

# **GAS FILTRATION AND SEPARATION**

**JONELL**

# Air and Gas Coalescing Elements

**Jonell gas coalescing elements** deliver extremely high removal efficiencies of liquid and solid aerosols in air and gas applications. The highest quality components are selected to optimize the performance of these elements in typical compressed air and gas processes.

**Special construction** in materials and configuration is available to suit most every requirement. **Jonell** supplies a number of OEMs and can design and build an element to suit most manufacturers' standard equipment configurations.

**Replacements** are available for most filter manufacturers' elements and **Jonell** is constantly expanding our product offering to include new designs as they become necessary.

**Industry standard** rated at 0.3 micron to efficiently capture the most difficult size contaminants.

**Special medias** and pre-filter options are available to help deal with high solids loading applications or upset conditions.

**Robust construction** minimizes the possibility of an element failure even in upset conditions.

**Long Life** due to high surface area resulting from the pleated, cylindrical construction and careful engineering to ensure there is no bunching or blinding of the media due to configuration.

## APPLICATIONS

**Jonell** gas coalescing elements are used in a variety of applications including the protection of natural gas compressors, turbines and mechanical seals preventing fouling and excessive wear caused by oil, water and their itinerant contaminants. Efficient recovery of entrained solvents and hydrocarbon liquids. Protection of mol sieves, mechanical equipment such as heat exchangers, sensing and measuring devices.

## RECOMMENDED OPERATING LIMITS

Maximum Operating Temperature ..... 300°F  
Minimum Operating Temperature ..... -60°F  
Change out Differential ..... 15 PSID  
Maximum Differential ..... 75 PSID

## MATERIALS OF CONSTRUCTION

Standard element construction includes pleated micro-fiberglass coalescing media, a cellulose support layer, and a polyester drainage layer.

Plated steel end caps and cores are standard but stainless steel and synthetics are available.

A heavy duty outer support prevents element failure in high differential upset conditions.

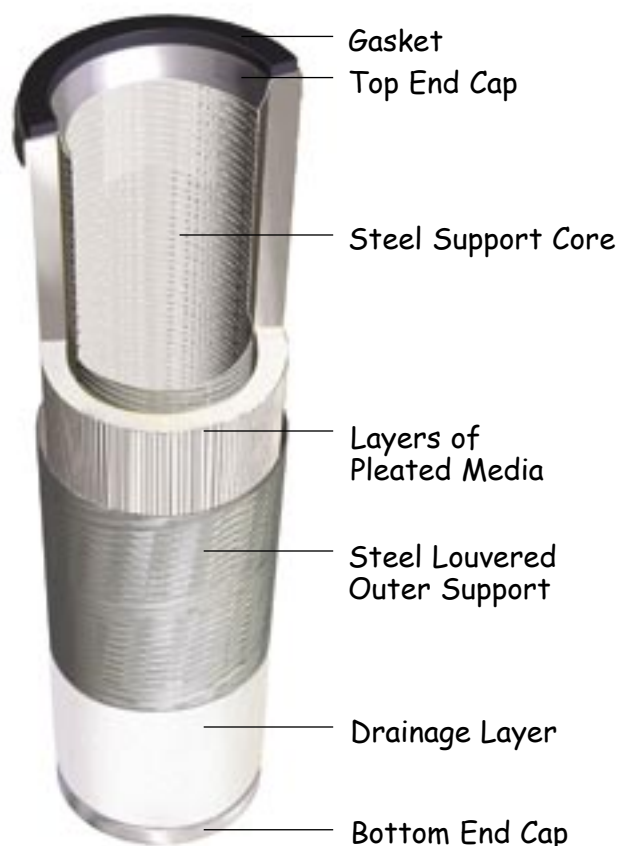
A needled polyester drainage layer ensures high drainage rates

Special materials are available on request.

## CYLINDRICAL SHAPED MEDIA PACKS

**Jonell** manufactures only cylindrical elements, designed for optimum use of the maximum amount of media that can practically be incorporated into a given configuration.

A cylindrically shaped media pack, with the appropriate number of pleats, allows even flow throughout the entire available media surface.



## ELEMENT CONFIGURATIONS

The table below shows capacities and configurations for a few of the more popular coalescing elements. Many other configurations are available with a variety of sealing mechanisms.

