



HY-PRO

A short introduction to

HY-PRO FILTRATION

Donaldson Company Inc.

Donaldson acquired
Hypro Filtration May 1st 2017



Company overview

- Hy-Pro Filtration HQ, Anderson, Indiana



- DFE Filter rated elements manufacturing + filter assemblies manufacture
- Primary element stocking warehouse
- Off-line contamination solutions (portable + dedicated) manufacture
- Hy-Pro laboratory and test facility
- Hy-Pro training/education facilities

Focused Activity

- ***Filtration & Conditioning***
- ***Lube & Hydraulic Systems Diesel Oil and Fuel***







Lab & Test Stand

- Element integrity (bubble point)
- ISO Code
- KF (H₂O)
- Microscope / Patch
- MPC Varnish
- Element forensic
- Contaminant analysis
- Partner labs



Hy-Pro West

- Hy-Pro Filtration West, Vancouver, Washington, primary manufacturing for:



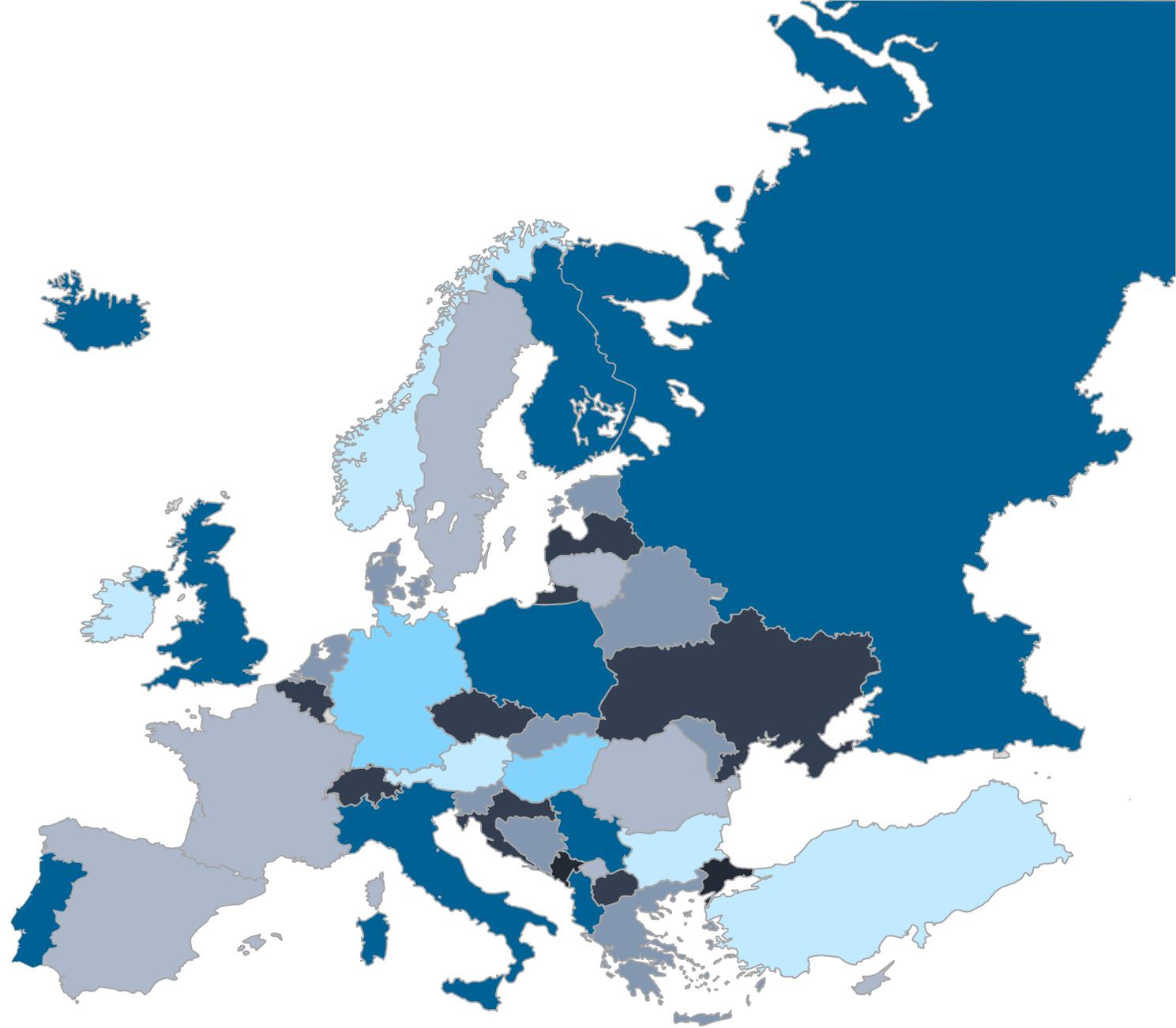
- Vac-U-Dry vacuum dehydration conditioning systems
- COT turbine oil coalesce conditioning systems
- COD diesel coalesce conditioning systems
- Custom filtration, conditioning, pumping & heating systems
- Electrical control panels for equipment & industrial solutions
- Electrical control panels according to UL,CUL,CE,ATEX and ICE standards
- Equipment rental & service fleet

