Deronex®

MAKE IN INDIA FOR GLOBAL MARKETS

CLASSIFICATION ENGINE OILS & GEAR OILS

Specification tables

SAE VISCOSITY CLASSIFICATION FOR ENGINE IOLS

Categor SAE	Kinematic viscosity (cSt) at100°C (ASTM D-445)		Maximum
	Minimum	Maximum	
0W	3.8	-	-35
5W	3.8	-	-30
10W	4.1	-	-25
15W	5.6	-	-20
20W	5.6	-	-15
25W	9.3	-	-10
20	5.6	9.3	-
30	9.3	12.5	-
40	12.5	16.9	-
50	16.3	21.9	-

API VEHICLE ENCLOSED GEAR OILS CLASSIFICATION

Category API	Operating conditions	Applications
GL-1	-	Special gearboxesΥποειδής Sub-gear
GL-4	Light to harsh	wheels with small displacement of mechanical gearboxes
GL-5	Harsh conditions	Sub-wheels etc.
GL-6	Very harsh conditions	Sub-wheels with large displacement and excessive surface loads

SAE VEHICLE ENCLOSED GEAR OILS CLASSIFICATION

Category SAE	Kinematic viscosity (cSt) at 160°C (ASTM D-445)	
	Minimum	Maximum
75W	4.1	-
80W	7	-
85W	11	-
90W	13.5	< 24
140W	24	< 41
250W	41	-

Category ISO	Average of kinematic viscosity (cSi) at 40°C	Boundaries of kinematic viscosities (cSi) at 40°C	
		<Minimum	Maximum
2	2.2	1.98	2.42
3	3.2	2.88	3.52
5	4.6	4.14	5.06
7	6.8	6.12	7.48
10	10	9	11
15	15	13.5	16.5
22	22	19.8	24.2
32	32	28.8	35.2
46	46	41.4	50.6
68	68	61.2	74.8
100	100	90	110
150	150	135	165
220	220	198	242
320	320	288	352
460	460	414	506
680	680	612	748
1000	1000	900	1100
1500	1500	1350	1650

Specification may change without notice as per OEM requirements

Lubricants

PASSENGER CAR

Product Name	Viscosity	Specifications	VISCOCITY @100 (CST)	FLASH POINT (COC)	VISCOCITY Index	TBN (MG KOH/GM)	Product Description
Deronex Multi Synto-V SYN	SAE 10W40	API SN/SM	14.6	238	158	7.8	ACEA A3/B4:API SN/SM : MB 229,3:RENAULT RN0700:VW 505.00
Deronex Multi Synto-V SYN	SAE 10W40	API SN/CF	13.6	212	155	7.2	ACEA A3/B4:API SN/CF : MB 229,1:VW 501.01/505.00
Deronex Turbo GX	SAE 10W60	ACEA A3/B4 API SN	23.8	240	185	8.0	ACEA A3/B4 : API SN/CF
Deronex Turbo GX	SAE 10W40	API SN PLUSJASO MA2	14.6	224	145	6.81	API SN PLUS: MA 229.1: VW 501.01
Deronex Syntergy	SAE 15W40	API SJ/CF-4	15.5	220	138	8.91	API SJ/CF-4, US MIL-L-2104E
Deronex Syntergy	SAE 15W40	API SJ/CF-4	15.5	220	138	8.91	API SJ/CF-4, US MIL-L-2104E
Deronex Syntergy	SAE 15W40	API SJ/CF-4	15.5	220	138	8.91	API SJ/CF-4, US MIL-L-2104E
Deronex Dynamic Moto	SAE 15W50	API SM/JASO MA2	15.8	232	152	7.98	API SM/JASO MA2 MEETS WITH 350 CC ENFIELD, YAMAHA,SUZUKI
Deronex Diamond Plus	SAE 20W50	API SF/SG	17.85	220	132	7.12	ACEA E7 API SF/SG DEUTZ DQC III-10: MB 228.1
Deronex Diamond Plus	SAE 20W50	API SF/SG	17.85	220	132	7.12	ACEA E7 API SF/SG DEUTZ DQC III-10: MB 228.1
Deronex Diamond Plus	SAE 20W50	API SF/SG	17.85	220	132	7.12	ACEA E7 API SF/SG DEUTZ DQC III-10: MB 228.1
Deronex Diamond Plus	SAE 20W50	API SF/SG	17.85	220	132	7.12	ACEA E7 API SF/SG DEUTZ DQC III-10: MB 228.1
Deronex Diamond Plus	SAE 20W40	API CF-4/SF	17.69	220	125	10.23	ACEA E7:API CF-4/SF:CUMMINS CES 20076/20077:M 3275-1:MB 228.1
Deronex Pride	SAE 50	API SG/CF	18.95	230	90	9.5	ACEA E2: API SG/CF:MB 227.0/228.0:MAN 270

HEAVY DUTY MOTOR OILS

Product Name	Viscosity	Specifications	VISCOCITY @100 (CST)	FLASH POINT (COC)	VISCOCITY Index	TBN (MG KOH/GM)	Product Description
Deronex Multi Synto-V SYN	SAE 5w30	API SN/SM	12.5	218	160	10.23	ACEA C3,C4:MB-APPROVAL 229.51:RENAULT RN0720:MB 226.51
Deronex Multi Synto-V SYN	SAE 5w30	API SN/CF	13.2	210	154	8.96	ACEA C2:API SN/CF:FLAT 9.55535-S1:RENAULT RN0700
Deronex Turbo GX	10w	API SG/CF	6.3	226	109	7.3	ACEA E2: API SG/CF;MB 227.0/228.0: MAN 270
Deronex Turbo GX	10w	API SF	6.3	226	109	7.3	API SF: MTU TYPE 2: CCMC G2/D1: MIL-L-46152
Deronex Multi Synto-V SYN	SAE 10w30	API SH/CF	11.59	234	145	9.5	ACEA A3/B4:API SH/CF:VW 502.00/505.00:
Deronex Multi Synto-V SYN	SAE 10w30	API SL CF	11.59	234	145	9.5	ACEA A3/B3 : API SL/CF
Deronex Multi Synto-V SYN	SAE 10w30	API CI-4/SH	11.59	234	145	9.5	ACEA A3/B4:API CI-4/SH:CAT ECF-2:CUMMINS CES 20077/20078 DEUTZ DQC III-18
Deronex Multi Synto-V SYN	SAE 10w30	API SM	11.59	234	145	9.5	MB-228.51: MAN M3477: VOLVO VDS-3: RENAULT VI RLD-2: MACK EO
Deronex Multi Synto-V SYN	SAE 10w30	API CH-4	11.59	234	145	9.5	ACEA E7: API CH-4/SH: CAT ECF-1-A:CUMMINS CES 20076/20077
Deronex Multi Synto-V SYN	SAE 10w40	API SN/SM	13.98	228	165	10.52	ACEA A3/B3, A3/B4-08: API SN/SM: MB 229.1:VW 501.01/505.00
Deronex Multi Synto-V SYN	SAE 10w40	API SN/CF	13.98	228	165	10.52	ACEA A3/B4: API SN/CF: MB 229 .: VW 501.01/505.00
Deronex Multi Synto-V SYN	SAE 10w40	API SN PLUS	13.98	228	165	10.52	ACEA A3/B4: API SN PLUS : MB 229.3:RENAULT RN0700:VW 505.00
Deronex Multi Synto-V SYN	SAE 15w40	API SP	16.52	234	152	12.95	API SP: ACEA A3/B4: VW 501.01/505.00
Deronex Multi Synto-V SYN	SAE 15w40	API CI-4	16.52	234	152	12.95	ACEA E7:API CI-4/SL:CAT ECF-1-A/ECF-2: CUMMINS CES 20077/20078
Deronex Turbo Guard	SAE 15w40	API CI-4 PLUS	17.69	220	125	10.23	ACEA E5:API CI-4 PLUS:CAT ECF-1-A/ECF-2: CUMMINS:JASO H:MACK EO-M PLUS
Deronex Turbo Fleet Master	SAE 15w40	API CK-4 PLUS	14.8	238	139	10	EXCEEDS API CK-4/SN, ACEA E7/E9
Deronex Sprint	SAE 20w40	API CF-4/SF	15.2	224	120	9.7	EXCEEDS API CF-4/SF, US MIL-L-2104C PLUS
Deronex Sprint	SAE 20w50	API CF-4/SJ	17.69	220	125	10.23	EXCEEDS API CF-4/SJ, US MIL-L-2104C PLUS
Deronex Super SX	SAE 20w50	API SN	17.85	236	145	11.12	EXCEEDS API SN ACEA E2: MB 228.1: M271: VOLVO VDS: MTU TYPE 1: RENAULT RD
Deronex Pride	SAE 30	API CF/CD	12.25	220	95	10.5	ACEA E2: API CF/CD:MB 227.0/228.0:MAN 270
Deronex Pride	SAE 40	API CF /CD	14.89	225	90	11.0	ACEA E2: API CF/CD:MB 227.0/228.0:MAN 270
Deronex Pride	SAE 50	API SM/JASO MA-2	18.95	230	90	12.5	ACEA E2: API SM/JASO:MA 227.0/228.0:MAN 270

