## Diesel Conditioning Systems

Remove water and particulate to extend fuel injector life and increase combustion engine fuel efficiency.

Ideal for large mining and construction fueling depots, diesel fueled turbines, backup generators, and smaller day tank dispensing or on-board fueling truck applications. With options for adding non-powered units to existing fuel dispensing lines, there's a perfect COD for all of your diesel applications.



#### Filtration starts with the filter(s).

COD combines high efficiency single pass particulate and water removal to ensure that your fuel is always in spec, eliminating wear related injector failures. Achieve cleanliness below the 18/16/13 ISO Code limit required by engine manufacturers with  $\beta S_{cl} > 4000$  media elements and extend the life of on-board fuel filters that plug and cause replacement downtime that can shut down your entire mining group.





#### Redefining standard filtration.

For high pressure injectors, water is one of the worst forms of contamination. The solution for your water contamination lies in COD's 100% synthetic coalesce/separator elements that remove all free and emulsified water down to 50 ppm. Your fuel rail and high pressure injectors will be protected and running more efficiently than ever.

#### Increase fuel efficiency, lower emissions.

Cleaner fuel runs more efficiently and with lower emissions, yielding better injector performance and life and can even lead to lower fuel usage – which translates to bottom line profitability and a drastically lower environmental footprint. Monitor your fuels' condition with properly positioned sample ports before the pre-filter and after the coalesce stage and always know how your filtration is performing.



# HY-PRO SOLUTION SOLUTION

#### Take control of your systems.

Smart relay and auto water drain make COD a 24/7 unattended, easy-to-operate solution that functions as an in-line contamination barrier for every drop of fuel that goes into your engines. Optional PLC touchscreen enables custom programming so your COD can purify backup fuel tanks on your schedule and even data log ISO Codes and saturation levels so you know your fuel is clean and reliable when you're on and off the clock.

#### Integrated results.

For fuel delivery systems already in place, the CODX non-powered skids are the perfect addition for seamless integration and contain all the contamination removal technology of powered COD units. Ideal for fueling depots, bulk fuel deliveries, upgrading common fuel rails, on-board engine and marine applications.



#### Built to exceed your expectations.

Flexible dimension and process arrangement are available with every COD so you get the perfect contamination solution for your fuel delivery system. Even choose from explosion proof models and color coordinate to fit perfectly with your existing safety standards for the ultimate system in diesel conditioning.

## COD Specifications

Model	COD5-10-30	COD60-100		COD200	COD300-400	COD500-600		
Height <sup>1</sup>	72" (183 cm)	80" (203 cm)		90" (229 cm)	90" (229 cm)	90" (229 cm)		
Length <sup>1</sup>	48" (122 cm)	72" (183 cm)		84" (213 cm)	84" (213 cm)	96" (244 cm)		
Width <sup>1</sup>	42" (107 cm)	36" (92 cm)		48" (122 cm)	60" (152 cm)	60" (152 cm)		
Weight <sup>1</sup>	1200 lbs (454 kg)	2000 lbs (907 kg)		2400 lbs (1089 kg)	3500 lbs (1588 kg)	4200 lbs (1905 kg)		
Inlet <sup>2</sup>	COD5-10: 1" (2.5 cm) COD30: 1½" (3.8 cm)	2" (5.1 cm)		3" (7.6 cm)	4" (10.2 cm)	6" (15.2 cm)		
Outlet <sup>2</sup>	COD5-10: 1" (2.5 cm) COD30: 1½" (3.8 cm)	1½" (3.8 cm) 2" (5.1 cm)		3" (7.6 cm)	4" (10.2 cm)	6" (15.2 cm)		
Motor Size	1-5 hp	7.5-10 hp		20 hp	30 hp	40 hp		
Pre-Filter Elements	1	1		3	4	4		
Coalesce Elements	1 x HP538L38-CSB <sup>3</sup>	2 x HP731L39-CB		3 x HP731L39-CB	6 x HP731L39-CB	8 x HP731L39-CB		
Separator/ Polish Elements	(combination element)	1 x HP582L30-S	525MB	2 x HP582L30-S25MB	3 x HP582L30-S25MB	5 x HP582L30-S25MB		
Operating Temperature	Fluid Temperature 30°F to 225°F (0°C to 105°C)		40°F to	ent Temperature o 104°F o 40°C)				
Materials of Construction	Housings Frame Tray Carbon steel with industrial coating Carbon steel with industrial coating Carbon steel with industrial coating							
Electric Motor	TEFC motors with overload protection							
Pump	Cast iron, positive displacement gear pump with internal relief. Maximum pressure on pump inlet 15 psi (1 bar). Consult factory for higher pressures.							
Pump Relief	85-100 psi adjustable							
Media Description			<b>Coale:</b> 100% :	<b>sce</b> synthetic fiber media	<b>Separator</b> TEFLON® coated screen (water barrier)			
Fluid Compatibility	Petroleum based fuels, #2 Diesel (standard) and jet fuel. For other fuel options contact factory.							
Hazardous Environment Options	Select special option X for explosion proof unit. Consult factory for exact standards requirements such as Class, Division, and Zone.							