Hy-Pro West manufactured:



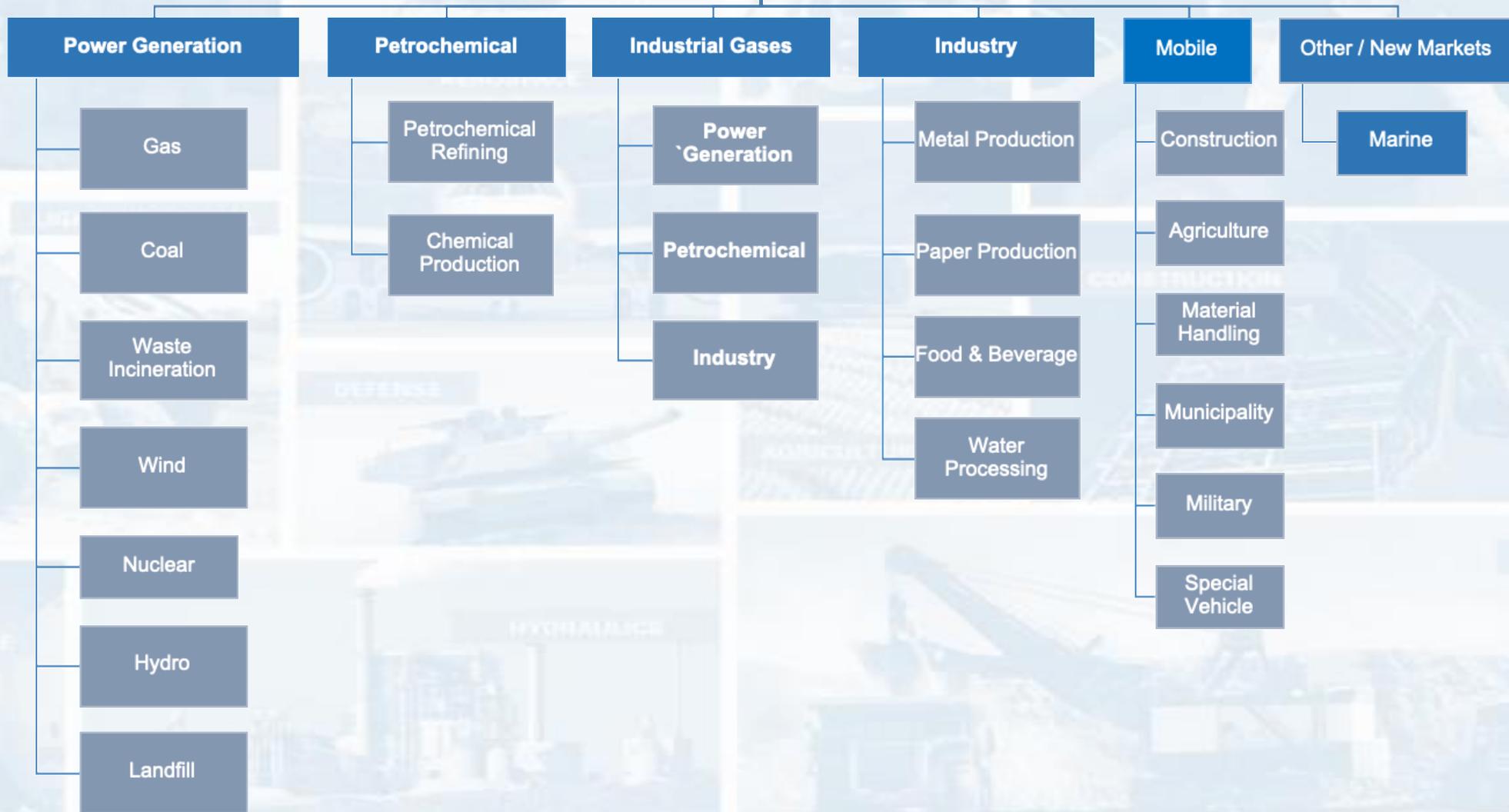
Way to Market

- **Distributor Network**
 - Full product range
 - Knowledgeable
 - Local Language
 - Market knowledge
- **OEM Account**
 - distributor
- **Global Account**
 - Distributor
- **Mobile OEM Accounts**
 - Distributor / Direct
- **European Market**
 - Patrick Kreutzer (PK)
 - Andy Pratt (AP)
 - Oliver Metzger (OM)
 - Thierry Vernay (TV)