Element Model	FLOW MMSCFD			Dimensions in inches		
	100 PSI	400 PSI	2000 PSI	Length	I.D.	O.D.
JPMG-318-R	1.7	3.3	8	18	3.13	4.5
JPMG-336-R	2.1	4.1	10	36	3.13	4.5
JPMG-536-R	2.5	4.8	11.7	36	4.25	5.5
JPMG-30226	.75	1	2.25	29.31	1.5	2.75
JPMG-36349-V	2.7	5.3	12.9	36.25	4.2	6
JPMG-36346C-V	2.25	4.3	10.5	37.31	3.5	5.5

Capacities are based on Natural Gas at 0.60 S.G. and 60°F

Sizing and configuration of the vessel are integral components of the selection process. The capacities shown are for elements only.

# Gas Coalescer Vessels

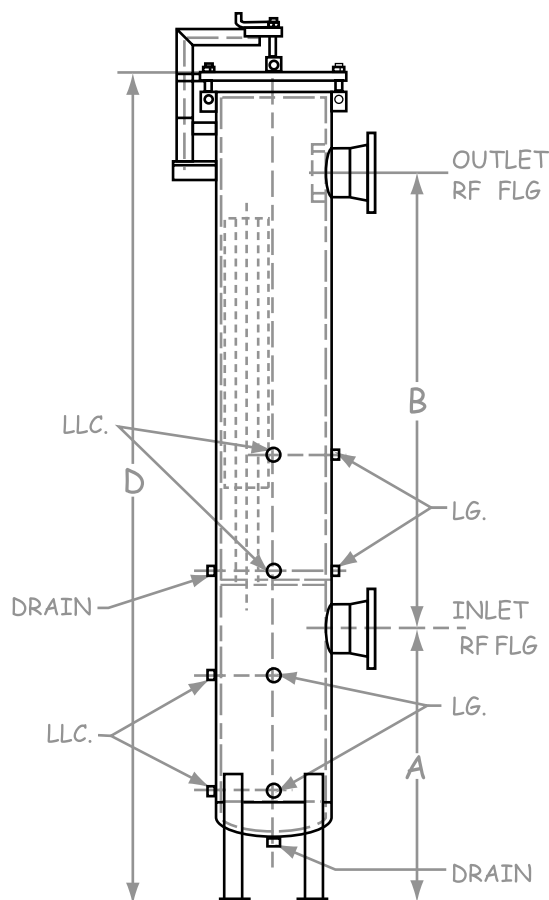
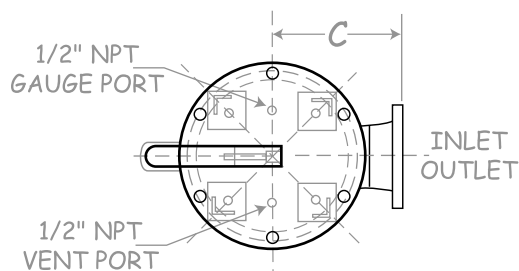
**Jonell JVC Series** vertical coalescer vessels are available in carbon and stainless steel to suit any application.

**ASME Registered** and constructed to the customer's specifications with U stamp, National Board number, or CRN.

**NDE and Materials** for low temperature service, sour service, or standard sweet service.

**Optional knockout** to capture slugs in the lower chamber.

**JPMG Series Gas coalescing** elements are used. Standard JPMG 336R values are shown below however new vessels can be fitted with JPMG-536R or JPMG-36349 elements to maximize available media areas. Smaller versions can be built to suit specifications.



## DIMENSIONS

Model	Vessel Diameter	Max. No. of Elements	Element Number	Inlet Outlet	A	B	C	D	PI	LG	LLC	Drains
JVC-612-2F	6.625	1	JPMG-312R	2	34	36	8	81	1/2	3/4	3/4	2
JVC-624-2F	6.625	1	JPMG-324R	2	34	48	8	93	1/2	3/4	3/4	2
JVC-636-3F	6.625	1	JPMG-336R	3	34	60	8	105	1/2	3/4	3/4	2
JVC-1236-6F	12.75	3	JPMG-336R	6	36 1/2	64	12	110	3/4	3/4	3/4	2
JVC-1636-8F	16	5	JPMG-336R	8	38	66	14	118	3/4	3/4	3/4	2
JVC-1836-8F	18	7	JPMG-336R	8	40	66	15	118	3/4	3/4	3/4	2
JVC-2036-10F	20	9	JPMG-336R	10	40	68	16	124	3/4	3/4	3/4	2
JVC-2436-10F	24	13	JPMG-336R	10	40	68	18	126	3/4	3/4	3/4	2
JVC-3036-12F	30	21	JPMG-336R	12	42	70	22	128	3/4	3/4	3/4	2
JVC-3636-16F	36	31	JPMG-336R	16	45	74	26	137	3/4	3/4	3/4	2
JVC-4236-18F	42	43	JPMG-336R	18	47	76	32	142	3/4	3/4	3/4	2
JVC-4836-20F	48	57	JPMG-336R	20	49	80	36	155	3/4	3/4	3/4	2
JVC-5436-24F	54	72	JPMG-336R	24	51	84	41	163	3/4	3/4	3/4	2

