



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



Process Filtration

Vessel Technical Capabilities for
Industrial Applications



Vessel Technical Capabilities

Unique solutions for your process filtration application

We understand your process filtration requirements.

Parker has been providing filter vessel solutions and products for over 50 years. Our broad range of standard vessel offerings is complimented by our custom designed vessels made to your specific application and engineering requirements.



Markets Served

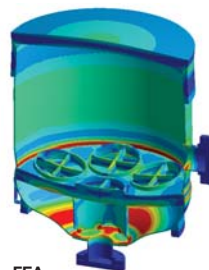
- Water treatment
- Petrochemical & fuels
- Coolants & lubricants
- Food & beverage
- Microelectronics
- Life sciences
- Power generation
- Inks, paints & coatings

Standard and Custom Ranges

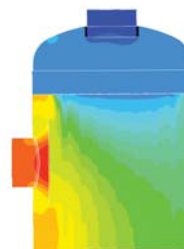
- 3" to 60"+ vessel diameter
- 2.5" to 6.5" cartridge diameters
- 2.5" to 60" cartridge lengths
- #1 and #2 size bags
- Double open end, 126, 222, 226 SOE
- Carbon Steel, 304L | 316L SST, AL6XN
- LDX2101, Super Duplex 2507
- Alloy 2205, Hastelloy, Titanium
- Fluoropolymer and rubber lined
- Vertical, horizontal and inclined orientation
- 150 PSI to 3000 PSI design pressure

Engineering Analysis

- 3D solid modeling
- Computational flow analysis
- Finite element analysis (FEA)
- ASME code, CRN, PED
- Wind, Seismic, Zick Leg & Saddle
- Nozzle loading



FEA
Total deformation



Flow analysis
Pressure contours



Quality | NDT

- ISO 9001:2008
- Radiograph testing
- Ultrasonic testing
- Liquid penetrant examination
- Magnetic particle
- Positive material identification
- Hardness testing
- Pressure testing



If your application requires it...we can design it!

Vessel Products

Meeting requirements for performance, quality and value

STANDARD VESSEL CONFIGURATIONS FOR INDUSTRIAL PROCESS

Parker ASME code and non-code filter vessels are available in a variety of configurations for a broad range of liquid, compressed air & gas applications.

Standard single-cartridge vessels							
	M Series	B-Series	BSSB	SSTC	4.5C	NP	LT/LTG
Typical Flow Rate* (gpm)	5-15	Liquid: 5-10	5-15	5-15	5-10	5-10	5-10
		Gas: 65-180 SCFM					
Pressure rating (psi)	225-1610	125-150	150	200	450	150	125-150
Materials	Carbon Steel	Carbon Steel	316SS	316SS	Carbon Steel	Polypropylene	Polypropylene
	316SS				316SS		SAN
Cartridge Length (in)	10, 20, 30	Liquid: 10, 20	10, 20, 30	10, 20, 30	10	10, 20	10, 20
		Gas: 3, 5, 7					
Connections	1" NPTF	1/4" - 1" NPT	3/4" - 1" NPT	3/4" - 1" NPT	3/4" NPT	3/4" NPT	3/4" NPT
	150, 300, 600 ANSI Flange						1" NPT 1 1/2" NPT
ASME Code	Yes	No	No	No	No	No	No

*5 gpm per 10 in. cartridge

Standard bag vessels			
	FB	SB	CB
Typical Flow Rate* (gpm)	80-160	80-1440	80-160
Pressure rating (psi)	150	150-300	175
Materials	Carbon Steel	Carbon Steel	Carbon Steel
	304LSS	304SS	304SS
	316LSS	316SS	316SS
# Bags	1	1-9	1
Industry Bag Size	Size 1	Size 1	Size 1
	Size 2	Size 2	Size 2
Connections	2" - 3" ANSI Flange	2" ANSI Flange	2" NPT
	NPT		
ASME Code	Yes	Yes	No