Lubricants

MANUAL TRANSMISSION AND AXEL OILS

Product Name	Viscosity	Specifications	VISCOCITY @100 (CST)	FLASH POINT (COC)	VISCOCITY Index	TBN (MG KOH/GM)	Product Description
Deronex Gear Maxx	SAE 10W		6.1	232	107	NA	ALLISION C4:CAT TO-4/TO2:KOMATSU KES 07.868.1:ZF TE-ML 03C
Deronex Gear Oil	SAE 75w80	API GL-4	9.5	234	155	NA	API GL4/5, MT-1:MAN 342 M3:MAN 341E2;IVECO;MIL-PRF-2105E;SCANIA;
Deronex Gear Oil	SAE 90	API GL-4	15.5	200	101	NA	API GL4, MT-1:MAN 342 M3:MAN 341E2;IVECO;MIL-PRF-2105E; SCANIA
Deronex Gear Oil	SAE 85w140	API GL-5	25.3	224	97	NA	API GL-5: MIL-PRF-2105D; MAN 342 M1/M2; MB 235.0; VOLVO 97310; DAF, RENAULT
Deronex Gear Oil	SAE 140	API GL-4	24.12	228	101	NA	API GL4, MT-1:MAN 342 M3:MAN 341E2;IVECO
Deronex Gear Oil	SAE 80	API GL-5	10.1	200	99	NA	API GL-5: MIL-PRF-2105D; MAN; VOLVODAF, RENAULT,ARVIN ZF TE-ML 05C, 12C,
Deronex Gear Oil	SAE 80w90	API GL-5	14.5	202	105	NA	API GL-5; MIL-L-2105D, MAN 342 M1/M2; ZF TE-ML 05A,07A, 16B, 16D, 17B, 19B, 21A
Deronex Gear Oil	SAE 80w90	API GL-5	14.5	202	105	NA	API GL-5: MIL-L-2105D: MAN 342 M1/M2; MB 235.0; VOLVO 1273.10;
Deronex Gear Oil	SAE 75w140	API GL-5	15.3	216	100	NA	API GL-4/GL-5/MT-1;MIL-L-2105D/MIL-PRF-2105E,SAE J2360;SCANIA STO
Deronex Gear Oil	SAE 75w90	API GL-5	14.5	202	105	NA	API GL-5; MIL-L-2105D, MAN 342 M1/M2; ZF; VOLVO 1273.10
Deronex Gear Oil	SAE 30W	TO-4(TRANSMISSION OIL)	8.4	220	115	NA	ALLISION C4; CAT TO-4/TO-2; KOMATSU KES 07.868.1; ZF TE-ML 03C

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Hydraulic oils

Deronex®

Product name	Density at 15°C [kg/m³]	Kinematic viscosity at 40°C [mm²/s]	Viscosity index	Flow temperature [°C]	Flash point [°C]	Corrosion effect on Cu plate, 100°C/3h	Quality class
HYDROL BIO 46	919,8	47,0	191	-48	300	1	PN-ISO 15380 Table 4
HYDROL BIO 46	917,7	47,7	207	-23	306	1	PN-ISO 15380 Table 2
HYDROL POWER L-HV 32	855,9	32,2	186	-39	-	1a	DIN 51524-3 HVLP; ISO 6743-4 HV; ISO 11158 HV
HYDROL POWER L-HV 46	866,8	48,6	180	-39	-	1a	
HYDROL POWER L-HV 68	871,5	68,4	180	-36	-	1a	
HYDROL SYNT AW46	839,0	43,7	140	-54	258	1a	DIN 51524-3 HVLP; ISO 6743-4 HV; ISO 11158 HV
HYDROL EXTRA L-HV 32	853,9	32,0	158	-42	-	1a	DIN 51524-3 HVLP; ISO 6743-4 HV; ISO 11158 HV
HYDROL EXTRA L-HV 46	878,4	47,0	157	-39	-	1a	
HYDROL EXTRA L-HV 68	884,4	68,6	155	-36	-	1a	
HYDROL PREMIUM L-HV 15	845,6	16,3	153	-39	191	1a	DIN 51524-3 HVLP; ISO 6743-4 HV; ISO 11158 HV
HYDROL PREMIUM L-HV 22	861,7	21,7	152	-37	195	1a	
HYDROL PREMIUM L-HV 32	867,3	31,6	165	-39	203	1a	
HYDROL PREMIUM L-HV 46	875,6	45,9	148	-34	210	1a	
HYDROL PREMIUM L-HV 68	880,5	65,9	146	-30	221	1a	
HYDRAULIC OIL L-HV 15	856,6	16,0	198	-40	178	1a	DIN 51524-3 HVLP; ISO 6743-4 HV; ISO 11158 HV
HYDRAULIC OIL L-HV 22	862,6	22,2	169	-39	192	1a	
HYDRAULIC OIL L-HV 32	868,2	30,8	155	-35	205	1a	
HYDRAULIC OIL L-HV 46	875,9	44,8	154	-42	209	1a	
HYDRAULIC OIL L-HV 68	880,3	65,0	148	-30	223	1a	
HYDRAULIC OIL L-HV 100	884,3	91,6	148	-30	232	1a	
HYDRAULIC OIL L-HV HLP-32	869,0	31,9	99	-35	216	1a	DIN 51524-3 HVLP; ISO 6743-4 HV; ISO 11158 HV

PREMIUM - zinc-free oils
PAO - poly-alpha-olefins

Specification may change without notice as per OEM requirements

Approvals	Product description
-	Easily biodegradable hydraulic oil produced on the basis of specially selected synthetic esters. Recommended for industrial and mobile hydrostatic hydraulic systems where there is a potential risk of oil leaking into the environment.
-	Easily biodegradable hydraulic oil produced on the basis of a specially selected vegetable oil. Recommended for industrial and mobile hydrostatic hydraulic systems where there is a potential risk of oil leaking into the environment.
Central Mining Institute certificate mark B; Parker Denison HF0, HF1, HF2	Hydraulic oils with a higher viscosity index for lubricating the hydraulic systems of mobile construction, mining and stationary industrial machinery. The DYNAVISR technology developed by EVONIK allows for reduced fuel consumption and reduced energy consumption.
-	Synthetic, zinc-free and ashless hydraulic oil produced on the basis of poly-alpha-olefins (PAO). Recommended for use in heavy-duty power transmission systems and hydraulic drive and control systems where very difficult operating conditions and high ambient temperatures and humidity prevail.
Central Mining Institute certificate mark B; Eaton Vickers Brochure 03-401-2010 (M-2950-S, I-286-S); Parker Denison HF0, HF1, HF2	Hydraulic oils with a high viscosity index and excellent shear resistance. They are mainly intended for lubrication of the hydraulic systems of mobile construction and mining machinery operating in very difficult conditions (working pressure in hydraulic pumps up to 50 MPa), variable temperatures and humidity.
-	Hydraulic oils with excellent low-temperature properties and a very high viscosity index. Intended for use in hydraulic systems operating at extremely low ambient temperatures.
-	Zinc-free hydraulic oils intended for heavy-duty power transmission systems and hydraulic drive and control systems operating under extreme conditions of high pressure and over a wide temperature range.
-	Hydraulic oils intended for use in heavy-duty drive systems, high-pressure fixed and variable displacement piston pumps and precision hydraulic controls and systems. These oils are characterised by a high level of antiwear properties and additionally improved viscosity-temperature properties compared to L-HM hydraulic oils.
Central Mining Institute certificate mark B	
-	High-quality, zinc-free hydraulic oil with cleaning properties. The product is intended for use in stationary and mobile hydraulic systems operating in variable working conditions under high pressure and high thermal load. The oil is especially dedicated to continuous operation and where there is a danger of contamination of the system with water or condensed steam.