All dimensions in inches

## INSTRUMENTATION

Coalescers and Separators can be supplied with or without level gauges, level controls, dump valves, pressure or temperature indicators, as required to meet the customer's specification.

# Dry Gas Filter Vessels

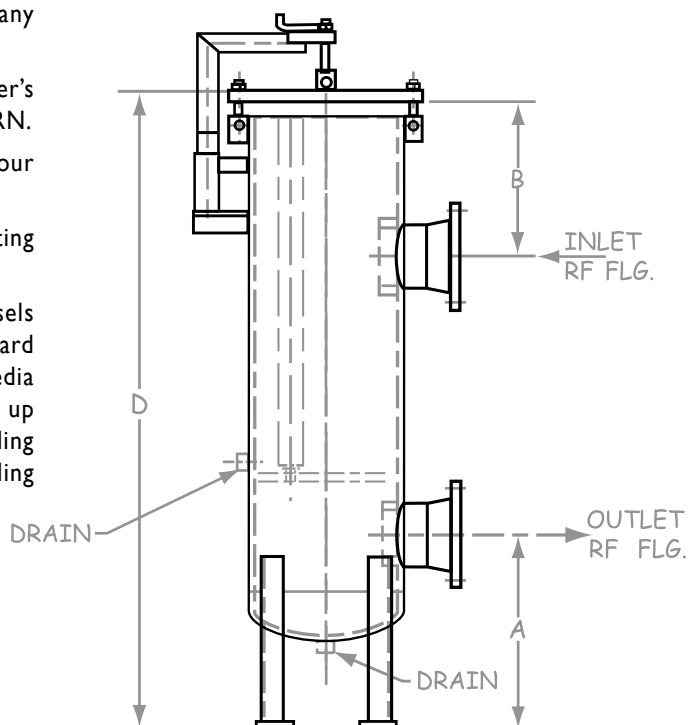
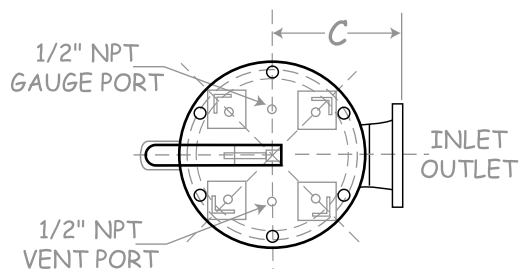
**Jonell JVP Series** vertical particulate filter vessels are available in carbon and stainless steel to suit any gas application.

**ASME Registered** and constructed to the customer's specifications with U stamp, National Board number, or CRN.

**NDE and Materials** for low temperature service, sour service, or sweet service.

**Orientation** can be inline or offset (shown) to suit existing piping configurations.

**JPMK Series** Particulate elements are standard but vessels can be supplied with any of the media shown. The standard configuration is 4536 DOE which incorporates a large media area to provide long service life. However element lengths up to 60" are available to extend service life and solids holding capacity even further minimizing changeouts without adding significantly to capital costs.

