5°C) below the likely lowest temperature. Where conditions of usage and storage of the air is not known the pressure dewpoint shall not exceed 12.2°F (-11°C) .	Airline pressure dewpoint should be at least 9°F (5°C) below the lowest known temperature or 12.2°F (-11°C) if the lowest temperature is not known.



# Parker's Motion & Control Technologies

At Parker, we're guided by a relentless drive to help our customers become more productive and achieve higher levels of profitability by engineering the best systems for their requirements. It means looking at customer applications from many angles to find new ways to create value. Whatever the motion and control technology need, Parker has the experience, breadth of product and global reach to consistently deliver. No company knows more about motion and control technology than Parker. For further info call 716 686 6400



## Aerospace

### Key Markets

Aftermarket services  
Commercial transports  
Engines  
General & business aviation  
Helicopters  
Launch vehicles  
Military aircraft  
Missiles  
Power generation  
Regional transports  
Unmanned aerial vehicles

### Key Products

Control systems & actuation products  
Engine systems & components  
Fluid conveyance systems & components  
Fluid metering, delivery & atomization devices  
Fuel systems & components  
Fuel tank inerting systems  
Hydraulic systems & components  
Thermal management  
Wheels & brakes



## Climate Control

### Key Markets

Agriculture  
Air conditioning  
Construction Machinery  
Food & beverage  
Industrial machinery  
Life sciences  
Oil & gas  
Precision cooling  
Process  
Refrigeration  
Transportation

### Key Products

Accumulators  
Advanced actuators  
CO<sub>2</sub> controls  
Electronic controllers  
Filter driers  
Hand shut-off valves  
Heat exchangers  
Hose & fittings  
Pressure regulating valves  
Refrigerant distributors  
Safety relief valves  
Smart pumps  
Solenoid valves  
Thermostatic expansion valves



## Electromechanical

### Key Markets

Aerospace  
Factory automation  
Life science & medical  
Machine tools  
Packaging machinery  
Paper machinery  
Plastics machinery & converting  
Primary metals  
Semiconductor & electronics  
Textile  
Wire & cable

### Key Products

AC/DC drives & systems  
Electric actuators, gantry robots & slides  
Electrohydraulic actuation systems  
Electromechanical actuation systems  
Human machine interface  
Linear motors  
Stepper motors, servo motors, drives & controls  
Structural extrusions



## Filtration

### Key Markets

Aerospace  
Food & beverage  
Industrial plant & equipment  
Life sciences  
Marine  
Mobile equipment  
Oil & gas  
Power generation & renewable energy  
Process  
Transportation  
Water Purification

### Key Products

Analytical gas generators  
Compressed air filters & dryers  
Engine air, coolant, fuel & oil filtration systems  
Fluid condition monitoring systems  
Hydraulic & lubrication filters  
Hydrogen, nitrogen & zero air generators  
Instrumentation filters  
Membrane & fiber filters  
Microfiltration  
Sterile air filtration  
Water desalination & purification filters & systems



## Fluid & Gas Handling

### Key Markets

Aerial lift  
Agriculture  
Bulk chemical handling  
Construction machinery  
Food & beverage  
Fuel & gas delivery  
Industrial machinery  
Life sciences  
Marine  
Mining  
Mobile  
Oil & gas  
Renewable energy  
Transportation

### Key Products

Check valves  
Connectors for low pressure fluid conveyance  
Deep sea umbilicals  
Diagnostic equipment  
Hose couplings  
Industrial hose  
Mooring systems & power cables  
PTFE hose & tubing  
Quick couplings  
Rubber & thermoplastic hose  
Tube fittings & adapters  
Tubing & plastic fittings



## Hydraulics

### Key Markets

Aerial lift  
Agriculture  
Alternative energy  
Construction machinery  
Forestry  
Industrial machinery  
Machine tools  
Marine  
Material handling  
Mining  
Oil & gas  
Power generation  
Refuse vehicles  
Renewable energy  
Truck hydraulics  
Turf equipment