Markets

Hy-PRO Filtration



Product and Solution overview

Filter Elements and upgrade solutions



Filter Elements & Media:

- DFE Dynamic Filter Efficiency
- Cellulose to Glass Upgrades
- Lube Design Filter Elements
- Dynafuzz Stainless Steel Fiber Media
- NSD Non-Spark Discharge Filter Elements
- Water Removal Filter Elements
- Turbo-TOC Filter Element Upgrade

Pall
Hydac
Parker
Schroeder
Stauff
Mahle
Taisei Kogyo
Internormen
Indufil
Moog

Kaydon
Hilco
Eppensteiner
Fleetguard
Fairey Arlon
Caterpillar
Nugent
Porous Media
PTI
Western
Vickers
Many more



- Upgrades (Not Replacements) For All Major Filter OEM **Hydraulic** and **Lubrication** Filter Elements
- Modified ISO 16889 testing principle -> DFE $\beta_{[x]} > 1000$
- Over **450.000** Interchange Upgrade Elements & critical interchanges
- Flexible manufacturing
- Hot Order Response; Delivery in hours/days **not** in weeks
- Extensive element stock levels

Filter Assemblies & Accessories



In-Tank

- In-Tank Assemblies
- Low Pressure Assemblies
- Medium Pressure Assemblies
- High Pressure Assemblies
- Duplex Filter Assemblies
- Reservoir Accessories
- Test Kits & Equipment



Duplex Filter



Low Pressure



Medium Pressure



Reservoir Accessories



Spin-On



Hy-Dry



High Pressure

Fluid Conditioning Equipment

Off-Line Filter Systems:

- CFU Compact Filter Unit
- FPL Filter Panel
- FC Filter Carts
- FSL High Viscosity Filter Systems
- FSLD Duplex High Viscosity Filter Skids
- FSW Wall Mounted High Viscosity Filter System
- FCL High Viscosity Filter Carts
- HS Heater Skid



Fluid Conditioning Equipment

COD



Diesel Filter Housing & Systems:

- COD Diesel Conditioning Filter Systems
- FSLCOD Diesel Conditioning Filter Systems
- FCLCOD Diesel Conditioning Filter Carts
- CSD Diesel Coalesce Filter Housing

CSD



FCLCOD



FSLCOD



Strategic Global Partnership EPT

- Calgary based knowledge guided company with over 25 years of experience in advance science of lubrication maintenance and reliability for critical applications.
- Strategy Partnership between EPT and HY-PRO:
 - Design,
 - Engineering,
 - Oil Analysis
 - Sales
 - Dedicated Customer Solutions
- **EPT patented technologies:**
 - Ion Charged Bonding (ICB™),
 - Soluble Varnish Removal (SVR™)
 - Electrostatic Contamination Removal (ECR™), and
 - Total Moisture Removal (TMR™)
- EPT Technologies have tens of millions of hours of proven performance on super-critical applications such as airports, aircraft carriers, gas turbines, and EHC systems at some of the largest power plants in the world. Markets : e.g. Power Generation, Manufacturing, Heavy Industries ect.



Fluid Conditioning Equipment

SVR



ICB



Varnish & Acid Scavenging Systems :

- SVR Soluble Varnish Removal Filter Systems
- FSTO Turbine Oil Varnish Removal Systems
- FSA Phosphate Ester Varnish Removal Systems
- FSJL Jet Lube Varnish Removal Systems
- ECR Electrostatic Contamination Removal Systems
- ICB Ionic Charged Bonding Filter Elements

FSTO



ECR



FSA



FSJL



Fluid Conditioning Equipment

VUD



V1



Water Removal Equipment :

- VUD Vac-U-Dry Vacuum Dehydration Systems
- V1 Compact VUD Vacuum Dehydration Systems
- COT Turbine Oil Conditioning Systems
- FCLCOT Turbine Oil Conditioning Filter Carts
- TMR-N2 Headspace Dehydrator + Nitrogen Generators
- TMR-Air Headspace Dehydrators

COT



FCLCOT



TMR-N2



TMR-Air



Fluid Conditioning Equipment

Fluid Test Equipment

- FPM 75 Portable Fluid Monitor for particulate, water & fluid condition.
- VTK on site Varnish test kit.
- PTK1 Portable Oil analysis Patch Test Kit
- PM-1 On-Line ISO Code Particle Monitor



FPM 75



VTK



PTK1



PM-1

Fluid Conditioning Equipment

LCS



- Fluid Handling, Storage & Customer made:
- LCS Liquid Conditioning Station
 - Custom Equipment



Custom Equipment: FSAPE



Custom Equipment: V10-ATEX



**Custom Equipment:
V5 – Explosion Proof Class 1 Div 1**



**Custom Equipment:
Heater & HighSpeed Flushing unit**



HY-PRO

Thank you for your attention.

hyprofiltration.com

