

NEW OIL IS DIRTY OIL

Below are the results of filtering 10 drums of new MIL-H-5606 Hydraulic fluid. Random samples were taken before filtering to compare with the results after filtering. NEW OIL IS DIRTY OIL as the particle counts (shown below) well demonstrate. You may not need to achieve this cleanliness level for your oil, but you can with **Filter Works Filtration Systems**. You will also be removing moisture from your oil. (Each element will hold up to one gallon of water.) Clean oil is the "Life Blood" of any hydraulic system.

<u>Barrel #1</u>	<u>Start Up</u>	<u>Final Pass</u>	<u>Barrel #6</u>	<u>Start Up</u>	<u>Final Pass</u>
5-10 m	128,080	59	5-10 m		84
11-25 m	13,436	0	11-25 m		2
26-50 m	4,543	1	26-50 m		2
51-100 m	1,111	0	51-100 m		1
100+m	218	0	100+m		0

<u>Barrel #2</u>	<u>Start Up</u>	<u>Final Pass</u>	<u>Barrel #7</u>	<u>Start Up</u>	<u>Final Pass</u>
5-10 m		150	5-10 m	6,055	17
11-25 m		6	11-25 m	429	1
26-50 m		8	26-50 m	132	1
51-100 m		0	51-100 m	8	0
100+m		0	100+m	3	1

<u>Barrel #3</u>	<u>Start Up</u>	<u>Final Pass</u>	<u>Barrel #8</u>	<u>Start Up</u>	<u>Final Pass</u>
5-10 m	12,361	10	5-10 m		12
11-25 m	1,140	2	11-25 m		1
26-50 m	460	0	26-50 m		0
51-100 m	85	0	51-100 m		0
100+m	7	0	100+m		0

<u>Barrel #4</u>	<u>Start Up</u>	<u>Final Pass</u>	<u>Barrel #9</u>	<u>Start Up</u>	<u>Final Pass</u>
5-10 m	7,629	12	5-10 m	36,468	28
11-25 m	1,132	2	11-25 m	2,807	1
26-50 m	543	1	26-50 m	709	1
51-100 m	123	0	51-100 m	227	0
100+m	21	0	100+m	2,022	0

<u>Barrel #5</u>	<u>Start Up</u>	<u>Final Pass</u>	<u>Barrel #10</u>	<u>Start Up</u>	<u>Final Pass</u>
5-10 m	11,304	147	5-10 m	26,309	18
11-25 m	1,365	7	11-25 m	3,174	1
26 -50 m	744	0	26-50 m	1,119	0
51-100 m	126	0	51+-100 m	187	0
100+m	13	0	100+m	92	0

MIL-M-5606 B

Size Range (Microns)

5-15	2,500
16-25	1,000
26-50	250
51-100	25
Over 100	1 less than # of samples

“TENTATIVE SAE CLASSIFICATION.” (Common name, although never adopted by the SAE.)

Class	0	1	2	3	4	5	6
Size Range (Microns)							
5-10	2,700	4,600	9,700	24,000	32,000	87,000	128,000
10-25	670	1,340	2,680	5,360	10,700	21,400	42,000
25-50	93	210	380	780	1,510	3,130	6,500
50-100	16	28	56	110	225	430	1,000
Over 100	1	3	5	11	21	41	92

NATIONAL AEROSPACE STANDARD 1638

Class	00	0	1	2	3	4	5	6	7	8	9	10	11	12
Size Range (Microns)														
5-15	125	250	500	1,000	2,000	4,000	8,000	16,000	32,000	64,000	128,000	256,000	512,000	1,024,000
15-25	22	44	89	178	356	712	1,425	2,850	5,700	11,400	22,800	45,600	91,200	182,400
25-50	4	8	16	32	63	126	253	506	1,012	2,025	4,050	8,100	16,200	32,400
50-100	1	2	3	6	11	22	45	90	180	360	720	1,440	2,880	5,760
Over 100	0	0	1	1	2	4	8	16	32	64	128	256	512	1,024

CMMCO.STANDARDS

Class	00	0	1	2	3	4	5	6	7	8	9	10
Size Range (Microns)												
5-10	951	1,902	3,805	7,610	15,221	30,443	60,887	121,775	243,551	487,102	974,205	1,948,411
10-25	404	808	1,617	3,234	6,469	12,939	25,878	51,757	103,514	207,028	414,057	828,115
25-50	49	99	199	398	796	1,593	3,186	6,373	12,747	25,495	50,991	101,983
50-100	6	13	27	54	108	217	434	869	1,739	3,479	6,959	13,919
Over 100	0	1	2	5	10	20	41	83	166	333	667	1,335

“New” Aviation Hydraulic Oils