Specification may change without notice as per OEM requirements

Hydraulic oils

Deronex®

Table Viscosity classification of industrial oils according to ISO 3448	
Viscosity class in accordance with ISO 3448	Permissible kinematic viscosity range at 40°C for a given oil class [mm²/s]
2	1,98 - 2,42
3	2,88 - 3,52
5	4,14 - 5,06
7	6,12 - 7,48
10	9,00 - 11,0
15	13,5 - 16,5
22	19,8 - 24,2
32	28,8 - 35,2
46	41,4 - 50,6
68	61,2 - 74,8
100	90 - 110
150	135 - 165
220	198 - 242
320	288 - 352
460	414 - 506
680	612 - 748
1000	900 - 1100
1500	1350 - 1650

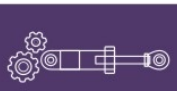
Table Classification of industrial oils according to ISO and DIN			
ISO 6743/4	DIN 51 524	Composition	Application
HL	HL	Mineral oils with improved anti-corrosion and antioxidant properties.	Hydraulic oils are intended for use in low- and medium-duty power transmission systems and hydraulic drive and control systems of hydrostatic drive equipment operating under moderate temperature conditions.
HM	HLP	HL oils with improved anti-wear properties.	Hydraulic oils intended for heavy-duty power transmission and hydraulic drive and control systems, i.e. hydraulic transmissions, regulating and controlling mechanisms and other similar equipment, where difficult operating conditions and increased ambient temperatures and humidity prevail.
-	HLPD	Mineral oils with anti-wear, anti-oxidation and anti-corrosion additives. They contain cleaning and dispersing additives.	For use in various types of stationary and mobile hydraulic systems on machinery and equipment operating under normal and heavy-duty conditions, where there is a risk of contamination of the system with water or condensed steam.
HV	HVLP	HM oils with improved viscosity-temperature properties.	Hydraulic oils intended for use in heavy-duty drive systems, high-pressure fixed and variable displacement piston pumps and precision hydraulic controls and systems.
HEES	-	Synthetic esters.	Biodegradable hydraulic oils recommended for industrial and mobile hydrostatic hydraulic systems where there is a potential risk of the oil leaking into the environment.
HETG	-	Triglycerides.	

Specification may change without notice as per OEM requirements

Hydraulic fluids for the mining industry

Product name	Kinematic viscosity at 40°C [mm²/s]	Water content by distillation	pH of emulsion	Approvals	Product description
HYDRAULIC OIL SYNTETIC	80,0	52	7 to 10	Safety certificate "B" No. B/2348/IV/2022. Approval for use in mining.	Emulsifying concentrate intended for the production of micro-emulsions with a concentration of 0.5–2 % (m/m) to be used in the mining industry as flame-retardant HFAE hydraulic fluid using waters with a total hardness of up to 750 mg CaCO3/l (42°n).
HYDRAULIC OIL SEMISYNTETIC	52,0	60	8 to 10	Safety certificate "B" No. B/2538/II/2021. Approval for use in mining.	Microemulsion emulsifying concentrate intended for the production of micro-emulsions with a concentration of 0.5–2 % (m/m) to be used in the mining industry as flame--retardant HFAE hydraulic fluid using waters with a total hardness of up to 750 mg CaCO3/l (42°n).

Product name	Density at 20°C [g/ml]	Crystallisation temperature, max. [°C]	Flow temperature [°C]	Approvals	Product description
HYDRAULIC OIL-T	1,076	-35	107	-	Product intended for the transport and temporary corrosion protection of hydraulic power equipment whose components are made of steel, copper, zinc, brass and aluminium. The liquid can be used as a working medium in refrigeration systems and as a liquid for sprinkling the floors and sides of coal wagons in winter to prevent coal from freezing and caking.



Hydraulic-transmission oils

Product name	Density at 15°C [kg/m³]	Kinematic viscosity at 40°C [mm²/s]	Viscosity index	Flow temperature [°C]	Flash point [°C]	Resistance to foaming, 1st sequence [ml/ml]	Quality class	Approvals	Product description
HYDROGEAR 46	882,3	46,8	100	-26	221	0/0	DIN 51517-3 CLP; DIN 51524-3 HLP	Central Mining Institute certificate mark B	Hydraulic-transmission oils recommended for lubricating hydraulic systems and mechanical transmissions in the mining industry and industrial machines.
HYDROGEAR 68	887,6	70,6	100	-25	241	0/0			
HYDROGEAR 100	889,2	98,6	97	-24	257	0/0			
HYDROGEAR 150	892,9	151,7	95	-18	260	0/0			
HYDROTRANS V32	869,5	32,3	107	-36	218	20/0	DIN 51517-3 CLP; DIN 51524-2 HLP	Voith Turbo 3625-006058; Voith Turbo 3625-006072; Voith Turbo 3625-006073; Voith Turbo 3625-008426;	Hydraulic-transmission oil for industrial stationary clutches and hydrodynamic transmissions of heavy-duty machinery.

Specification may change without notice as per OEM requirements

Transmission oils

Deronex®

Product name	Density at 15°C [kg/m³]	Kinematic viscosity at 40°C [mm²/s]	Viscosity index	Flow temperature [°C]	Flash point [°C]	Corrosion effect on Cu plate, 100°C/3h	FZG	Quality class
DEROTRANS PAG 150	998,7	152,8	201	-30	>260	1	>13	DIN 51517-3 CLP
DEROTRANS PAG 220	100,9	217,7	174	-30	>260	1	>13	
DEROTRANS PAG 320	100,8	329,2	198	-30	>260	1	>13	
DEROTRANS PAG 460	100,6	480,7	225	-28	>260	1	>13	
DEROTRANS PAO 150	852,9	140,4	168	-51	258	1	>12	DIN 51517-3 CLP; ISO 6743-6 CKD/CKS/CKT; ISO 12925-1 CKD/CKS/CKT
DEROTRANS PAO 220	881,3	206,5	163	-39	236	1	>12	
DEROTRANS PAO 320	858,0	326,0	176	-45	274	1	>12	
DEROTRANS PE-150	876,1	147,8	160	-39	240	1	>12	DIN 51517-3 CLP; ISO 12925-1 CKD; ANSI/AGMA 9005-F16 US Steel 224
DEROTRANS PE-220	883,9	216,3	163	-39	232	1	>12	
DEROTRANS PE-320	891,7	318,2	169	-39	238	1	>12	
DEROTRANS PE-460	898,1	449,2	166	-36	238	1	>12	
DEROTRANS SP-68	885,1	68,1	101	-28	223	1	12	DIN 51517-3 CLP; ISO 6743-6 CKD; ISO 12925-1 CKD
DEROTRANS SP-100	890,3	99,8	100	-27	230	1	12	
DEROTRANS SP-150	894,2	154,4	99	-24	232	1	12	
DEROTRANS SP-220	897,8	224,6	97	-23	260	1	12	
DEROTRANS SP-320	900,6	320,9	95	-18	265	1	12	
DEROTRANS SP-460	903,1	467,5	95	-17	265	1	12	
DEROTRANS SP-680	905,6	681,0	94	-15	264	1	12	
DEROTRANS SP-1000	905,7	1036,0	94	-12	265	1	12	
DEROTRANS CLP-68	886,0	67,1	102	-28	230	1	12	DIN 51517-3 CLP; ISO 6743-6 CKC; ISO 12925-1 CKC
DEROTRANS CLP 100	889,9	99,0	98	-27	233	1	12	
DEROTRANS CLP 150	893,9	157,6	99	-27	236	1	12	
DEROTRANS CLP 220	897,9	221,9	95	-24	263	1	12	
DEROTRANS CLP 320	900,9	320,2	96	-21	261	1	12	
DEROTRANS CLP 460	904,6	456,4	94	-17	260	1	12	
DEROTRANS CLP 680	904,3	671,0	95	-15	259	1	12	
HARMONY 68	885,0	68,0	99	-27	229	1	12	DIN 51517-3 CLP; ISO 6743-6 CKC; ISO 12925-1 CKC
HARMONY 100	890,1	97,9	96	-25	230	1	12	
HARMONY 150	894,0	158,8	96	-24	235	1	12	
HARMONY 220	897,8	224,6	95	-24	260	1	12	
HARMONY 320	901,3	317,2	95	-15	261	1	12	
HARMONY 460	904,6	471,5	94	-15	298	1	12	
HARMONY 680	904,6	676,5	95	-15	260	1	12	

