



حداقل سطح تمیزی مورد نیاز روغنهای روانکار و سیالات هیدرولیک

حداقل سطح تمیزی مورد نیاز سیالات هیدرولیک براساس اجزاء و فشار سیستم

Type of hydraulic system	Low Pressure Under 140 Bar			Medium Pressure 140-210 Bar			High Pressure 210 Bar and Over		
	ISO4406	NAS 1638	Minimum Recommended Filtration Level In Microns (9x2100)	ISO4406	NAS 1638	Minimum Recommended Filtration Level In Microns (9x2100)	ISO4406	NAS 1638	Minimum Recommended Filtration Level In Microns (9x2100)
PUMPS									
External Gear	21/17/14	8	20	20/16/14	7	10	20/16/14	7	10
Vane	21/17/14	8	20	20/16/14	7	10	19/16/13	7	7
Fixed Piston	20/16/14	7	10	19/16/13	7	7	19/15/12	6	5
Variable Piston	19/16/13	7	7	19/15/12	6	5	18/14/12	5	5
VALVES									
Check Valve	21/17/14	8	20	20/16/14	7	10	20/16/14	7	10
Directional(solenoid)	21/17/14	8	20	20/16/14	7	10	20/16/14	7	10
Standard Flow Control	21/17/14	8	20	20/16/14	7	10	20/16/14	7	10
Cartridge Valve	20/16/14	7	10	19/16/13	7	7	19/15/12	6	5
Proportional Valve	19/15/12	6	5	18/14/12	5	5	17/13/11	4	5
Servo Valve	18/14/12	5	5	17/13/11	4	5	16/12/10	4	5
ACTUATORS									
Cylinders, Vane Motors, Gear Motors	22/18/15	9	20	21/17/14	8	15	19/16/13	7	7
Piston Motors	20/16/14	7	10	19/16/13	7	7	19/15/12	6	5
Hydrostatic Drives	19/15/12	6	5	18/14/12	5	5	17/13/11	4	5
TEST STANDS	17/12/9	3	5	17/12/9	3	5	17/12/9	3	5



حداقل سطح تمیزی مورد نیاز روغنهای روانکار بر اساس اجزاء سیستم

Type of lubricating system	ISO 4406	NAS 1638	Minimum Recommended Filtration Level in Microns
Ball bearing	15/12	6	5 to 10
Roller bearing	16/13	7	10 to 12
Gear Box (industrial)	16/13	7	10 to 12
Gear Box (mobile)	17/14	8	12 to 14
Diesel Engine	17/14	8	12 to 14
Paper machine	17/14	8	12 to 14