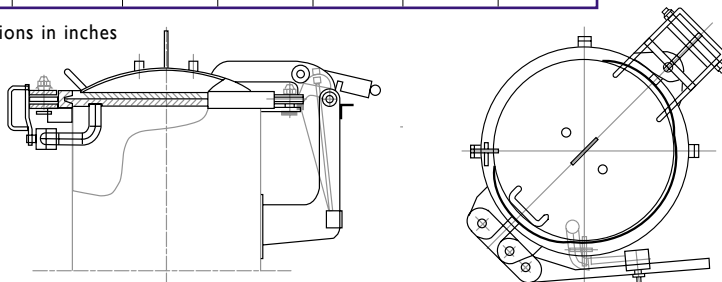


Model	Vessel Diameter	No. of Elements	Total Media Surface Area sq. ft.	Element Number	Inlet Outlet	A	B	C	D	Drains
JVP-612-2F	6	1	8	JPMK-4512	2	15	6	8	35	1
JVP-624-2F	6	1	17	JPMK-4524	2	15	6	8	47	1
JVP-636-3F	6	1	26	JPMK-4536	3	16	16	8	60	1
JVP-1236-6F	12.75	3	79	JPMK-4536	6	20	16	12	65	1
JVP-1636-8F	16	5	133	JPMK-4536	8	23	16	14	68	1
JVP-1836-8F	18	7	186	JPMK-4536	8	23	16	15	68	1
JVP-2036-10F	20	9	239	JPMK-4536	10	24	18	16	72	1
JVP-2436-10F	24	13	345	JPMK-4536	10	26	18	18	72	1
JVP-3036-12F	30	21	558	JPMK-4536	12	28	18	22	75	1
JVP-3060-12F	30	21	930	JPMK-4560	12	28	30	22	99	1
JVP-3636-16F	36	31	824	JPMK-4536	16	32	18	26	80	1
JVP-3660-16F	36	31	1373	JPMK-4560	16	32	30	26	104	1
JVP-4236-18F	42	43	1143	JPMK-4536	18	34	18	32	83	1
JVP-4260-18F	42	43	1904	JPMK-4560	18	34	30	32	107	1
JVP-4836-20F	48	57	1516	JPMK-4536	20	36	18	36	86	1
JVP-4860-20F	48	57	2525	JPMK-4560	20	36	30	36	110	1
JVP-5436-24F	54	72	1915	JPMK-4536	24	40	18	41	92	1
JVP-5460-24F	54	72	3189	JPMK-4560	24	40	30	41	116	1

All dimensions in inches

## QUICK OPENING CLOSURES

A variety of Quick opening closures can be provided with any of the vessels we produce. Consult your representative for options available at a particular size and pressure.



# Gas Filter Separator Elements

**Jonell JFG Series** Gas Filter Separator elements are designed to replace Peco, King Tool, Peerless, Facet and others.

The direction of flow is outside to in. 3.5", 4.5" and 5.5" diameters are available in lengths up to 72". Nominal micron ratings of 10, 5, 1, 0.5, and 0.3 are available.

**Jonell JFG Series** elements also provide excellent dry gas filtration.

## Materials of Construction

Standard element construction includes:

Molded fiberglass media designed to efficiently coalesce free liquids for second stage removal while delivering high solids holding capacity.

Plated steel end caps and cores which are mechanically joined to ensure the integrity of the element.

A cotton outer cover to protect the element and the operator during installation.

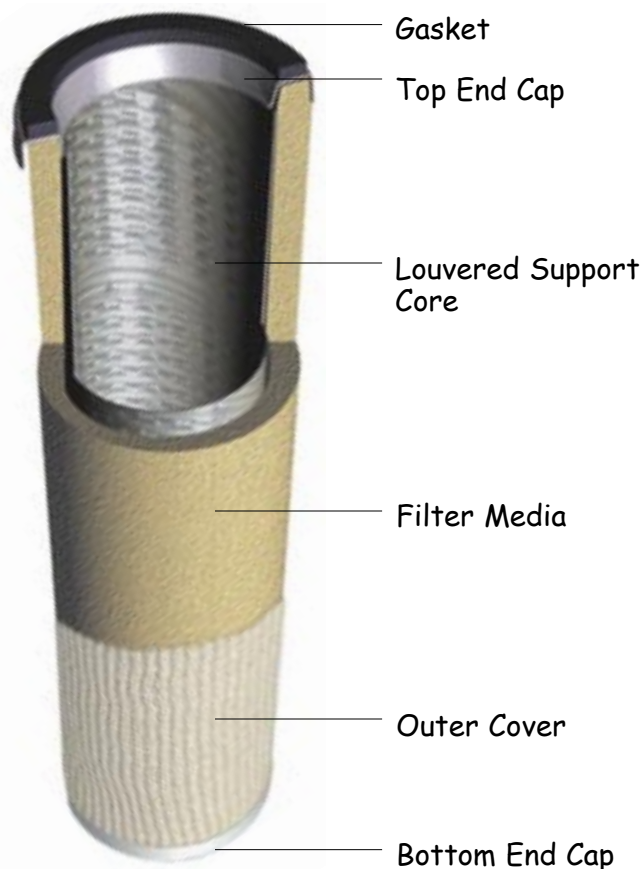
## Recommended Operating Limits

Maximum Operating Temperature .....275°F

Minimum Operating Temperature.....60°F

Change out Differential..... 15 PSID

Maximum Differential ..... >75 PSID



# Gas Particulate Filter Elements

**Jonell JPM Series** Gas Particulate Filter elements are designed to replace Peco, King Tool, Peerless, Pall, and other manufacturers' original elements.

