



ULTRA **CLEAN** HYDRAULIC SYSTEM

Modern hydraulic systems impose demanding cleanliness conditions to preserve and extend the service life of such sensitive components as servo valves, vane and piston motors/pumps, and directional and pressure control valves.

The contamination cycle of abrasion, surface fatigue, and accumulating debris continues until the particles are either caught by a filter or flushed from the system. The longer the particles stay in the system, the more damage they cause.

TABLE OF RECOMMENDED TARGET ISO CLEANLINESS CODES

Equipment	Pressure >212 bar >3000 psi	Equipment	Pressure >212 bar >3000 psi
Pumps		Actuators	
Fixed piston	17/15/12	Cylinder	15/13/10
Fixed vane	18/16/13	Vane motor	18/16/13
Variable piston	16/14/11	Axial piston motor	17/15/12
Valves		Gear motor	18/16/13
Cartridge	17/15/12	Radial piston motor	18/16/13
Check valve	19/17/14	Hydrostatic transmission	16/14/11
Directional (solenoid)	18/16/13	Test stand	15/13/10
Flow control	17/15/12	Bearings	
Pressure control (modulating)	16/14/11	>140 bar >2000 psi	
Proportional cartridge valve	16/14/11	Ball bearing	15/13/10
Proportional directional	16/14/11	Gearbox (industrial)	18/16/13
Proportional flow control	16/14/11	Journal bearing (high speed)	17/15/12
Proportional pressure control	16/14/11	Journal bearing (low speed)	17/15/12
Servo valve	15/13/10	Roller bearing	16/14/11



ELEMENT TECHNICAL SPECIFICATIONS

Efficiency	Beta 4-4193 (ISO 16889:99)
DHC	40gr @1gpm (MTD)
Flow Calibration	0.1-1 gpm (1-3 gpm Optional)
Dimensions	12x2.1x2.1"
Weight	0.3 lbs
Housings	FMS-3-TP

Hydraulic systems optimum performance is about more than just using the right oil, it's also about good maintenance practices and taking the right strategy to ensure a clean operating environment. FMS Filtering Systems guarantee absolute fluid cleanliness to the point that particle contamination is not a risk factor of system failures of any component.

ISO CLEANLINESS REQUIRED NEW MACHINE SYSTEMS:

Current Machine Cleanliness ISO	DIESEL ENGINES: 17/15/12			HYDRAULIC SYSTEMS: 15/13/10		
	Target	Target	Target	Target	Target	Target
23/21/18	20/18/15	19/17/14	18/16/13	17/15/12	16/14/11	15/13/10
22/20/17	19/17/14	18/16/13	17/15/12	16/14/11	15/13/10	14/12/9
21/19/16	18/16/13	17/15/12	16/14/11	15/13/10	14/12/9	13/11/8
20/18/15	17/15/12	16/14/11	15/13/10	14/12/9	13/11/8	-
19/17/14	16/14/11	15/13/10	14/12/9	13/11/8	-	-
18/16/13	15/13/10	14/12/9	13/11/8	-	-	-
17/15/12	14/12/9	13/11/8	-	-	-	-
16/14/11	13/11/8	-	-	-	-	-
15/13/10	13/11/8	-	-	-	-	-
Life Extension Factor	2X	3X	4X	5X	6X	7X



SCAN TO VISIT OUR WEBSITE



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