

ASTM Committee D-2 Interlaboratory Crosscheck Program
In-Service Oil Monitoring - March 2023 (ISDO2303)

Metodo	Parametro	U.M.	Media		Dev.St. RRT	z-score*
			Mecoil	RRT		
ASTM D8045 (corr. D664)	AN	mg KOH/g	1.98	3.78	1.3	-1.4
ASTM D2896(B)	TBN	mg KOH/g	8.0	8.4	0.2	-1.8
ASTM D7094 (corr. D93)	Flash Point	°C	219	215	7.2	0.6
ASTM D8004 (corr. GC)	Gasolio FDM	% peso	0.0	0.2	0.2	-0.9
ASTM D6595	Alluminio	mg/kg	5.0	4.6	1.1	0.4
ASTM D6595	Argento	mg/kg	0.0	0.0	0.0	-0.5
ASTM D6595	Bario	mg/kg	0.0	0.1	0.1	-0.9
ASTM D6595	Boro	mg/kg	24	27	4.8	-0.7
ASTM D6595	Calcio	mg/kg	1333	1388	97.6	-0.6
ASTM D6595	Cromo	mg/kg	1.7	1.7	0.4	-0.1
ASTM D6595	Ferro	mg/kg	17.3	16.6	2.7	0.3
ASTM D6595	Fosforo	mg/kg	775	744	41.9	0.7
ASTM D6595	Magnesio	mg/kg	1047	926	111.9	1.1
ASTM D6595	Manganese	mg/kg	0.0	0.3	0.3	-1.0
ASTM D6595	Molibdeno	mg/kg	49	49	6.3	-0.1
ASTM D6595	Nichel	mg/kg	0.3	0.3	0.3	0.1
ASTM D6595	Piombo	mg/kg	62.8	64.2	7.7	-0.2
ASTM D6595	Potassio	mg/kg	2.5	2.9	1.2	-0.3
ASTM D6595	Rame	mg/kg	40.8	44.7	4.8	-0.8
ASTM D6595	Silicio	mg/kg	4.2	3.7	1.0	0.6
ASTM D6595	Sodio	mg/kg	7.1	8.8	0.9	-1.9
ASTM D6595	Stagno	mg/kg	2.0	0.8	1.1	1.2
ASTM D6595	Titanio	mg/kg	0.0	0.1	0.2	-0.6
ASTM D6595	Vanadio	mg/kg	0.0	0.3	0.4	-0.7
ASTM D6595	Zinco	mg/kg	931	927	74.2	0.1
ASTM D7624-proc.A	Nitrazione	Abs/cm	12.0	12.1	2.5	-0.1
ASTM D7624-proc.B	Nitrazione	Abs/cm	11.6	8.3	6.5	0.5
ASTM D7414-proc.A	Ossidazione	Abs/cm	27.9	27.5	1.9	0.2
ASTM D7414-proc.B	Ossidazione	Abs/cm	19.9	23.9	4.3	-0.9
ASTM D7415-proc.A	Solfatazione	Abs/cm	25.2	24.9	1.7	0.2
ASTM D7415-proc.B	Solfatazione	Abs/cm	3.6	5.6	0.8	-2.4
ASTM D7412-proc.A	Antiusura	Abs/0.1mm	15.0	14.2	1.5	0.6
ASTM E2412 modif.	Soot	% peso	0.1	0.3	1.1	-0.2
ASTM E2412 modif.	Glicole	% peso	0.0	0.1	0.2	-0.4
ASTM E2412 modif.	Acqua FTIR	% peso	0.0	0.0	0.0	-0.4
ASTM D445	Visc. 40°C	cSt	137.8	136.7	1.0	1.2
ASTM D445	Visc. 100°C	cSt	16.8	16.7	0.1	1.1
ASTM D2270 (D445)	Indice di viscosità		132	132	1.9	0.3
ASTM D7042	Visc. 40°C	cSt	137.4	137.4	0.8	0.0
ASTM D7042	Visc. 100°C	cSt	16.8	16.7	0.1	1.2
ASTM D2270 (D7042)	Indice di viscosità		132	132	1.2	0.3
ASTM D6304(C)	Acqua, KF	mg/kg	169	240	126.8	-0.6

Firenze, 25 may 2023

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* "The z-score column reports each lab's deviation in units of standard deviations. The z-score is the ratio of the deviation to the standard deviation. A z-score greater than 2 - or less than negative 2 - should cause a laboratory to review their test data for any possible systematic error. Z-scores outside this range should occur only about one time in twenty, if a laboratory has average capability running the method. Laboratories should strive to obtain z-score values close to zero."
(da ASTM ISDO Report Introduction).