

Part number:

136-10008**HYDROMA**

HYDRAULICKÉ SYSTÉMY

**HIDROMA
SYSTEMS**

UKŁADY HYDRAULICZNE

HYDROMA

ГИДРАВЛИЧЕСКИЕ СИСТЕМЫ



INDUSTRIAL OILS CLASSIFICATION

Industrial oils are classified according to viscosity grades and performance classes. Viscosity grades ISO VG determine mean value in mm² at 40°C. This viscosity is mainly contained in oil description and it is mainly a number at the end of a trade oil name. There is a written code under this number which characterizes oil performance. The first number generally labels oil classification according its main type of use according to standard ISO 6743 or DIN 51502 and further letters usually determine which refining additives the oil should have or closely specify way of use.

ISO 3448 viscosity grades of industrial oils

Viscosity grade at 40°C in mm ² /s	Medium oil viscosity in mm ² /s	Viscosity range at 40 °C
ISO VG 2	2,2	1.98–2.42
ISO VG 3	3,2	2.88–3.52
ISO VG 5	4,6	4.14–5.06
ISO VG 7	6,8	6.12–7.48
ISO VG 10	10	9.0–11.0
ISO VG 15	15	13.5–16.5
ISO VG 22	22	19.8–24.2
ISO VG 32	32	28.8–35.2
ISO VG 46	46	41.4–50.6
ISO VG 68	68	61.2–74.8
ISO VG 100	100	90–110
ISO VG 150	150	135–165
ISO VG 220	220	198–242
ISO VG 320	320	288–352
ISO VG 460	460	414–506
ISO VG 680	680	612–748
ISO VG 1000	1000	900–1100
ISO VG 1500	1500	1350–1650

	ISO 6743	DIN 51 502
Open lubricating system, common oils	A	AN, B
Separators, form oils	B	FS
Gearings, circulatory systems	C	C, HYP
Compressors	D	V, K
Combustion motors	E	HD
Spindles, bearings and related gears	F	C
Gliding conduit	G	CG
Hydraulic systems	H	H, HV, HF, ATF
Metals machining	M	S, W
Electrical insulation	N	J
Pneumatic machines, lubrication by oil vapor	P	D
Heat carrier media	Q	Q
Corrosion protection	R	R
Turbines	T	TD
Heat processing	U	L
Other applications	Y	F
Vapor machines	Z	Z

Industrial oils



Industrial gear oils PARAMO CLP

ISO VG 100, 150, 220, 320, 460, 680; DIN 51 517/III – CIP
U.S. Steel 224; AGMA 9005-D94; FRENCH STEEL FT 158

PARAMO CLP oils are produced from high refined base oils with additive of friction modifier, high-pressure additives, anti-oxidants and anti-corrosion additives.

TYPICAL PARAMETERS	CLP 100	CLP 150	CLP 220	CLP 320	CLP 460	CLP 680
Viscosity at 40 °C (mm ² /s)	100	150	220	320	460	680
Viscosity index	95	90	90	90	95	80
Pour point (°C)	-24	-21	-21	-15	-15	-15
Flashpoint (°C)	220	235	235	240	245	255
Anti-corrosion properties	pass	pass	pass	pass	pass	pass
FZG test (A20/8.3/90) Unsatisfactory degree, min.	12	12	12	12	12	12
Timken	70	70	75	75	75	75

Use:

- fill of circulatory lubricating systems;
- heavy-load industrial gearboxes.

Gear oils PARAMO PP

ISO VG (100), 220, (680)
API GL-3

PARAMO PP oils are produced from high refined base oils with additive of anti-abrasion and high-pressure additives.

TYPICAL PARAMETERS	PP 7	PP 13	PP 44
Viscosity at 40 °C (mm ² /s)	110	220	730
Pour point (°C)	-30	-21	-12
Flashpoint (°C)	230	240	240
Anti-corrosive attributes	satisfies	satisfies	satisfies

Use:

- fill of circulatory lubricating systems;
- older industrial gearboxes;
- gearboxes in old automobiles.

