# **Coalescing Filters - to 285** psig

Series R30- Enameled Carbon Steel ♦ Series R32- 304 Stainless

• Intake Air/Gas/Mist Flows to 100,000 SCFM Std.

- ASME U Stamp Std., Nat'l. Board Registered
- Pleated Element Design Exceptional Filter Area, Low ΔP, High Flow
- Hinged Flange and Lift Lug Std., Service Access W/O Breaking Connections
- 304SS Throat Safety Cages and ΔP Taps Std.
- Rugged Enameled Steel or 304SS Construction
   Series R30 coalescing pipeline filters are fabricated from rugged enameled carbon steel, (R32 are 304SS), designed, constructed, and stamped in accordance with ASME Boiler and Pressure Vessel Code requirements for unfired pressure vessels. Any model can be modified to more exactly fit your needs.
- Standard Connection Sizes from 1" to 12" Male NPT or raised face flange in-line connections are std. Alternative orientations and sizes are available. An elevated discharge connection is shown below. A hinged blind face flange closure assembly with lift lug is standard.
- Coalescing Filter Media. Sparks<sup>TM</sup> #907 media is composed of microfine borosilicate glass fibers bonded with phenolic resin. Together with a textile prefilter and a final drain layer, these pleated elements are remarkably effective at coalescing fine entrained oil and aqueous vapor mist from air/gas flows with very low ΔP. Experience has demonstrated high removal (over 90%) in dealing with 1.0 to 0.3μ aerosols. Other optional filter media such as #926 exceeds 95% removals. Individual performance will vary with the specific viscosity and vapor pressure of liquid contaminates.
- Options: Models R30-0202-MT-020 and larger include CS leg supports. (add 18" to OH) Carbon steel support
  legs in any length, gauges, special finishes, and head lift assemblies are optional on any model. Call for informa-



tion on vessels having other pressure services, 304SS, or other materials of construction.

See http:// www.sparksfilters.com for more options.

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Housing Model No.	Conn. Size	Conn. Type	Cover Style	Dimension in Inches				Wgt.	Order
				OD	ОН	С	Sev. Space	Lbs.	Element No.
R30-0200-MT-010	1"	MPT	Blind Flg.	65/8	24	16	16	130	321-1439WK907
R30-0201-MT-015	1½"	MPT	Blind Flg.	65/8	28	16	16	140	321-3235WK907
R30-0202-MT-020	2"	MPT	Blind Flg.	85/8	28	16	16	150	321-3236WK907
R30-0203-RF-030	3"	Flg.	Blind Flg.	85/8	39	20	24	200	321-3237WK907
R30-0204-RF-040	4"	Flg.	Blind Flg.	10¾	42	20	24	325	321-3238WK907
R30-0205-RF-060	6"	Flg.	Blind Flg.	12¾	51	24	26	500	321-3239WK907
R30-0206-RF-080	8"	Flg.	Blind Flg.	16	66	28	36	850	321-3240WK907
R30-0207-RF-100	10"	Flg.	Blind Flg.	20	76	32	36	1200	321-3241WK907
R30-0208-RF-120	12"	Flg.	Blind Flg.	24	78	36	39	1400	321-3242WK907

Coalescing filter

in service cleaning an eight inch gas pipeline in the

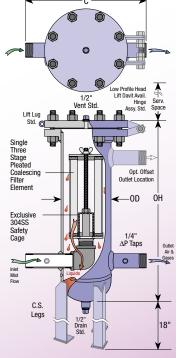
parksFilters.com

For more information contact:

585-624-5300 fax

E-Mail: Sales@sparksfilters.com

**SparksFilters 585-624-4500** 



285psig @ -20 to 100°F 260psig @ -20 to 200°F

ΔP vs. Flow: SparksFilters™ Series R30 Coalescing Pipeline Filters	1 in. @ 150 psi 1 in. @ 275 psi 1 in. @ 275 psi	1.5 in. @ 200 psi 2 in. @ 275 psi 2 in. @ 275 psi 2 in. @ 275 psi 3 in. @ 220 psi 3 in. @ 2275 psi 4 in. @ 150 psi 4 in. @ 210	6 in. @ 150 psi 6 in. @ 200 psi 8 in. @ 220 psi 8 in. @ 220 psi 8 in. @ 220 psi 10 in. @ 225 psi 10 in. @ 225 psi 12 in. @ 225 psi 12 in. @ 225 psi 12 in. @ 225 psi
5 3 2  1.0 0.7 0.4 0.2 0.1 100 200 300 1. For service at temp, other than 60°F, multiply 2. ΔP is chgd. proportionally with gas gravity, i.e	500 700 1,000 ΔP by: (460 + (oper. °F)) / 520 . nat. gas ΔP 60% that of air.	2,000 3,000 5,000 7,000 10,000 Flow, SCFM (60 °F, 1 atm.)	20,000 40,000 70,000 100,000

# **Filter Vessel Options & Features**

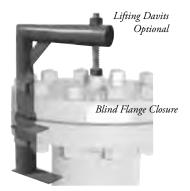


Hinges w/lift ring std. above 35 lbs.



O-Ring Closure (Hinge std.) Buna-N Gasket Std., Viton, Teflon coated, EPDM gaskets available.

A Superior Finish! We use



a high gloss enamel that has exceptional resistance to fungus, salt air, and alkalis. It is twice as costly as lesser paints. Some competitors use paints that are designed instead to hide welding and other fabrication defects. Our standard grey finish is used on all sheet metal filter housings. Pressure vessels have a special "clean white" interior finish. If you have special requirements for finishing, let us know.