### Key Products

Accumulators  
Cartridge valves  
Electrohydraulic actuators  
Human machine interfaces  
Hybrid drives  
Hydraulic cylinders  
Hydraulic motors & pumps  
Hydraulic systems  
Hydraulic valves & controls  
Hydrostatic steering  
Integrated hydraulic circuits  
Power take-offs  
Power units  
Rotary actuators  
Sensors



## Pneumatics

### Key Markets

Aerospace  
Conveyor & material handling  
Factory automation  
Life science & medical  
Machine tools  
Packaging machinery  
Transportation & automotive

### Key Products

Air preparation  
Brass fittings & valves  
Manifolds  
Pneumatic accessories  
Pneumatic actuators & grippers  
Pneumatic valves & controls  
Quick disconnects  
Rotary actuators  
Rubber & thermoplastic hose & couplings  
Structural extrusions  
Thermoplastic tubing & fittings  
Vacuum generators, cups & sensors



## Process Control

### Key Markets

Alternative fuels  
Biopharmaceuticals  
Chemical & refining  
Food & beverage  
Marine & shipbuilding  
Medical & dental  
Microelectronics  
Nuclear Power  
Offshore oil exploration  
Oil & gas  
Pharmaceuticals  
Power generation  
Pulp & paper  
Steel  
Water/wastewater

### Key Products

Analytical Instruments  
Analytical sample conditioning products & systems  
Chemical injection fittings & valves  
Fluoropolymer chemical delivery fittings, valves & pumps  
High purity gas delivery fittings, valves, regulators & digital flow controllers  
Industrial mass flow meters/ controllers  
Permanent no-weld tube fittings  
Precision industrial regulators & flow controllers  
Process control double block & bleeds  
Process control fittings, valves, regulators & manifold valves



## Sealing & Shielding

### Key Markets

Aerospace  
Chemical processing  
Consumer  
Fluid power  
General industrial  
Information technology  
Life sciences  
Microelectronics  
Military  
Oil & gas  
Power generation  
Renewable energy  
Telecommunications  
Transportation

### Key Products

Dynamic seals  
Elastomeric o-rings  
Electro-medical instrument design & assembly  
EMI shielding  
Extruded & precision-cut, fabricated elastomeric seals  
High temperature metal seals  
Homogeneous & inserted elastomeric shapes  
Medical device fabrication & assembly  
Metal & plastic retained composite seals  
Shielded optical windows  
Silicone tubing & extrusions  
Thermal management  
Vibration dampening

ENGINEERING YOUR SUCCESS.

[www.parker.com/faf](http://www.parker.com/faf)

# Worldwide Filtration Manufacturing Locations

## North America

### Compressed Air Treatment Filtration & Separation/Balston

Haverhill, MA  
978 858 0505  
[www.parker.com/balston](http://www.parker.com/balston)

### Finite Airtek Filtration Airtek/domnick hunter/Zander

Lancaster, NY  
716 686 6400  
[www.parker.com/faf](http://www.parker.com/faf)

### Finite Airtek Filtration/Finite

Oxford, MI  
248 628 6400  
[www.parker.com/finitefilter](http://www.parker.com/finitefilter)

### Engine Filtration & Water Purification Racor

Modesto, CA  
209 521 7860  
[www.parker.com/racor](http://www.parker.com/racor)

Holly Springs, MS  
662 252 2656  
[www.parker.com/racor](http://www.parker.com/racor)

Beaufort, SC  
843 846 3200  
[www.parker.com/racor](http://www.parker.com/racor)

### Racor – Village Marine Tec.

Gardena, CA  
310 516 9911  
[desalination.parker.com](http://desalination.parker.com)

### Parker Sea Recovery

Carson, CA  
310 637 3400  
[www.searecovery.com](http://www.searecovery.com)

### Hydraulic Filtration Hydraulic Filter

Metamora, OH  
419 644 4311  
[www.parker.com/hydraulicfilter](http://www.parker.com/hydraulicfilter)

Laval, QC Canada  
450 629 9594  
[www.parkerfarr.com](http://www.parkerfarr.com)

### Process Filtration domnick hunter Process Filtration

Oxnard, CA  
805 604 3400  
[www.parker.com/processfiltration](http://www.parker.com/processfiltration)

Madison, WI  
608 824 0500  
[www.scilog.com](http://www.scilog.com)