The direction of Flow is outside to in. A wide variety of medias and configurations are available in micron ratings as low as beta 5000 at 1 micron.

**Jonell JPM Series** gas elements offer high solids capacities and resistance to liquids.

## MATERIALS OF CONSTRUCTION

Standard element construction includes:

Polypropylene, Polyester, Micro-Fiberglass, or Cellulose Synthetic media packs bonded to plated carbon steel end caps. These medias are also available with stainless steel hardware using plastisol or epoxy potting compounds.

Media packs are pleated for low initial differential pressures and maximum service life.

## RECOMMENDED OPERATING LIMITS

Change out Differential ..... 15 PSID

Maximum Differential .....>50 PSID

JPMF Polypropylene

Maximum Operating Temperature ..... 175°F

Minimum Operating Temperature ..... - 60°F

JPME Polyester

Maximum Operating Temperature ..... 240°F

Minimum Operating Temperature ..... - 60°F

JPMG Fiberglass

Maximum Operating Temperature ..... 275°F

Minimum Operating Temperature ..... - 60°F

JPMK Cellulose Synthetic Blend

Maximum Operating Temperature ..... 240°F

Minimum Operating Temperature ..... - 60°F

Note: Operating limits are for standard construction and may be affected by the use of alternative materials for ancillary components.

Series	Media				Core and End Caps		Adhesives	
	Polypropylene	Polyester	Fiberglass	Cellulose	Steel	Stainless	Plastisol	Epoxy
JPMF	S				S	A	S	A
JPME		S			S	A	S	A
JPMG			S		S	A	S	A
JPMK				S	S	A	S	A

S = Standard A = Available

# Filter Separators

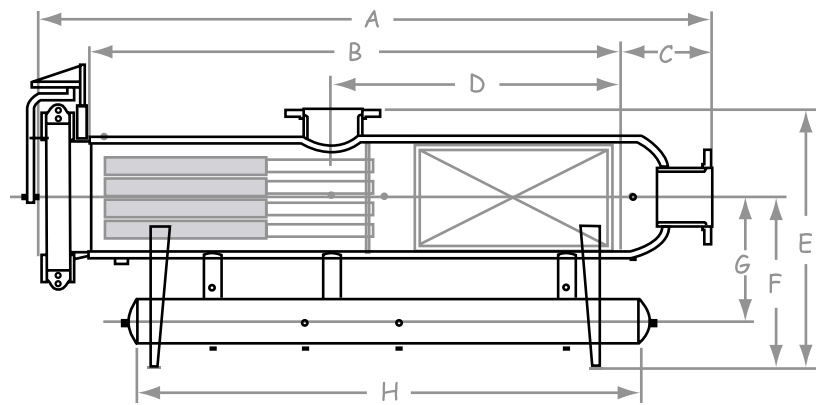
**Jonell JHS Series** horizontal filter separator vessels are available in carbon and stainless steel to suit any application.

**ASME Registered** and constructed to the customer's specifications.

**NDE and Materials** for low temperature service, sour service, or sweet service.

Second Stage option of mesh pads or vanes.

JFG Series elements are used in 36" or 72" lengths.



MODEL	VESSEL DIAMETER	SUMP DIAMETER	INLET/ OUTLET	A	B	C	D	E	F	G	H
JHS-6-2F	6-5/8	6-5/8	2	80	62	12	21	45	34	19	62
JHS-8-3F	8-5/8	6-5/8	3	89	68	13	27	48	35	20	68
JHS-10-3F	10-3/4	6-5/8	3	99	76	14	35	50	36	21	76
JHS-12-4F	12-3/4	6-5/8	4	109	84	15	41	53	37	22	84
JHS-16-6F	16	6-5/8	6	130	96	20	53	61	39	23	96
JHS-18-6F	18	8-5/8	6	136	102	21	59	65	42	25	102
JHS-20-8F	20	8-5/8	8	143	114	21	66	67	43	26	114
JHS-24-8F	24	10-3/4	8	165	126	22	78	73	47	29	126
JHS-30-10F	30	10-3/4	10	189	144	24	99	79	50	32	144
JHS-36-12F	36	12-3/4	12	224	186	26	132	84	55	36	186
JHS-42-14F	42	14	14	260	204	30	150	97	59	40	204
JHS-48-16F	48	14	16	274	222	30	170	102	62	62	222
JHS-54-18F	54	16	18	314	246	34	189	112	67	47	246
JHS-60-20F	60	16	20	343	270	36	210	128	70	50	270
JHS-72-24F	72	18	24	361	276	41	219	135	78	57	276