Specification may change without notice as per OEM requirements

Transmission oils

Deronex®

Product name	Density at 15°C [kg/m³]	Kinematic viscosity at 40°C [mm²/s]	Viscosity index	Flow temperature [°C]	Flash point [°C]	Corrosion effect on Cu plate, 100°C/3h	FZG	Quality class
DEROTRANS PAG 150	998,7	152,8	201	-30	>260	1	>13	DIN 51517-3 CLP
DEROTRANS PAG 220	100,9	217,7	174	-30	>260	1	>13	
DEROTRANS PAG 320	100,8	329,2	198	-30	>260	1	>13	
DEROTRANS PAG 460	100,6	480,7	225	-28	>260	1	>13	
DEROTRANS PAO 150	852,9	140,4	168	-51	258	1	>12	DIN 51517-3 CLP; ISO 6743-6 CKD/CKS/CKT; ISO 12925-1 CKD/CKS/CKT
DEROTRANS PAO 220	881,3	206,5	163	-39	236	1	>12	
DEROTRANS PAO 320	858,0	326,0	176	-45	274	1	>12	
DEROTRANS PE-150	876,1	147,8	160	-39	240	1	>12	DIN 51517-3 CLP; ISO 12925-1 CKD; ANSI/AGMA 9005-F16 US Steel 224
DEROTRANS PE-220	883,9	216,3	163	-39	232	1	>12	
DEROTRANS PE-320	891,7	318,2	169	-39	238	1	>12	
DEROTRANS PE-460	898,1	449,2	166	-36	238	1	>12	
DEROTRANS SP-68	885,1	68,1	101	-28	223	1	12	DIN 51517-3 CLP; ISO 6743-6 CKD; ISO 12925-1 CKD
DEROTRANS SP-100	890,3	99,8	100	-27	230	1	12	
DEROTRANS SP-150	894,2	154,4	99	-24	232	1	12	
DEROTRANS SP-220	897,8	224,6	97	-23	260	1	12	
DEROTRANS SP-320	900,6	320,9	95	-18	265	1	12	
DEROTRANS SP-460	903,1	467,5	95	-17	265	1	12	
DEROTRANS SP-680	905,6	681,0	94	-15	264	1	12	
DEROTRANS SP-1000	905,7	1036,0	94	-12	265	1	12	
DEROTRANS CLP-68	886,0	67,1	102	-28	230	1	12	DIN 51517-3 CLP; ISO 6743-6 CKC; ISO 12925-1 CKC
DEROTRANS CLP 100	889,9	99,0	98	-27	233	1	12	
DEROTRANS CLP 150	893,9	157,6	99	-27	236	1	12	
DEROTRANS CLP 220	897,9	221,9	95	-24	263	1	12	
DEROTRANS CLP 320	900,9	320,2	96	-21	261	1	12	
DEROTRANS CLP 460	904,6	456,4	94	-17	260	1	12	
DEROTRANS CLP 680	904,3	671,0	95	-15	259	1	12	
HARMONY 68	885,0	68,0	99	-27	229	1	12	DIN 51517-3 CLP; ISO 6743-6 CKC; ISO 12925-1 CKC
HARMONY 100	890,1	97,9	96	-25	230	1	12	
HARMONY 150	894,0	158,8	96	-24	235	1	12	
HARMONY 220	897,8	224,6	95	-24	260	1	12	
HARMONY 320	901,3	317,2	95	-15	261	1	12	
HARMONY 460	904,6	471,5	94	-15	298	1	12	
HARMONY 680	904,6	676,5	95	-15	260	1	12	

Specification may change without notice as per OEM requirements

Meets the requirements of	Product description
David Brown Typ G	Synthetic industrial transmission oils are produced on the basis of polyalkylene glycols. Oils intended for heavy-duty mechanical transmissions of industrial equipment operating at temperatures in excess of 200°C.
Central Mining Institute certificate mark B	Synthetic industrial transmission oils manufactured on the basis of poly-alpha-olefins (PAO) and esters. Products intended for various types of heavy-duty transmissions in industrial machinery and equipment exposed to micropitting, operating at temperatures up to 180°C.
Has the approval of: Flender T7300, Rev.16; Central Mining Institute certificate mark B	Synthetic industrial transmission oils. Products intended for various types of heavy-duty transmissions in industrial machinery and equipment exposed to micropitting, operating at temperatures up to 180°C.
AGMA 9005-E02; U.S. Steel 224; David Brown S1.53.101	Industrial transmission oils, manufactured from selectively refined mineral oils and an EP – Extreme Pressure – type additive package. Products intended for heavy-duty mechanical transmissions of industrial equipment operating at temperatures up to 120°C.
AGMA 9005-E02; U.S. Steel 224	Industrial transmission oils, manufactured from selectively refined mineral oils and an EP – Extreme Pressure – type additive package. Products intended for heavy-duty mechanical transmissions of industrial equipment operating at temperatures up to 120°C.
-	Industrial transmission oils, manufactured from selectively refined mineral oils and an EP – Extreme Pressure – type additive package. Products intended for heavy-duty mechanical transmissions of industrial equipment operating at temperatures up to 100°C.

