

Filter Cart *for Industrial Applications*

The Donaldson filter cart provides a convenient portable mode of off-line filtration, flushing and fluid transfer. Use it with your in-plant machinery and hydraulic equipment to achieve and maintain proper ISO cleanliness levels.

Two in-series pressure filters can provide coarse/fine particle removal or, install a water absorbing element to obtain particulate and water removal. The powerful one horsepower motor won't bog down and when coupled with a 10 gpm pump it provides efficient fluid transfer and filtration. Convenience features include a rear mounted motor for better balance, a removable angled drip tray and clear braided hoses.

The Donaldson filter cart is designed with performance, convenience and safety in mind. Its value added features make it the best choice to protect your machinery and equipment from breakdowns caused by contamination.



Donaldson®

Features	Benefits
Rugged and durable frame	Enables long service life
High efficiency media grades	Cost effective filtration
Two pressure filters	Two-stage filtration – Coarse/Fine or Particulate/Water
Safety relief valve	Prevents over pressurizing and damage to pump, hoses and filters
Overload protected switch	Prevents motor/pump from overheating

Applications

- **Filter new fluid** – New fluids are usually above the recommended ISO cleanliness level
- **Offline filtration** – Filter cart can be used to supplement existing filtration
- **Transferring fluid** – Fluid is transferred from a storage container (tote, drum, tank, etc.) to a machine's reservoir
- **Water removal** – Using Donaldson water removal elements can help remove free water from the system
- **Flushing after repairs and rebuilds** – After machines are serviced or repaired they need to be flushed thoroughly before they are returned to service
- **Flushing during equipment commissioning** – New machines have original fabrication debris and dirt that has ingressed during transport and storage

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Features



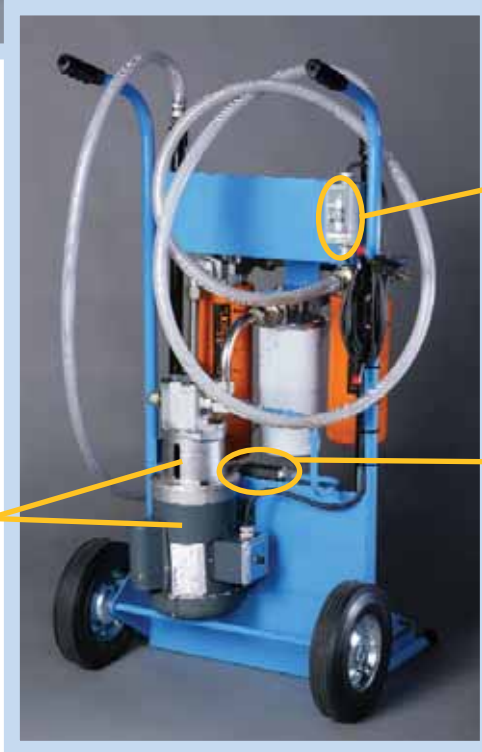
Stainless steel wands
 - Will not break, won't corrode

Differential pressure indicators
 - Lets you know when to change elements

Two pressure filters mounted in series
 - Allows for particulate/water removal or coarse/fine particle removal

Clear braided hoses
 - Visually shows fluid flowing

Suction filter
 - Protects pump



Removable angled drip tray
 - Easy clean up, fluid will not leak out when tipped back

Motor/Pump
 - Industrial brand name

Motor mounted on back
 - Better balance
 - Fluid will not drip on motor when changing filters

Overload protected switch
 - Protects motor and pump from overheating

Safety relief valve
 - Protects against over pressurizing

Oil sampling valve (not shown)
 - Monitors filter performance and cleanliness of oil



Filter Cart Ordering Code

Example

Model	Flow Rate	Power Supply	Suction Filter	Pressure Filter #1	Pressure Filter #2
DFC	10	P1	WM	3	WA
	TABLE 1	TABLE 2	TABLE 3	TABLE 4	TABLE 5

Shipped fully assembled, tested and ready to use.

Select one option from each table below.

(See example shown above.)

TABLE 1
Flow Rate

10	10 GPM
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TABLE 2
Power Supply

P1	110 VAC / 60 Hz
P2	110 VAC / 50 Hz
P3	230 VAC / 60 Hz
P4	230 VAC / 50 Hz

TABLE 3
Suction Filter

WM	Wire Mesh 150µm
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TABLE 4
Pressure Filter #1

WA	Water absorbing
3	Synteq® Beta 1,000 at < 3 micron
10	Synteq® Beta 1,000 at 10 micron
23	Synteq® Beta 1,000 at 23 micron

TABLE 5
Pressure Filter #2

WA	Water absorbing 10µm
3	Synteq® Beta 1,000 at < 3 micron
10	Synteq® Beta 1,000 at 10 micron
23	Synteq® Beta 1,000 at 23 micron

Element Chart

Micron Rating				
WM	WA	3	10	23
P550276	P179075	P564468	P176567	P173789

Specifications

Electrical Service:	115 volts: 16 amp, single phase
	230 volts: 8 amp, single phase
Cord Length:	7 ft. cord with storage for 50 ft.
Gear Pump:	60 Hz: 10.4 gpm*
	50 Hz: 8.3 gpm*
Maximum Recommended Fluid Viscosity:	500 SUS or 108 cSt*
Compatibility:	Mineral based fluids*
Operating Temperature:	-10° F to 150° F (-23° C to 65° C)
Filter Bypass Valve Settings:	Suction – 5 psid, Pressure – 25 psid
Weight:	approx. 140 lbs. (63.5 kg)
Dimensions:	Height: 47" (1194 mm)
	Width: 24" (610 mm)
	Depth: 23" (585 mm)
	Hose/Wand assembly length: 10' (3.05 m)

*Contact Donaldson for special order options

Using the Donaldson Filter Cart

When using the filter cart for offline filtration the fluid will need to pass through the filter cart approximately seven times to achieve single-pass filtration. Use the following formula to calculate the amount of time needed to achieve single-pass filtration:

$$\text{(Reservoir Size x 7) / Filter Cart Flow Rate = Time}^*$$

For example: if you have a 50 gallon reservoir it will take approximately 35* minutes to achieve single-pass filtration.
 $(50 \text{ gallons} \times 7) / 10 \text{ gpm} = 35 \text{ minutes}$

*Times will vary depending on initial cleanliness of oil, system ingress, choice of media grades and other variables.