All Dimensions in Inches

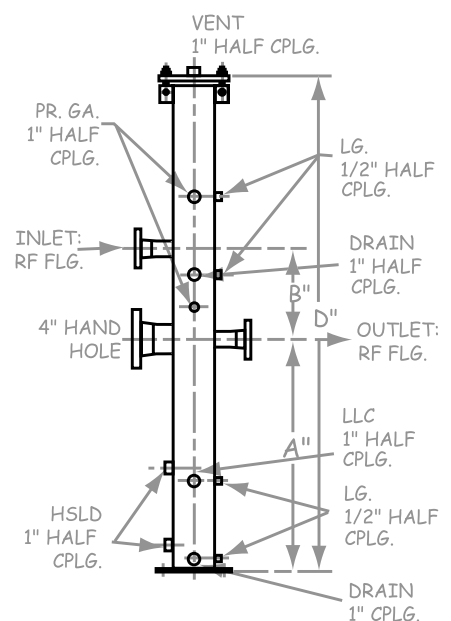
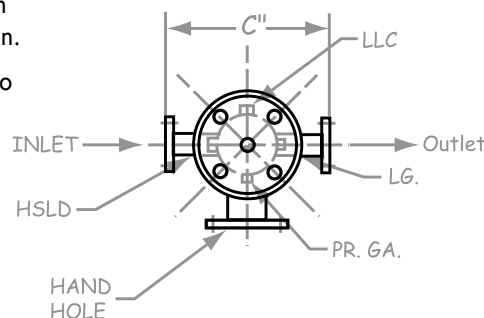
**Jonell JVS Series** vertical filter separator vessels are available in carbon and stainless steel to suit any application.

**ASME Registered** and constructed to the customer's specifications.

**NDE and Materials** for low temperature service, sour service, or sweet service.

**Second Stage** option of mesh pads or vanes.

**JFG Series** elements are used in 12" to 36" lengths.



MODEL	VESSEL DIAMETER	NO OF ELEMENTS	ELEMENT NUMBER	INLET OUTLET	A	B	C	D	PI	DRAINS	LLC HSLD	LG
JVS-312-2F	6	1	JFG-312	2	36	14	16	65	I	I	I	I/2
JVS-324-2F	6	1	JFG-324	2	36	14	16	77	I	I	I	I/2
JVS-336-3F	6	1	JFG-336	3	36	14	16	89	I	I	I	I/2
JVS-36-4F	10.75	3	JFG-36	3	53	72	24.75	136	I	I	I	I/2
JVS-336-6F	12.75	3	JFG-336	6	53	72	26.75	136	I	I	I	I/2
JVS-336-8F	16	7	JFG-336	8	53	72	28	140	I	I	I	I/2

All Dimensions in Inches

## Jonell Quality

Every **Jonell** gas filter is inspected and tested to ensure both components and construction meet our strict standards of quality. Only the very best components suitable for construction are used in the manufacture of our gas filter elements and all vessels are built to ASME code. We support our products with a money back guarantee: If our filter elements do not perform as promised, for any reason, we will replace them or accept their return for full credit of the purchase price.

## Jonell Service

We pride ourselves in providing the very best Customer Service available in the industry. From our technical expertise to our unparalleled response times, delivery times and 24/7 emergency service, we are committed to exceeding our customers' expectations in every facet of our business.

## Jonell People

**Jonell** was founded in December 1987 for the express purpose of providing the industry with quality replacement filter elements. The three original principals each contributed over three decades of experience in the design, application and manufacturing of a wide variety of filtration and separation equipment. **Jonell** has since grown and now has individuals in these capacities comprising over 200 years of experience in a myriad of filtration applications. Utilizing this experience **Jonell** has succeeded in developing over six thousand different filter elements covering a wide variety of filtration applications.



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