Phoenixville, PA  
610 933 1600  
[www.parker.com/processfiltration](http://www.parker.com/processfiltration)

### Aerospace Filtration

Velcon Filtration  
Colorado Springs, CO  
719 531 5855  
[www.velcon.com](http://www.velcon.com)

## Europe

### Compressed Air Treatment domnick hunter Filtration & Separation

Gateshead, England  
+44 (0) 191 402 9000  
[www.parker.com/dhfn](http://www.parker.com/dhfn)

### Parker Gas Separations

Etten-Leur, Netherlands  
+31 76 508 5300  
[www.parker.com/dhfn](http://www.parker.com/dhfn)

### Hiross Zander

Padova Business Unit  
Padova, Italy  
+39 049 9712 111  
[www.parker.com/hzd](http://www.parker.com/hzd)

### Hiross Zander

Essen Business Unit  
Essen, Germany  
+49 2054 9340  
[www.parker.com/hzd](http://www.parker.com/hzd)

### Engine Filtration & Water Purification Racor

Dewsbury, England  
+44 (0) 1924 487 000  
[www.parker.com/rfde](http://www.parker.com/rfde)

### Racor Research & Development

Stuttgart, Germany  
+49 (0)711 7071 290-10  
[www.parker.com/rfde](http://www.parker.com/rfde)

### Hydraulic Filtration Hydraulic Filter

Arnhem, Holland  
+31 26 3760376  
[www.parker.com/hfde](http://www.parker.com/hfde)

### Ujala Operation

Ujala, Finland  
+358 20 753 2500  
[www.parker.com/hfde](http://www.parker.com/hfde)

### Condition Monitoring Centre

Norfolk, England  
+44 (0) 1842 763 299  
[www.parker.com/hfde](http://www.parker.com/hfde)

### Parker Kittiwake

West Sussex, England  
+44 (0) 1903 731 470  
[www.kittiwake.com](http://www.kittiwake.com)

### Parker Procal

Peterborough, England  
+44 (0) 1733 232 495  
[www.kittiwake.com](http://www.kittiwake.com)

### Process Filtration domnick hunter Process Filtration

Birtley, England  
+44 (0) 191 410 5121  
[www.parker.com/processfiltration](http://www.parker.com/processfiltration)

### Parker Twin Filter BV

Zaandam, Netherlands  
+31(0)75 655 50 00  
[www.twinfilter.com](http://www.twinfilter.com)

## Asia Pacific

### Australia

Castle Hill, Australia  
+61 2 9634 7777  
[www.parker.com/australia](http://www.parker.com/australia)

### China

Shanghai, China  
+86 21 5031 2525  
[www.parker.com/china](http://www.parker.com/china)

### India

Navi Mumbai, India  
+91 22 651 370 8185  
[www.parker.com/india](http://www.parker.com/india)

### Parker Fowler

Bangalore, India  
+91 80 2783 6794  
[www.johnfowlerindia.com](http://www.johnfowlerindia.com)

### Japan

Tokyo, Japan  
+81 45 870 1522  
[www.parker.com/japan](http://www.parker.com/japan)

### Parker Techno

Osaka, Japan  
+81 66 340 1600  
[www.techno.taiyo-ltd.co.jp](http://www.techno.taiyo-ltd.co.jp)

### Korea

Hwaseon-City  
+82 31 359 0852  
[www.parker.com/korea](http://www.parker.com/korea)

### Singapore

Jurong Town, Singapore  
+65 6887 6300  
[www.parker.com/singapore](http://www.parker.com/singapore)

### Thailand

Bangkok, Thailand  
+66 2186 7000  
[www.parker.com/thailand](http://www.parker.com/thailand)

## Latin America

### Parker Comercio Ltda. Filtration Division

Sao Paulo, Brazil  
+55 12 4009 3500  
[www.parker.com/br](http://www.parker.com/br)

### Pan American Division

Miami, FL  
305 470 8800  
[www.parker.com/panam](http://www.parker.com/panam)

## Africa

Aeroporto Kempton Park, South Africa  
+27 11 9610700  
[www.parker.com/africa](http://www.parker.com/africa)

