

JGCS Series

TRI-SHIELD™ Horizontal Multi-stage Coalescer Cartridges for high dirt and high efficiency coalescing applications.

Jonell Systems patented TRI-SHIELD media JGCS single piece cartridges, are suitable for critical applications that require high coalescing efficiencies or in challenging applications with high dirt and high liquid loading including semi solids, iron sulphide and paraffins.

Features and benefits

- The blend of Tri-Lobal and cylindrical fibers in combination with the engineered gradient depth all in the same media matrix provides superior dirt loading and enhances coalescing compared to conventional depth cartridges.
- Media layers can be customized for challenging applications and multiple surface coating options provide filtration flexibility.
- Protects critical equipment and enables increased uptime with fewer unexpected failures resulting in an improved total cost of ownership.
- Textured cartridge with a coarse finish designed to improve filtration performance.




Criteria	Performance	Cartridge Design Advantage
Pressure Drop	Up to 25% less pressure drop at start-up compared to standard polyester depth media.	Media matrix has greater void space compared to traditional fiber blends due to shape of fibers used.
Efficiency	15X fewer contaminants downstream of the filtration solution	Provides a larger effective surface area per media volume while creating an environment for stable droplet growth.
Dirt Holding	Up to 20% more capacity at same recommended change-out.	Different denier fiber styles, sizes and layering of TRI-SHIELD media in gradient depth for improved contaminant loading capacity.
Capture Probability	High	Contaminant particles lose energy and velocity as they attempt to maneuver the gradient media matrix.
Filtering Area	Large	Multiple customized layers effectively create larger surface area for solids loading for a wide particle distribution including difficult semi-solid such as paraffins.

* Tested against comparable PECO PEACH Cartridges and other depth filtration technology.

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Specifications

Products	Specifications	Horizontal Coalescer Cartridge
	Flow Direction	Stage 1: Outside to Inside Stage 2: Inside to Outside
	Nominal Sizes	4.50"
	Standard Lengths	73", 82", 94"
	Media Type	Depth Style Polyester Depth Style Polypropylene
	Hardware Materials	Core: Coreless, Tin Plated, Stainless Gasket: Buna, Viton, TES O-ring End Caps: Nylon
	End Cap Configuration	Closed end with bayonet or handle
	Efficiency	Up to 99.99% 0.3μ & larger of both liquid & solids
	Maximum Temperature	240-degree F for Polyester (above 200-degree F requires a core) 180-degree F for Polypropylene
	Recommended Change-out PSID	12-15 PSID
	Applications	Compressor Suction/Discharge Custody Transfer Meters Natural Gas gathering Glycol Contactor Amine Contactor Molecular Sieve Contactor Fuel Gas Conditioning Syn Gas Cleanup Natural Gas Transmission

Other configurations, micron ratings and options available. **Contact Jonell Systems to discuss your unique needs.**

Nomenclature

JGCS **73** **H** - **A** **E*** **C** **B** **1** **SF** **FF***

Product Line Nominal Length TRI-SHiELD Media Type Core Gasket # of U-CUP Gaskets Performance Level

Code	Description
Blank	Bayonet
H	Handle

Code	Description
C	Coreless
T	Tin Core
S	Stainless

Code	Description
1	One
2	Two

Code	Description
B	Buna
V	Viton
T	TES O-ring

Code	Description
FF	99.99% 0.3μ & Larger of both liquid & solids
UF	99.99% 0.5μ & Larger of both liquid & solids
SF	(Standard offering) 99.5% 0.3μ & Larger of liquid & 99.99% and larger of solids

* Will be two letters if media types differ from First to Second Stage.

* Second Stage rating when different from the First Stage rating. Blank if both stages are the same.

About us

Jonell Systems, a Filtration Group brand, partners with oil, gas and energy companies worldwide to address end to end filtration challenges to improve process safety, reliability, productivity and ultimately profitability. With a wide range of vessels and cartridges with multiple media options, we have solutions to make the world safer, healthier and more productive.