<sup>&</sup>lt;sup>1</sup>Dimensions are approximations taken from base model and will vary according to options chosen.

<sup>&</sup>lt;sup>2</sup>Female pipe port. <sup>3</sup>HP538L38-CSV element combines coalesce and separator element functions into a single element.

### COD Part Number Builder

COD			-	-
	Flow Rate	Power Ontions	Seal	Special Options

Flow Rate<sup>1</sup>

 5
 5 gpm (18.9 lpm)

 10
 10 gpm (37.9 lpm)

 30
 30 gpm (114 lpm)

 60
 60 gpm (225 lpm)

 100
 100 gpm (379 lpm)

 200
 200 gpm (757 lpm)

 300
 300 gpm (1135 lpm)

 400
 400 gpm (1514 lpm)

 500
 500 gpm (1892 lpm)

600 gpm (2271 lpm)

Power Options

60 Hz 12 120 V ac, 1P E2 230 V ac, 1P 46 460 V ac, 3P 57 575 V ac, 3P

#### 50 Hz

E1 120 V ac, 1P E3 230 V ac, 1P 32 320 V ac, 3P 38 380 V ac, 3P 41 415 V ac, 3P

525 V ac, 3P

#### Non-Powered

**X**<sup>2</sup> Non-powered COD: No pump-motor combination or electrical controls.

Seals

Nitrile (Buna)Fluorocarbon

#### Special Options

8" (20 cm) solid wheel upgrade

A<sup>3</sup> Auto water drain (manual drain included)

**B**<sup>4</sup> Adjustable coalesce vessel bypass loop

C CE marked for machinery safety directive 2006/42/EC

**H** Manual reset hour meter (in addition to non-reset meter)

**K** Sight flow indicator (wheel type)

L Lifting eye kit

M Water discharge totalizing meter

On-board PM-1 particle monitor & clean oil indicator light

P PLC touch screen control (does not include VFD)

**Q**<sup>5</sup> Maintenance spares and repair kit

**T**<sup>3</sup> Hose kit (suction & return hoses + wands)

**U** 50' (15 m) electrical cord with no plug

X Explosion proof - must specify standards required

Y VFD variable speed motor frequency control

**Z**<sup>3</sup> On site start-up training

For all up to date option details and compatibilites, please reference our Contamination Solutions Price List or contact customer service.

#### Want to find out more? Get in touch.

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<sup>&</sup>lt;sup>1</sup>Nominal flow rates at 60 Hz motor speeds.

<sup>&</sup>lt;sup>2</sup>Suitable for adding to existing fuel delivery system with existing pressure and flow. Auto water drain option is mechanical.

<sup>&</sup>lt;sup>3</sup>Recommended option.

<sup>&</sup>lt;sup>4</sup>Standard option.

<sup>&</sup>lt;sup>5</sup>Includes fuses, common relay, panel bulb, replacement element set for coalesce chamber & particulate housing.