Compressor oils

Deronex®

Product name	Kinematic viscosity at 40°C [mm²/s]	Viscosity index	Flash point in open cup [°C]	Flow temperature [°C]	Quality class	Product description
DEROCOMP 46	42,5	190	226	-48	ISO 6743-3; ISO L-DGC	Synthetic oil on the basis of water-insoluble polyalkylene glycols intended for lubricating screw compressors compressing natural gas, LPG, and other hydrocarbon gases operating under heavy-duty conditions. DEROCOMP- 46 oil is not miscible with mineral oils or other synthetic oils and cannot be used to top up oil in these systems, or vice versa. When replacing previously used mineral/synthetic compressor oil with DEROCOMP- 46 oil, an oil change operation must be carried out in conjunction with cleaning and flushing of the compressor lubrication system.
DEROCOMP 68	89,4	150	252°C	-46	ISO 6743-3; ISO L-DGC	Synthetic oil based on water-soluble polyalkylene glycols for lubricating reciprocating and rotary compressors for natural gas, LPG and other hydrocarbon gases. DEROCOMP- 68 oil is not miscible with mineral oils or other synthetic oils and cannot be used to top up oil in these systems, or vice versa. When replacing previously used mineral/synthetic compressor oil with DEROCOMP- 68 oil, an oil change operation must be carried out in conjunction with cleaning and flushing of the compressor lubrication system.
DEROCOMP 150	146,3	162	242°C	<-40	ISO 6743-3; ISO L-DGC	Synthetic oil based on water-insoluble polyalkylene glycols. DEROCOMP- 150 oil is not miscible with mineral oils or other synthetic oils and cannot be used to top up oil in these systems, or vice versa. When replacing previously used mineral/synthetic compressor oil with DEROCOMP- 150 oil, an oil change operation must be carried out in conjunction with cleaning and flushing of the compressor lubrication system. The product is suitable for both rotary and reciprocating compressors where the oil is in constant contact with process gases.
DEROCOMP SYN 32	32,4	-	-	-56	ISO 6743-3; ISO L-DAJ	Synthetic oils (based on polyalphaolefins) intended for lubricating rotary, vane and screw air compressors operating under heavy-duty conditions.
DEROCOMP SYN 46	45,2	-	-	-54		
DEROCOMP SYN 68	62,2	-	-	-48		
DEROCOMP SYN 100	101,8	-	236	-37	ISO 6743-3; ISO L-DAA, DAG; DIN 51506 VDL	Piston and rotary air compressor oils for spray- and splash--lubricated air compressors intended for normal and heavy-duty operating conditions.
DEROCOMP SYN 150	136,4	-	248	-34		
DEROCOMP ST 32	33,6	-	-	-36	ISO 6743-3; ISO L-DAA; L-DAB, DAG; DIN 51506 VDL	Oils for rotary air compressors, rotary vane and screw compressors with or without oil injection, operating under medium conditions. The products are used in circulating oil systems integrated into a transmission lubrication system and systems integrated into a turbine or compressor.
DEROCOMP ST 46	47,4	-	-	-33		
DEROCOMP T 32	30,9	-	214	-12	ISO 6743-3; ISO L-DAH; ISO 6743-5 L-TSE, L-TGE; DIN 51524 part 1 L-HL	Oils intended for lubricating rotary air compressors operating in medium conditions. It can also be used as a hydraulic fluid in turbine regulation systems and to lubricate circulating systems of steam, gas and water turbines.
DEROCOMP T 46	41,7	-	232	-9		
DEROCOMP VDL 32	30,8	-	-	-	ISO 6743-3; ISO L-DAA, L-DAB; DIN 51506 VDL	Oils intended for lubricating reciprocating, screw (with or without oil injection) and vane (with oil injection) air compressors operating in medium conditions.
DEROCOMP VDL 46	44,5	-	-	-12		
DEROCOMP VDL 68	64,7	-	-	-		
DEROCOMP VDL 100	104,4	-	-	-		
DEROCOMP VPO	103,8	-	260	-10**	-	Oil intended for use in rotary vacuum pumps.
AIRCOMP DAB 68	64,2	97	123	-24	ISO 6743-3; ISO L-DAB	Oils intended for lubrication of reciprocating air compressors and rotary vane compressors, drip-lubricated, with medium operating conditions.
AIRCOMP DAB 100	96,3	92	256	-18		
AIRCOMP DAB 150	141,4	91	276	-12		
AIRCOMP DAB 320	320,9	92	304	-9		
AIRCOMP DAB 460	476,1	93	314	-6		
HARMONY DAA 46	44,7	100	223	-12	ISO 6743-3; ISO L-DAA	Oils intended for lubrication of reciprocating air compressors and rotary vane compressors, drip-lubricated, with light operating conditions.
HARMONY DAA 68	68,0	97	248	-12		
HARMONY DAA 100	101,4	93	243	-12		
HARMONY DAA 150	147,4	89	272	-12		

**** Solidification temperature [°C]**

Specification may change without notice as per OEM requirements

Deronex®

Compressor oils

Product name	Kinematic viscosity at 40°C [mm²/s]	Flash point in open cup [°C]	Flow temperature [°C]	Quality class	Application
FREEZOL	68,3	235°C	-42	ISO 6743-3; ISO L-DRD	Synthetic oils (polyester-based) intended for use in refrigeration compressors and air-conditioning units with HFC, HCFC refrigerants.
FREEZOL	99,5	252°C	-33		
FREEZOL	66,4	202	-35	ISO 6743-3; ISO L-DRE	Oil intended for lubrication of all types of refrigeration compressors operating with refrigerants of the CFC (e.g. R12), HCFC (e.g. R22) and ammonia group.

Product name	Kinematic viscosity at 50°C [mm²/s]	Flash point in open cup [°C]	Solidification point [°C]	Quality class	Application
ICEMATIC TZ-13	13,4	176	-50	PN-C-96072:1974 TZ-13	Oils intended for lubricating ammonia refrigeration compressors, e.g. two-stage compressors with a circulating lubrication system.
ICEMATIC TZ-19	26,8	228	-34	PN-C-96072:1974 TZ-19	
ICEMATIC TZ-28	29,5	230	-34	PN-C-96072:1974 TZ-28	
ICEMATIC WZ	31,2 *	164	-45	PN-C-96072:1974 WZ	Oil intended for lubrication of ammonia and acid-carbon refrigeration compressors with evaporator temperatures up to – 45°C, e.g. single-stage, horizontal, slow-running compressors.

***** Kinematic viscosity at 20°C
PAG - polyalkylene glycol
POE - polyesters

Machinery oils

Deronex®

Product name	Density at 15°C [kg/m³]	Kinematic viscosity at 40°C [mm²/s]	Kinematic viscosity at 100°C [mm²/s]	Viscosity index	Flow temperature [°C]	Flash point [°C]
HARMONY ST 150	878,1	152,9	17.5	102	-33	280
HARMONY P 220	885,6	228,9	25.8	101	-27	284
HARMONY M 220	896,2	220,2	24.5	91	-12	272
HARMONY M 460	902	475	32.6	93	-15	315
HARMONY HT 32	875,7	32,9	-	101	-21	215
HARMONY HT 46	881,9	47,2	-	101	-18	217
HARMONY HT 68	884,5	64,6	-	99	-21	224
HARMONY HT 100	887,9	98,4	-	98	-15	243
HARMONY HT 220	896,2	216,8	-	96	-18	252
HARMONY HT 320	900,4	315,3	-	92	-12	255
SLIDEGUIDE 8	866,9	12,2	-	100	-12	176
SLIDEGUIDE 10	864,2	21,1	-	100	-27	196
SLIDEGUIDE 15	874,3	31,5	-	102	-24	222
SLIDEGUIDE 20	879,2	45,4	-	99	-15	222
SLIDEGUIDE 50	875,0	99,3	-	91	-24	264
SLIDEGUIDE 60	872,1	115,6	-	93	-15	232
WAYLUBE 10	813,4	10,3	2,7	101	-18	154
WAYLUBE 15	810,4	16,2	3,6	110	-15	172
WAYLUBE 22	830,2	21,1	4,2	99	-15	210
WAYLUBE 32	845,1	31,7	5,3	101	-12	224
WAYLUBE 46	869,4	45,4	6,6	98	-12	225
WAYLUBE 55	873,0	58,1	-	97	-9	244
WAYLUBE 68	883,6	66,4	8,4	97	-12	240
WAYLUBE 100	889,6	98,4	10,9	95	-10	258
WAYLUBE 150	892,0	145,1	13,8	90	-10	276
WAYLUBE 15Z	882,0	15,8	-	-	-33	-
WAYLUBE 46Z	880,8	48,1	-	-	-30	-
WAYLUBE 68Z	885,5	66,2	-	-	-24	-
WAYLUBE 320	912,5	328,5	-	-	-18	281

* Kinematic viscosity at 40°C [mm²/s]
*Z-Zinc Free Oils

Product name	Density at 15°C [kg/m³]	Kinematic viscosity at 50°C [mm²/s]	Kinematic viscosity at 100°C [mm²/s]	Solidification point [°C]	Flash point [°C]	Acid value [mg KOH/g]
GREASED MACHINE OIL MN-11	896	82,2	-	-13	292	0,15
GREASED MACHINE OIL MN-15	898,4	111,2	-	-13	286	0,02
DEROCYL 68	901,6	-	28,1	-8	304	0,03
DEROCYL 100	902,2	-	43,0	-6	304	0,03
DEROCYL 150	906,1	-	52,6	-6	296	0,05
DEROCYL ST-68	904,0	-	29,4	-6	308	-
DEROCYL ST-150	902,8	-	31,3	-6	304	-
AXLE OIL U	886,1	46,9	-	-27	253	-

EP - Extreme Pressure
AW - Antiwear

Specification may change without notice as per OEM requirements

Quality class	Meets the requirements of	Product description
DIN 51502 C	DIN 51517-1 C; DIN 51517-2 CL	Circulating oils characterised by very good oxidation resistance and good water release properties. The products are compatible with SRE-NBR 28/SX type seals and are used in machine circulation systems, low and medium duty enclosed transmissions and light duty, reciprocating, rotary, vane air compressors.
-	-	Fluid friction bearing oil for large metallurgical units in the sheet rolling process. In addition, it can be used as a non-emulsifying, refined, high-quality machine oil. The product meets MORGOIL's basic requirements
ISO 6743-13 GB; DIN 51502 CG	Fives Cincinnati P-53	Oils for all types of slideways and, in particular, for lubricating horizontal slideways operating at moderate temperatures and under moderate to medium loads. They guarantee proper slide operation with particular emphasis on proper friction characteristics and the elimination of the "stick-slip" phenomenon.
	-	
	Fives Cincinnati P-47	
	-	
	Fives Cincinnati P-50	
	-	
-	-	Machine oils for through- and bath lubrication of high-speed textile machine components, machine tools and other precision equipment components in accordance with lubrication instructions. They can also be used for machining metals: steel, brass, e.g. turning, milling, threading, etc.
-	-	
ISO 6743-1 AN	-	Oils used for light- and medium-duty rotating machine parts such as rolling and plain bearings, guides, spindles. They can also be used in washing and rinsing processes for mechanical components of machines and tanks.
ISO 6743-1 AN; DIN 51502 AN	DIN 51501	Machine oils are intended for light- to medium-duty operating elements of industrial machinery and equipment, such as rolling and sliding bearings, guides, mechanical transmissions, spindles and auxiliary friction nodes.
		Low-solidifying machine oils intended for light- to medium-duty operating elements of industrial machinery and equipment, such as rolling and sliding bearings, guides, mechanical transmissions, spindles and auxiliary friction nodes.

