

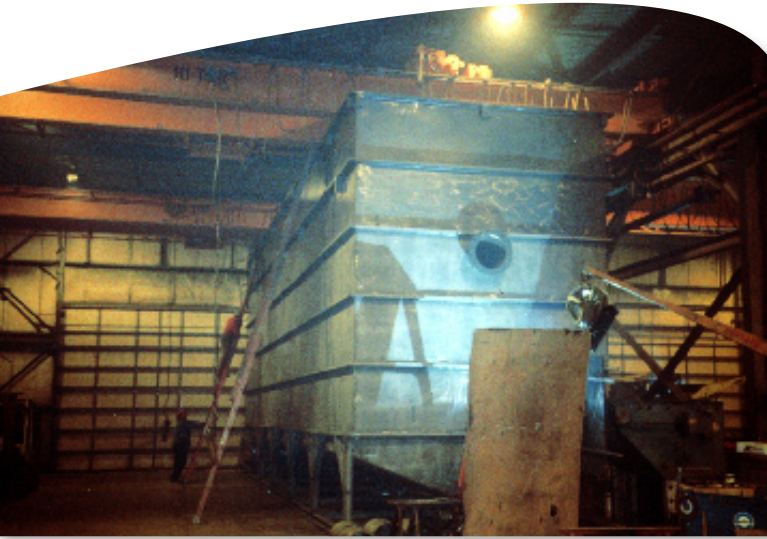
HI HUDSONTM **I N D U S T R I E S** Industrial Separation & Process Solutions

CS SERIES *Coalescing Oil/Water Separators*





CS SERIES



CS - L Series Coalescing Separator

Hudson Industries designs and manufactures a complete line of pressurized coalescing oil/water separators, from 1-5000 gpm for a wide variety of industrial applications. These CS Series separators effectively reduce free oil and grease content in waste streams to 10 mg/ or less through the use of high efficiency PVC and CPVC corrugated plate modules providing high quality, consistent effluent results.

INDUSTRIES SERVED

- Offshore/Onshore Produced Water Treatment
- Petrochemical and Refining
- Power Generation
- Food Processing
- Steel Manufacturing
- Marine/Groundwater Remediation
- General Heavy Industry

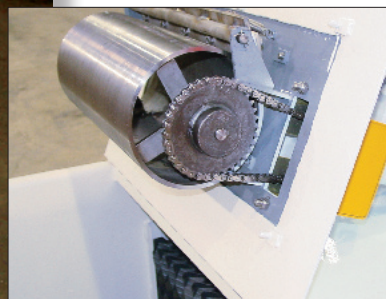
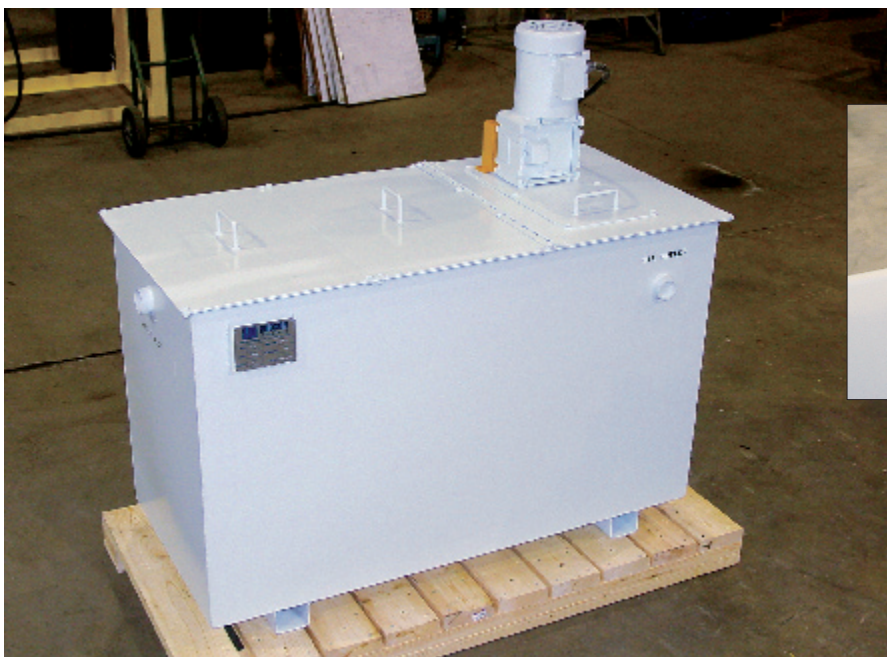
PRINCIPLE OF OPERATION

Oil and water influent is induced through the standpipe to the tank interior. The influent is evenly distributed by the flow diffusion baffle before entering the coalescing module. The module, being oleophilic, begins to attract the oil droplets which in turn begin to bond or coalesce into larger droplets. These large droplets continue to rise where they form a layer of oil on the surface.

