



Donaldson.
FILTRATION SOLUTIONS

Our History of Filtration Innovation for Engine Powered Vehicles & Equipment

1910s



First-ever air cleaner invented by Frank Donaldson

1930s



First closed crankcase ventilation system (pollution control device) invented for cars



Patent issued for oil-washed air cleaner

1950s



Innovative dry-type air cleaner and filter



First Donaldson exhaust manufacturing facility opened

1960s



Introduced mufflers with integrated ejectors

1970s

Mobile hydraulic low pressure filters manufactured



SealClamp™ band-style exhaust clamp

Developed Self Cleaning Air Filter (SCAF)

1980s



Donaldson pioneered Ultra-Web® Nanofiber Filtration Technology



Revolutionary Duramax® mid-pressure hydraulic spin-on



Synteq™ filter media developed for lube and hydraulic



Produced engine liquid filters



Innovative RadialSeal™ sealing technology

Pleatloc™ media spacing invented

Mufflers designed to meet U.S. EPA truck noise regulations



Active DPF system for transit bus verified

Fuel filter production began in South Africa

1990s



Ultra-Web® Nanofiber Filtration Technology first used in engine filtration products



Donaldson PowerCore® Filtration Technology developed

Engine liquid filter and mobile hydraulics production expanded globally



Donaldson Endurance™ extended service filters introduced



Pulse Jet Air Cleaner (PJAC™) applied on M1 Abrams tank



Donaldson pioneers the design of the integrated catalytic converter muffler

Silent Partner™ first muffler to effectively reduce engine brake noise

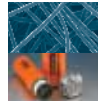
2000s



Ground-breaking PowerCore® G2 Filtration Technology introduced



Spiracle™ crankcase filtration introduced to eliminate emissions from open crankcase vents



Synteq XP™ filter media launched in next generation Duramax® and Spiracle™ crankcase filtration system

Synteq™ fuel filter media first and second generations



Revolutionary additive replenishment technology introduced into lube and coolant filters



T.R.A.P.™ filtration technology for hydraulic reservoirs



First to verify patented tailpipe and crankcase solutions with CARB and EPA



DPF cleaning system and DMF muffler launched for the emissions retrofit market



Introduced PJAC™ Ultra®

2010 & beyond

Synteq XP™ Media improves Donaldson Endurance™ extended life fuel filters