Standards	Product description
PN-56/C-96074	Greased machine oils are a mixture of mineral oils with oxidised vegetable oil. They are used for lubricating: steam engine bearings of rolling stock, bearings exposed to contact with water, with which greased machine oils form a permanent lubricating emulsion, and machine bearings exposed to higher specific loads.
PN-61/C-96095	Cylinder oils are intended for lubricating cylinders, shunting parts and glands of steam engines. The main function of these oils is to prevent ring and cylinder wear and to seal spaces operating at high temperatures and with steam.
-	
-	
PN-61/C-96097	Oil primarily intended for lubricating sliding bearings in steam locomotives, rail and tramway cars.

Specification may change without notice as per OEM requirements

Turbine oils

Deronex®

Product name	Density at 15°C [kg/m^3]	Kinematic viscosity at 40°C [mm^2/s]	Viscosity index	Flow temperature [°C]	Flash point [°C]	Corrosion effect on Cu plate, 100°C/3h	Oil air-release capacity at 50°C [min.]	RPVOT (oxidation test) [min.]
DEROTURB POWER PREMIUM 32	857,3	31,9	115	-18	212	1	2,7	1520
DEROTURB POWER PREMIUM 46	857,3	46,6	113	-18	244	1	2,7	1447
DEROTURB ST PREMIUM 32	842,5	31,6	132	-24	244	1	2,1	>2300
DEROTURB ST PREMIUM 46	845,6	43,6	130	-21	240	1	2,5	>2300
DEROTURB HD 32	877,5	32,6	96	-15	218	1	2	>1300
DEROTURB HD 46	879,0	43,4	98	-12	225	1	2,5	>1300
DEROTURB HV1 32	877,0	32,3	96	-12	222	1	2,4	>1000
DEROTURB HV1 46	878,7	42,9	96	-12	232	1	2,7	>1000
DEROTURB HV1 68	884,0	61,9	96	-12	248	1	4	>1000

Product name	Density at 15°C [kg/m^3]	Kinematic viscosity at 40°C [mm^2/s]	Kinematic viscosity at 50°C [mm^2/s]	Flow temperature [°C]	Flash point [°C]	Corrosion effect on Cu plate, 100°C/3h	Deemulsification number [s]	Standards	Product description
TURBINE OIL T-30	881,0	49,9	30,8	-13	228	1	120	ZN-66/ MPCh/NF-104	Turbine oils for the circulating bearing lubrication of steam turbines, water turbines and geared turbine sets in the case of a common oil circuit.

Specification may change without notice as per OEM requirements

Deronex®

Turbine oils

Quality class	Approvals	Opis produktu
DIN 51515 part 1; DIN 51515 part 2; ISO 8068	**Meets the requirements of:** General Electric HTGD 90117 AC, Siemens 901305, 901304, GEK 107395ASkoda Power, BS 489	Turbine oils recommended for the lubrication and cooling of gas and steam turbine bearings, gas-steam turbines operating in the CCGT combined cycle, also equipped with gears. Oils intended for turbine systems where elevated operating temperatures and pressures are present. They can also be used as hydraulic fluids in turbine regulation systems and to lubricate, among other things, marine turbochargers of main and auxiliary engines fuelled by exhaust gas.
	MAN TED 1000454696 Rev.03 **Meets the requirements of:** Siemens 901305, 901304, GE HTGD 90117, GEK 107395A Skoda Power, BS 489	
DIN 51515 part 1; DIN 51515 part 2; ISO 8068	Alstom HTGD 90117; Siemens TLV 901304; Siemens TLV 901305; Skoda Power	
	Alstom HTGD 90117; Siemens TLV 901304; Siemens TLV 901305; Skoda Power	
DIN 51515 part 1; DIN 51515 part 2; ISO 8068	Alstom HTGD 90117; Siemens TLV 901304; Siemens TLV 901305, Skoda Power	
	Siemens TLV 901304; Siemens TLV 901305; Skoda Power. Meets the requirements of: Alstom HTGD 90117	
DIN 51515 part 1; DIN 51515 part 2; ISO 8068	Alstom HTGD 90117; Siemens TLV 901304; Siemens TLV 901305; Skoda Power	Turbine oils recommended for the lubrication and cooling of bearings in steam and water turbines also equipped with gears. The oils can be used in not particularly strained gas turbines under normal operating conditions. They can also be used as hydraulic fluids in turbine regulation systems and to lubricate, among other things, marine turbochargers of main and auxiliary engines fuelled by exhaust gas.
	Siemens TLV 901304; Siemens TLV 901305; Skoda Power. Meets the requirements of: Alstom HTGD 90117	
	-	

Specification may change without notice as per OEM requirements

Oils for stationary gas engines

Product name	Kinematic viscosity at 100°C [cSt]	Flow temperature [°C]	Flash point in open cup [°C]	Total alkaline number TBN [mg-KOH/g]	CCS structural viscosity at -20°C	Sulphated ash [(%(m/m)]	Approvals	Product description
DERONEX PRIME SAE-40	13,9	-24	276	4,6	-	0,53	-	Oil intended for use in various types of stationary, four-stroke gas engines (including Jenbacher) naturally aspirated and turbocharged, fuelled with methane-rich gases such as landfill gas, mine gas and biogas. It can be used in three-way and selective catalyst systems.
DEROPRIDE SAE-40	13,8	-27	272	5,7	-	0,46	MWM TR-0199-99-2105; INNIO Jembacher TA 1000-1109, series 2, 3, 4 (version A and B) and 6 (version C and E), class A gases; Bergen Engines AS: B35:40, C26:33 and K-type engines, for medium-speed natural gas engines	Oil for use in various types of stationary, four-stroke gas engines (e.g. Jenbacher, MWM) running predominantly on natural gas. It can be used in three-way and selective catalyst systems.
SPRINT-M-40	13,7	-34	274	10,5	-	0,68	-	Oil for use in various types of stationary, four-stroke gas engines (including Jenbacher, MAN, Deutz) naturally aspirated and turbocharged, fuelled with methane-rich gases such as landfill gas, mine gas and biogas. It can be used in three-way and selective catalyst systems.
SYNERGY SAE-15W-40	14,5	-24	224	10,2	6320	0,97	-	Oil for use in various types of four-stroke gas engines fuelled by natural gas as well as other methane-rich gases such as landfill gas and biogas. The product is mainly dedicated to the naturally aspirated and turbocharged gas engines of containerised generators. It can be used in three-way and selective catalyst systems.
TURBO GX	14,7	-36	230	2,0	4700	0,001	-	Ashless oil intended for use in two-stroke natural gas-fuelled engines operating in gas transmission and compression stations.