The separator employs a continuous acting rotary pipe oil skimmer to remove the oil from the surface and deposit it into the oil separation tube. The majority of the water which may have been removed with the skimmed oil separates back out into the waste stream. The separated oil then discharges out of the separator.

The water continues through a series of underflow and overflow baffles before discharging from the unit.





Coalescing Separator-
CS10, S Series (left)

top lifted for rotor detail
(above)

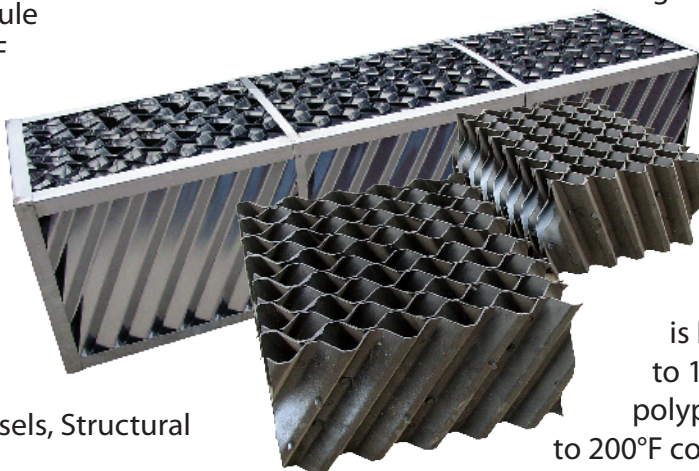
UNIQUE DESIGN ADVANTAGES

- Effective free oil removal to 10 mg/l or less @ 20 micron
- No costly cartridges or filter elements to replace.
- Coalescing media requires only periodic cleaning
- Fully automatic operation
- High efficiency coalescing module
- Operating temperature to 205°F
- Operating pressures to 600 psi
- Flow diffusion baffle for even flow distribution at the inlet channel
- Constructed for Durability
- High-performance phenolic epoxy interior coating for maximum protection
- Heavy mild steel construction: ASME Section VIII "U" Stamp Vessels, Structural Steel Bases
- The separator can handle 100% oil slugs on a limited basis
- Stainless steel hardware
- Permanent ID plates

COALESCING MEDIA

TPS Series oil/water separators utilize a unique coalescing media which provides for a high quality, consistent separation process. This configuration will also reduce internal sludge and solids

buildup due to its steep vertical flutes.

