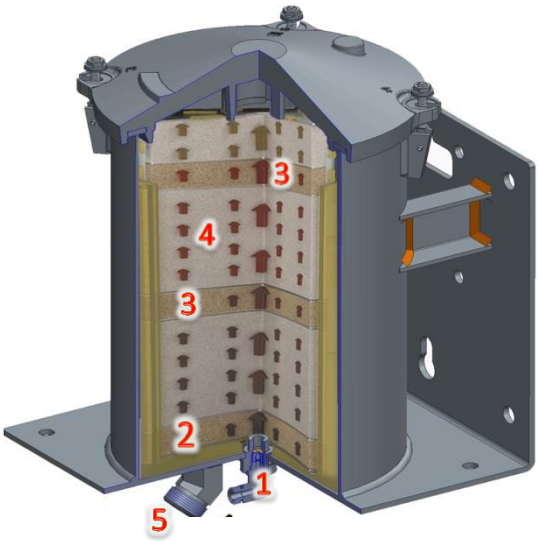
puraDYN M45

The M45 (previously MTS-60) is a multi-stage, highly efficient bypass oil filtration system for engine, hydraulic, or transmission applications with an oil sump capacity of up to 45 gallons.

Working much the same way as a kidney dialysis machine, the **pura**DYN® System diverts a small amount of engine oil at a slow rate of flow. Leveraging a proprietary solution, the filter continuously and safely cleans lubricant of impurities up to one micron, removes water, and replenishes key additives to keep oil like new.

Common contaminates :	Effects of Contamination
Engines:	
Solid particulate	Accelerated component failure
Water Particulate	Reduction in viscosity
Wear Metals	Shorter engine life, filter plugging
Transmissions:	
Sealing material	Accelerated bearing wear or failure
Oil oxidation products	Accelerated clutch wear
Dirt	Accelerated gear wear
Metals	Shifting issues due to plugged control valves
Water	Accelerated component wear
Hydraulics:	
Water	Reduction in viscosity, load-carrying ability, and hydrodynamic-film thickness, corrosion, rust
Silt caused by small-sized particulate	Valves function improperly due to gradual erosion of surfaces
Larger-sized particulate	Blockage of orifices, component jamming, improper seating of relief valves
Slime / Sludge	Increased strain on components (i.e., pumps); clogged nozzles, jets, and orifices



Step 1. Oil enters system at slow rate of 6-8 GPH / 22-30 LPH (engine) or 12-16 GPH / 45-60 LPH (hydraulics) and into the inner disposable element where the following processes occur:

Step 2. Water removal via Polydry technology

Step 3. Oil flows through time-released additive, replenishing base additive levels in engine oil.

Step 4. Oil continues filtering through the disposable element comprised of long-strand cotton media treated with CGP, a process for chemical grafting, and then slowly exits the element.

Step 5. Oil is gravity-fed back to engine.

puraDYN filtration systems

- Proudly manufactured in Boynton Beach, FL for over 30 years
- Will not void manufacturer's warranty
- Carries a $5m per occurrence liability coverage
- Five-Year unlimited miles/hours warranty on unit

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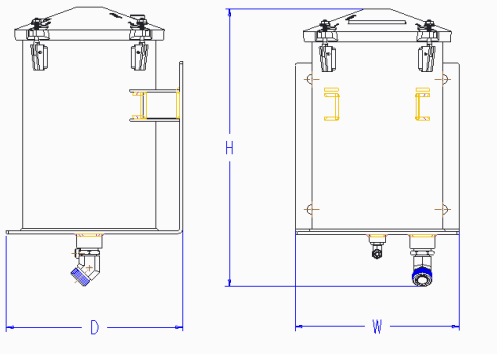
Weight	
System w/Dry Filter	32.3 LBS / 14.7 KGS
Boxed	38.15 LBS / 17.3 KGS
Vertical Clearance Requirements	12 IN / 31 CM
Dimensions - Overall	
Height (H)	16.9 IN / 43 CM
Width (W)	10 IN / 25 CM
Depth (D)	10.6 IN / 27 CM
Capacity	
Max Lube Oil Sump Capacity	45 GAL / 170 L
Make-up Oil	1.5 GAL / 5.7 L
Particulate removal	2.2 LBS / 1020 G
Water removal	27.05 OZ / 800 ML
Fluid Specs	
Pressure- Maximum Input	100 PSI / 690 KPA
Flow Rate Range Filtration (engine)	6-8 GPH / 22-30 LPH
Flow Rate Range Filtration (hydraulics)	12-16 GPH / 45-60 LPH
Approximate Operating Temperature	220 °F / 104 °C

*All M45 model specifications are approximate and will vary with options



Double System configurations available

Specific M45Applications:

Part Number:	Typical Application	Equipment Example	Max Sump Capacity	Max psi / kPa**
01-A1M45X-K (prev. 01-70601MTS-DL)	Engine	Caterpillar C32 / C3412	45 gal / 170 L	100 psi / 690 kPa
01-A1M45X-M (prev. 01-70601MTS-DL2)	Genset	MTU 16V2000	45 gal / 170 L	100 psi / 690 kPa
01-A2M45N-H (prev. 01-70602MTS-DLH) | | 2-Unit ***	Hydraulic		1200gal / 4,543 L	3,000 psi / 20,685 kPa

**Listed maximum "psi/ kPa" values based upon bypass filter systems with pressure reducing valve kit employed, as part of included kit materials.

*** M45 models can be used in multiple configurations to effectively filter large sump capacity engines. Hydraulic applications generally operate under high-pressure conditions, and therefore should be handled with extreme caution when servicing or carrying out installation. All hydraulic applications must be "customer engineered" and approved by Puradyn Engineering prior to any sale of Puradyn product for use in hydraulic applications. Contact Puradyn technical support for specifics.

This document is for informational purposes only and should not be the deciding factor when selecting a puraDYN System. Severe applications and operating environments may require model size adjustment from that shown on the standard sizing chart above. Please contact your local distributor or Puradyn directly with questions about specifics for your application or environment.