Specification may change without notice as per OEM requirements

Deronex®

TRIBOLOGY
LUBRICANTS & GREASES

We process, produce & Market new generation Lubricants & Greases

Automotive lubricants synthetic & Minerals

Car care products

Industrial Oils & Greases-synthetic & Mineral

We can produce lubricants & greases according to your requirements

Emulsifying oils for metalworking

Deronex®

Product name	Kinematic viscosity at 40°C [mm²/s]	Emulsion appearance at 20°C	pH 5% of emulsion	Corrosion protection capacity on steel plates using the Herbert method	Emulsion stability at 24h/20±50°C	Refractic index at 20°C
SMOOTHKUT-S	65,0	Transparent to iridescent liquid	9,2	H0	withstands	1,4
SMOOTHKUT-S E	1,0		-	H0	1A/1R/withstands	2,5
SMOOTHKUT-S HD	15,8	Transparent to iridescent liquid	9,4	H0	1A/1R/withstands	2,3
DEROSYNTH 40 PS	5,6		9,4	H0		-
DEROSYNTH 40 PW	15,8		9,4	H0		2,3
SMOOTHKUT-K	54,0	-	9,3	-	-	1,1
SMOOTHKUT-4A	29,0	Milk emulsion	9,2	H0	withstands	1,5
BUTTERCUT-S	28,5	Clear, homogeneous, amber-coloured liquid	9,2			1,5
BUTTERCUT-S	30,5	Clear, homogeneous, amber-coloured liquid	9,1			1,4

S-SOLUBE TYPE

Specification may change without notice as per OEM requirements

Water hardness [°n]	Material to be processed	Recommended working concentrations	Product description
From 10°n to 20°n	• steel • cast iron • non-ferrous metals • very hard materials, e.g. alloy steels	• heavy grinding: 3–5%, • heavy chip machining (turning, milling): 3–5%, • very heavy chip machining (reaming, threading): 5–8%.	Semi-synthetic emulsifying concentrate (microemulsion) with EP additives, used for heavy metalworking operations: cutting, grinding.
	• cast iron • iron alloys and stainless steel • aluminium alloys • plastic materials	• normal machining (turning, milling): light (3%), medium-heavy (5-6%) • grinding: light (1,5-2%), medium-heavy (3-5%) • stamping, forming: light (3-4%), medium-heavy (5-6%) • reaming: light (4-5%), medium-heavy (8-10%)	Semi-synthetic emulsifying concentrate (microemulsion) used for typical machining processes: turning, milling, drilling, reaming, threading, shaping, grinding. Suitable for low- and high-pressure CNC systems. It can be used in central systems and on individual machines.
From 10°n to 15°n	• cast iron • iron alloys and stainless steel • aluminium alloys • plastic materials	• normal machining (turning, milling): light (3%), medium-heavy (5-6%) • grinding: light (1,5-2%), medium-heavy (3-5%) • stamping, forming: light (3-4%), medium-heavy (5-6%) • reaming: light (4-5%), medium-heavy (8-10%)	Semi-synthetic concentrate (microemulsion), used for typical machining processes: turning, milling, shaping, grinding. Suitable for low- and high-pressure CNC systems. It can be used in central systems and on individual machines. The product should be stored at a temperature of +10°C to +30°C in the manufacturer's packaging protected from dust, frost and excessive heat.
	• steel • cast iron • copper • aluminium and their alloys	• normal machining (turning, milling): light (3%), medium-heavy (5-6%) • grinding: light (1,5-2%), medium-heavy (3-5%) • stamping, forming: light (3-4%), medium-heavy (5-6%) • reaming: light (4-5%), medium-heavy (8-10%)	Semi-synthetic concentrate (microemulsion), used for typical machining processes: turning, milling, drilling, reaming, deep-hole drilling, threading, shaping, grinding. Suitable for low and high-pressure CNC systems. It can be used in central systems and individual machines.
	• cast iron • iron alloys and stainless steel • aluminium alloys • plastic materials	• normal machining (turning, milling): light machining (3%), medium (5-6%), heavy (7-8%). • grinding: light machining (1.5-2%), medium (3-5%), heavy (3-5%). • heavy chip machining (tapping, deep drilling): light machining (3-4%), medium (6-8%), heavy (9%) • stamping, forming: light machining (3-4%), medium (5-6%), heavy (6-8%) • reaming: light machining (4-5%), medium (8-10%), heavy (10-12%).	Semi-synthetic concentrate (microemulsion), used for typical machining processes: turning, milling, drilling, reaming, deep-hole drilling, threading, shaping, grinding. Suitable for low and high-pressure CNC systems. It can be used in central systems and individual machines.
< 10°n	• aluminium • aluminium alloys • steel and copper alloys	• grinding: (3–5%) • rough turning: (3–5%) • smooth turning, finish reaming, threading: (5–8%) • extrusion: (8–20%)	Semi-synthetic concentrate (microemulsion) for universal use in metal machining operations. Suitable for low- and high-pressure CNC systems. It can be used in central systems and on individual machines.
10°n to 15°n	• steel • cast iron • non-ferrous metals and their alloys • copper and aluminium alloys	• On water with a general hardness of up to 15°N: • grinding: (3–4%) • normal chip machining (e.g. turning, milling): (4–8%) • heavy chip machining (e.g. threading): (8–10%, up to 15% for very heavy processing)	Cooling lubricant fluid (milk emulsion) for various machining operations
	• steel • cast iron • non-ferrous metals and their alloys • copper and aluminium alloys	• On water with a general hardness of up to 15°N: • grinding: (3–5%) • turning, milling, drilling, reaming: (5–10%) • threading: (10–15%)	Cooling lubricant fluid (milk emulsion) for various machining operations.
	• steel • cast iron • non-ferrous metals and their alloys • copper and aluminium alloys	• On water with a general hardness of up to 15°N: • grinding: (3–5%) • turning, milling, drilling, reaming: (5–10%) • threading: (10–15%)	Cooling lubricant fluid (milk emulsion) for various machining operations.

Specification may change without notice as per OEM requirements

Non-emulsifying oils for metalworking

Product name	Density at 15°C [g/cm^3]	Kinematic viscosity at 40°C [mm^2/s]	Flow temperature °C	Flash point °C	Welding load [kG]
DEROCUT N-945	0,86	16,7	-3	148	-
DEROCUT N-1000	0,87	21,3	-15	153	-
DEROCUT N-1500	0,87	26,5	-1	159	-
NEATCUT N-500	0,90	22,8	-21	172	620
NEATCUT N-800	-	25	-	-	700
NEATCUT M-1000	0,88	8	-	125	-
DEROCUT EPX 22	0,89	23	-15	170	450
DEROCUT EPX 32	0,89	31,5	-12	230	500
DEROCUT EPX 46		44,5	-12	240	500
FINECUT EP 5	0,87	5,2	-	120	-
FINECUT EP 32	0,89	33,2	-	205	-
FINECUT 22	0,87	22	-	-	200
FINECUT 32	0,88	30	-	-	200
CUTTROL-N	0,90	55	-	-	>800
CUT-X 3	0,84	4,5	-66	134	-
CUT-X 25	-	-	-	-	-
CUT-X 25 A	0,88	23	-12	198	-
CUT-X 32	0,88	34,4	-12	224	-
CUT-X 32 A	0,88	31,98	-12	224	-
CUT-SN OC	0,88	15,8	-12	182	-
CUT-SN OC MULTI	0,88	15,8	-12	180	800
CUT-SN EC AL	0,87	12,5	-57	176	-
DERONEX UNICUT 22	0,88	24,8	-15	200	-
DERONEX UNICUT 32	0,89	36,7	-12	202	-
SULFOFREZOL 1	0,87	22	-16	162	-
METALWORKING OIL SM	0,87	23,3	-6	180	
MILTRON AM 46	0,88	43,5	-18	220	250