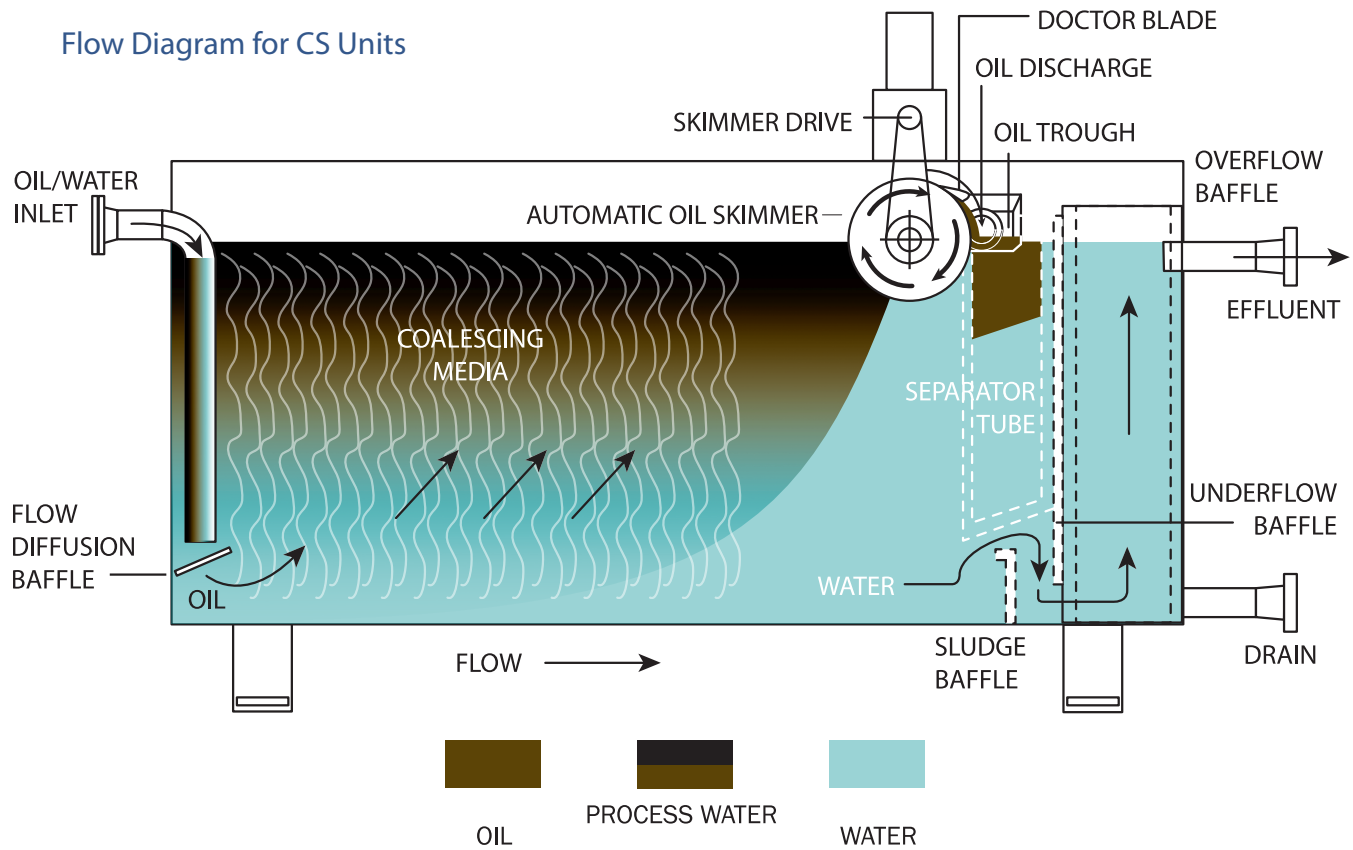


Standard material is PVC rated to 140° F and polypropylene to 200°F continuous.

Stainless steel media can be supplied for temperatures that exceed 200 °F. The media can be removed through the manways for simplified cleaning.



Flow Diagram for CS Units

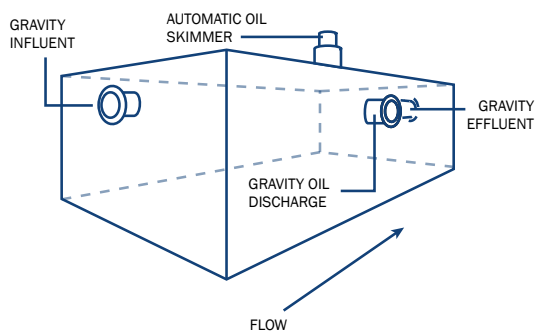


OPTIONS FOR CS UNITS

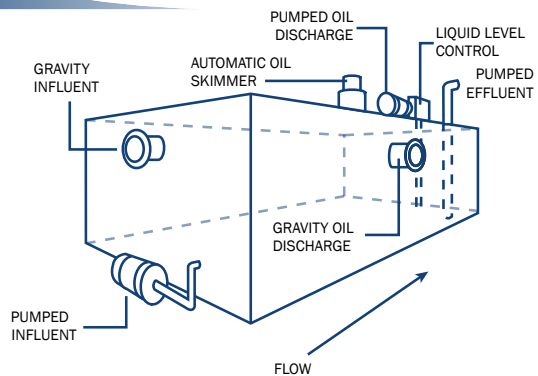
- NEMA 7/9 Explosive-proof controls
- NEMA 4 controls
- Influent Pumps: Air-operated Diaphragm, Progressive Cavity, Positive Displacement
- Effluent Pumps
- Oil Pumps
- Stainless Steel Vessels
- Heating Packages
- Insulated Vessels
- Stainless Steel Coalescing Media
- Elevated Platforms/Walkways
- Engineered Designs
- Carbon Absorption Vessels
- Effluent Monitors