5 % Acetic No Effect Lactic Acid No Effect Mineral Oil. Salt Spray, 200 hrs.. No Effect Flexibility 180° Mandrel, 1/4". No Cracking Fungus Resistance per Fed. Spec. TTP-18, para. F-3g ...... No Mildew

No Effect

Resistance To:

2 % NaOH

Optional Low Profile Lifting Davit.

Removable



Safety Screen sits under (downelement(s) to guard against lost pens, stray coins, and other undesirable items at time of filter element change out.



ur process and pipeline filters can be readily altered from standard design items, with special features and options to suit your requirements. This is a partial list of options. Call us with your special needs, we will be more than helpful.

### Closures, Hinges & Optional Lifting Davits.

We offer an exceptional O-Ring closure design up to 175 psig, and Blind Flange closures operating above 175 psig. Hinges are std. for blind flanges weighing more than 35 lbs., and lifting davits are available as well. Other closure options such as Threaded or Ring Joint Flange are also available. Teflon coated studs and nuts are available.

#### Gauge Connections, Support Legs...

Legs are std. on many vessels. Differential pressure gauges, level gauges, and/or switches, adjustable support legs, pipe legs, special NDE (Non Destructive Examination ...like X-ray), mixed metals of construction, ie. stainless steel clean side, and other requests to meet the needs of your specific service environment are available, just ask.

### Superior Wall Thickness of Shells & Heads.

Minimum Schedule Std. Our 10" vessels have 0.365 walls where competitor's lesser drawn shells have only 0.120 to 0.130 walls. This means our vessels have much greater corrosion allowances, much more dependable closure seals, and eliminates shipping damage typical of drawn shell constructions.

- Stainless Steel Safety Cages are standard. These removable cages have saved many a maintenance person who might have dropped a wrench or pen when changing out a filter element.
- Rust Inhibiting White Interior Enamel Standard! Superior to clear coats. Everyone loves it! Sandblast and special finishes are
- Vessels Through 16" Diameter in a Hurry! Our rapid 2 to 4 week delivery is legend!

#### Detailed Approval Drawings are Fast!

Normally in a week, 2 weeks max. for complex requirements. (Yes, We do the tuff stuff! Try us.) We are very flexible on special orders and design modifications. Our non-code vessels are made from the same materials, quality and welding as our code vessels.

#### ASME Code Stamp

Our companion organization, Rush Certified, Inc., is fully certified to provide the ASME Boiler & Pressure Vessel Code "U" Stamp as required by most states for unfired pressure vessels exceeding 15 psig. Each vessel is registered with the National Board of Boiler Pressure Vessel Inspectors. Our code stamp allows design service to 3000 psig.

Most jurisdictions (see table) require certain vessels to comply with the ASME Code. It is the responsibility of the end user to verify the requirements within their jurisdiction, and to advise if vessels are to contain lethal substances, i.e. poisonous gases or liquids of such nature that very small amounts could be dangerous to life (mixed or unmixed with air). ASME Code Section VIII Div. 1 covers pressure vessels for containment of internal or external pressure (vacuum). You should consider need for ASME Cert. when:

(A) Vessels have an internal or external operating pressure of greater than 15 psi max. (no size limitation) or

(B) Vessels have an inside diameter of greater than 6 inches, without limitation on length or pressure.

\* Only portions of code.

ALY	MOY	WV N
AK N	MTN	WI
AZ N	NB Y	WYY
ARY	NV Y	AlbY
CAY	NHY	B.C. Y
COY	NJY	ManY
CTN	NMN	N.BY
DEY	NYY	N.F.&LY
FL N	NCY	NW.TY
GAY	NDY	N.SY
HIY	OHY	OntY
IDY	OKY	PE IsY
ILY	ORY	QueY
INY	PAY	SasY
IAY	PRY	Y.TerY
KSY	RIY	Albuquerque
KYY	SC N	Des Moines
LA N	SD N	Miami
MEY	TNY	New Orleans
MDY	TX N	Tucson Univsty Cty
MAY	UTY	Dade Co
MI Y*	VTY	Jeff Parish
MNY	VAY	St Louis Co
MSY	WA Y	Dist.of Clmb

Tape your card here, or	
Your Name	
Company	
Address	
City, State, Zip	
Phone Fax	
email	

. The service space re-

quirements are shown

on the sales drawing

for your project. Ample space should also be

allowed for easy ac-

cess, disassembly, and

inspection of the filter and its components.

• The filter should be

mounted in a upright vertical position with

the legs on a level

foundation. To prevent

movement the leas may be bolted or lagged.

Small or special design

filters may be mounted or supported by other

means with the consent

· Special care should be taken in the design

and installation of the

piping to the filter. The

piping system should be sufficiently sized

to minimize  $\Delta P$ . Most

piping systems are sloped to accessible

· Instrumentation of

some type is com-

mon for most filter

systems in the form of

gauges, sensors and/or switches. The use of instruments can save

time and money reduc-

ing visual inspections. Typical change out is

between 5 & 10 PSI

· All systems should

be carefully pressure

tested, inspected,

and cleaned before

being placed in service.

Many process systems

require special purging

or pickling, and may require filter changes

or special start-up

cartridges for this

procedure.

differential.

drain points.

of the factory.

## **Quotation Worksheet - Filter Vessels** Print, Fill Out, & FAX Back

Form is also at www.sparksfilters.com Request A Quote then, If you would like to request a vessel quote click here parksFilters.com

Note: Direction of Flow is reversed from that illustrated here if coalecsing

For more information contact: **SparksFilters 585-624-4500** 585-624-5300 fax

E-Mail: Sales@sparksfilters.com