*5 gpm per 10 in. cartridge

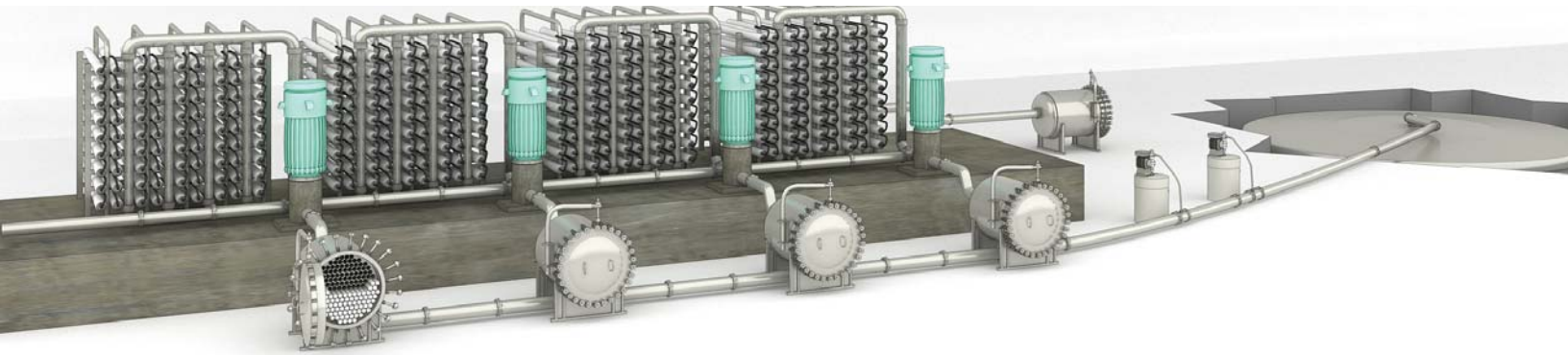
	Standard multi-cartridge vessels							High flow large diameter vessels		Oil & coolant vessels		
	SF	S	MP	FE	HT	CH	WH	ParMax	Mega-Flow	FP	P	CP
Typical Flow Rate* (gpm)	15-380	375-2040	180-3540	30-90	30-90	25-75	20-700	120-9500	250-3325	50-100	50-1800	30-60
Pressure rating (psi)	150-300	150-300	100-150	150	123-418	175	150	150-300	150-300	150	150	175
Materials	Carbon Steel	Carbon Steel	304LSS	Carbon Steel	Carbon Steel	Carbon Steel	Passivated 316SS	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel
	304SS	304SS	316LSS	304LSS		304SS		304SS	304SS			
	316SS	316SS		316LSS		316SS		316LSS	316SS			
# Cartridges	3-19	25-102	12-177	6	6	5	4-35	1-19	2-19	1-2	1-18	1-2
Cartridge Length (in)	10, 20, 30, 40	30, 40	30, 40	10, 20, 30	10, 20, 30	30, 40	30, 40	20, 40, 60	40	18, 36	18, 36	18, 36
Std. or Large OD	Std. OD	Std. OD	Std. OD	Std. OD	Std. OD	Std. OD	Std. OD	Large OD	Large OD	718 Series	718 Series	718 Series
Connections	2", 3", 4" ANSI Flange	4", 6", 8" ANSI Flange	3"-14" ANSI Flange	2" - 3" ANSI Flange	2" ANSI Flange	2" NPT	1.5"-6" ANSI Flange	3"-18" ANSI Flange	6"-16" ANSI Flange	2" - 3" ANSI Flange	2"-8" ANSI Flange	1 1/2" NPT
				2" - 3" NPT						2" - 3" NPT		
ASME Code	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	No

*5 gpm per 10 in. cartridge

For vessel technical support call 877 784 2234

Standard & Custom Designs

Options to match requirements for performance, quality and value



Standard Features

- ASME and commercial designs
- Dual purpose 222-DOE bottom seats
- Pressure testing
- SST vessels with welded attachments
- Fewer & larger diameter cover bolts
- Full line of Parker filtration media
- High differential pressure separator plate
- Glass bead blast finish on stainless steel



Custom Options

- Custom welding
- Custom paint
- Corrosion allowances
- Flange style & size
- Crevice free interior & exterior
- Machined cartridge locator seats (226, 222, DOE)
- Dual rated stainless steel
- Full immersion passivation
- Industrial electropolish
- Duplex & multiplex skid systems
- Removable cartridge cages
- Closure bolting & seal style
- Nitrogen purge
- Fluoropolymer and rubber lined



Engineering your success.

Experience and qualifications provide a flexible approach

We solve your unique filtration challenges.

Our multi-functional team of sales and engineering resources bring a wealth of experience and support on vessel projects around the world involving partnerships with many highly regarded companies. No matter what the industry demands, we have an established history of delivering solutions for even the most complex process application.



Custom design vessels



Multi-cartridge & bag vessels



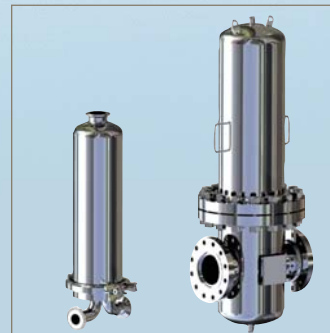
Economical & commercial grade vessels



Single cartridge vessels



Microelectronics & fine chemical
fluoropolymer (PFA) vessels



Sanitary vessels for life sciences
and food & beverage applications

over 50 years in the vessel industry

Worldwide Filtration Manufacturing Locations

North America

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