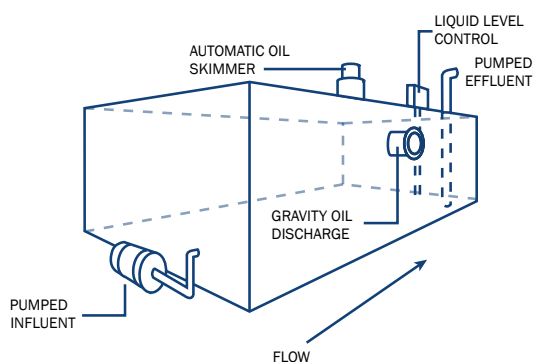
MODEL CS



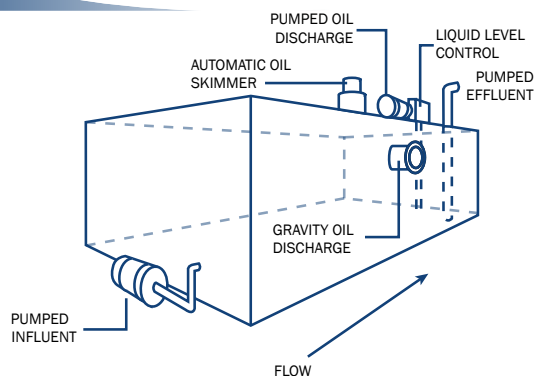
MODEL CS-PD



MODEL CS-PDF

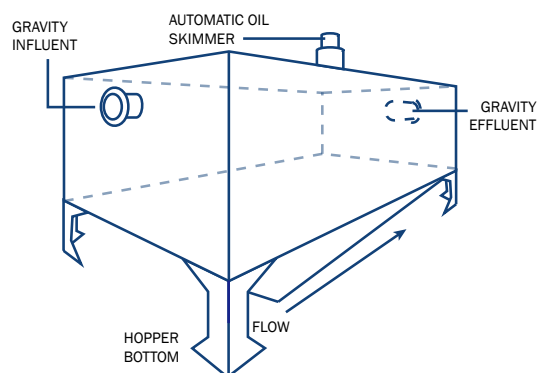


MODEL CS-PDXF



MODEL CS
MODEL CS-PD
MODEL CS-PDF
MODEL CS-PDXF
HOPPER BOTTOM OPTION

HOPPER BOTTOM OPTION



The featured options are available for any of the CS 1-5000 models.

	MODEL CS	MODEL CS-PD	MODEL CS-PDF	MODEL CS-PDXF	HOPPER BOTTOM OPTION
Gravity Influent	X	X			X
Gravity Effluent	X				X
Gravity Oil Discharge	X	X	X	X	
Automatic Oil Skimmer	X	X	X	X	X
Pumped Influent		X	X	X	
Pumped Effluent		X	X	X	
Pumped Oil Discharge		X		X	
Liquid Level Control		X	X	X	
Hopper Bottom					X

CS SIZES - L & S SERIES

MODEL	FLOW RATE (GPM)	DIMENSIONS	INLET/OUTLET
CS-1	1	2' L x 15" W x 21" H	1" NPT
CS-3	3	42" L x 15" W x 29" H	1.5" NPT
CS-10	10	52" L x 25" W x 33" H	1.5" NPT/2" NPT
CS-25	25	6' L x 3' W x 4' H	2" NPT/2" NPT
CS-50	50	8' L x 3' W x 4' H	3" 150# Flange
CS-75	75	8' L x 3' W x 52" H	4" 150# Flange
CS-100	100	12' L x 4' W x 5' H	6" 150# Flange
CS-150	150	12' L x 5' W x 5.5' H	6" 150# Flange
CS-200	200	15' L x 6' W x 6' H	6" 150# Flange
CS-350	350	17' L x 6' W x 6' H	8" 150# Flange
CS-450	450	19' L x 6' W x 7' H	8" 150# Flange
CS-500	500	22' L x 7' W x 7' H	10" 150# Flange
CS-600	600	25' L x 7' W x 7' H	10" 150# Flange
CS-700	700	29' L x 8' W x 8' H	10" 150# Flange
CS-800	800	34' L x 8' W x 8' H	10" 150# Flange
CS-900	900	34' L x 10' W x 8' H	12" 150# Flange
CS-1000	1000	36' L x 10' W x 10' H	12" 150# Flange
CS-1500	1500	42' L x 10' W x 10' H	16" 150# Flange
CS-2000	2000	48' L x 10' W x 10' H	16" 150# Flange
CS-3000	3000	56' L x 12' W x 12' H	20" 150# Flange
CS-4000	4000	64' L x 12' W x 12' H	24" 150# Flange
CS-5000	5000	70' L x 12' W x 14' H	24" 150# Flange

If you don't see what you need, our experienced engineers will design a system to meet your exact specifications.