N-NEAT CUTTING OILS

Specification may change without notice as per OEM requirements

Non-emulsifying oils for metalworking

Machining processes	Product description
• forming of steel, cast iron, copper and aluminium alloys • machining of toothing by chiselling • reaming with multi-cutters • thread cutting	Cutting oils for machining steel, cast iron, copper alloys and aluminium at high specific pressures and high cutting speeds. ACP machining oils are environmentally friendly, chloride-free, non-emulsifying metalworking oils.
• circumferential milling • reaming of steel with a multi-cutting reamer • thread cutting • rolling • gear shaving • pull broaching	
• deep drilling • working on automatic machines	
• milling (e.g. gears) • turning • threading • reaming • gear shaving • chiselling and broaching	New generation, non-emulsifying oils intended for use in heavy metalworking operations where a coolant with high lubricating film strength and high anti-wear properties is required.
• honing • grinding • lapping	Oil recommended for machining steel, non-ferrous metals and carbides during heavy and medium duty machining operations. It has been developed for metalworking processes where mineral-based machining oils are not suitable.
• turning • broaching • milling • chiselling • threading • reaming • cutting-off	Machining oils intended for use in operations that require a coolant with a high lubricating film strength. Particularly suitable for machining difficult-to-cut, stainless and acid-resistant steels.
• grinding • contour grinding	Oil intended for use in high-speed grinding and contour grinding operations on components made from tempered alloy steels.
• turning • broaching • milling • chiselling	Oil intended for use in machining processes that require a coolant with a high lubricating film strength. Recommended for machining stainless and acid-resistant steels.
• milling (e.g. gears) • turning • threading	Oils intended for use in light to medium processing operations on copper and its alloys and ferrous and non-ferrous metals.
	Non-emulsifying concentrate for heavy metal machining, intended as an EP booster at a minimum of 10% to the oil used in the system. It guarantees improved EP properties of the system, which consequently facilitates the machining of difficult-to-machine parts.
• grinding • metal honing	Machining oil intended for specific ferrous metal finishing work and the machining of steel and aluminium alloys.
• grinding • turning • milling • drilling • threading	Machining oil for use in high-performance grinding operations and for machining with precision tools at low to medium cutting speeds. Suitable for machining steel and non-ferrous metals. The product is not dedicated for the machining of copper and its alloys.
	Machining oil for use in high-performance grinding operations and for machining with precision tools at low to medium cutting speeds.
	The product is not dedicated for the machining of copper and its alloys.
	Versatile machining oil for a wide range of applications, both for operations with precisely defined tool geometries and for grinding. Suitable for machining steel, non-ferrous metals and yellow metals. It can be used as a multifunctional circulating oil.
• turning • milling • drilling (including deep drilling) • internal and external threading grinding	Oil intended for machining operations with precisely defined cutting tool edge geometry. Recommended even for machining materials with very poor machinability.
• turning • milling • drilling • reaming	Machining oil mainly for NC and CNC machining centres and for machining non-ferrous metals and their alloys. It provides an excellent effect of both cutting and cooling.
• milling • turning • internal and external threading • drilling (including deep drilling)	Oils intended for machining operations with precisely defined cutting tool edge geometry. Recommended even for machining materials with very poor machinability and for complex machining operations performed in gear manufacturing. Not suitable for machining non-ferrous metals.
• machining	A depressant and sulphurised mineral oil for machining steel and cast iron at high speeds and high cutting tool edge temperatures, and for machining high-strength and heat-resistant steels. Not recommended for machining non-ferrous metals and where a high surface smoothness grade of the workpiece material is required. Active sulphur content 0.40% (m/m).
• machining • broaching • threading	Greased oil is used as a finished coolant for machining alloys: ferrous and non-ferrous metals at low cutting speeds and cutting tool cutting edge temperatures of up to 120°C.
• drilling • turning • threading	Multifunctional machining oil for lubricating and cooling tools in steel machining. It fulfils the functions of a circulating oil and its innovative technology also allows it to be used safely in the hydraulic and gear systems of processing equipment.

Specification may change without notice as per OEM requirements

Quenching oils

Deronex®

Product name	Kinematic viscosity at 40°C [mm²/s]	Flash point (in open cup) min. [°C]	Flash point (in closed cup) min. [°C]	Flow temperature [°C]	Cooling rate [C/s]	Incineration residue [%]	Acid number [mg-KOH/g]	Recommended oil bath temperatures	Product description
DEROQUENCH-32	22,0	180	160	-15	96	-	0,1	40-80°C	Low-temperature quenching oil intended for the heat treatment of cast iron alloy steels and carburised steels, especially in closed furnaces with a controlled atmosphere, for which a high surface cleanliness of the workpieces is required. The product also works successfully in through-baths.
DEROQUENCH-46	24,0	195	180	-	96	0,20	-		Low-temperature quenching oil intended for the heat treatment of cast iron and steel components, particularly in closed furnaces with controlled atmospheres, for which high surface cleanliness of the workpieces to be quenched is required.
DEROQUENCH-68	21,0	-	185	-	99	0,10	-		
DEROQUENCH-100	41,0	-	-	-	100	-	-		
DEROQUENCH-150	45,0	220	200	-12	89	-	-	110-130°C	Medium-temperature quenching oil intended for the heat treatment of cast iron and steel components, particularly in closed furnaces with controlled atmosphere, for which high surface cleanliness of the workpieces to be quenched is required.
DEROQUENCH-220	220,5	240	220	-9	80	-	-	160-180°C	High-temperature quenching oil intended for the heat treatment of cast iron and steel components, particularly in closed furnaces with controlled atmospheres, for which high surface cleanliness of the workpieces to be quenched is required.
DEROQUENCH LT 32	14,0	190	-	-	105	-	-	40-80°C	Low-temperature quenching oil intended for the heat treatment of cast iron and steel components, particularly in closed furnaces with controlled atmospheres, for which high surface cleanliness of the workpieces to be quenched is required.
DEROQUENCH LT 46	31,5*	145	-	-		0,20	0,05		
DEROQUENCH LM 68	22,1	160	140	5	-	0,20	-		Low-temperature quenching oil intended for the heat treatment of cast iron and steel components for which small geometrical deformations are permitted at the required cooling rate.
DEROQUENCH LM 100	44,5	200	180	-5	-	0,60	-	110-130°C	Medium-temperature quenching oil intended for the heat treatment of cast iron and steel components for which small geometrical deformations are permitted at the required cooling rate.
DEROQUENCH LM 150	66,0	215	-	-6	-	-	-	130-150°C	Medium-temperature quenching oil intended for the heat treatment of cast iron and steel components for which small geometrical deformations are permitted at the required cooling rate.
DEROQUENCH LM 220	2 ,1	250	230	-3	-	0,90	-	160-180°C	High-temperature quenching oil intended for the heat treatment of cast iron and steel components for which small geometrical deformations are permitted at the required cooling rate.

HEAT TREATMENT OILS

Specification may change without notice as per OEM requirements

Deronex®

Plastic machining oils

Product name	Density at 15°C [g/cm³]	Kinematic viscosity at 40°C [mm²/s]	Open cup flash point [°C]	Lubricating properties – weld load [kG]	Product description
DEROSTAMP-100	0,78	1	52	-	Oil mainly intended for use in the stamping process of painted steel sheets in roofing manufacture. The surface of the sheet metal after treatment does not require degreasing or other cleaning operations. The product can be applied to the sheet metal surface by brush, roller and by spraying.
DEROSTAMP-200	0,90	86	214	800	Lubricating-cooling oil recommended for precision extrusion and rolling processes. The product has additives that provide increased lubricating film strength, improved anti-corrosion performance and facilitate the washing process of components after machining operations.
DEROSTAMP-300	-	205	-	800	Oil for extrusion (all types of presses) and hollowing in the cold plastic machining process. Recommended for all types of materials, including aluminium and copper.
DEROPRESS-500	0,91	330	240	620	The oil is used when stamping workpieces with difficult geometries and sharp curves that require very high pressures, e.g. when stamping bath tubs, sinks made of cold-rolled, high-alloy and stainless steel.
DEROPRESS-100	0,90	84	222	500	Plastic machining oil used as a cooling lubricant in the cold forging process. Product formulated on the basis of sulphurised mineral oil and additives with antioxidant and anticorrosive properties.

Specification may change without notice as per OEM requirements

Maintenance oils

Deronex®

Product Name	Density at 15°C [kg/m³]	Kinematic viscosity at 20°C [mm²/s]	Kinematic viscosity at 40°C [mm²/s]	Solidification point [°C]	Flash point [°C]	Protective properties	Product description
DEROLUBE-150	900,7	120,0*	211,8	-	204	-	Protective oil for saturating self-lubricating sintered powder bushings and plain bearing races.
DEROLUBE-220	891,7	-	105,9	-26	220	Corrosion on steel shank (Met.B – seawater): no corrosion	Maintenance oil used to protect the internal surfaces of internal combustion engines, air compressors and engine pumps against corrosion.
DEROFILM-100	872,1	-	10,8	-	174		Maintenance oil recommended for temporary protection against atmospheric corrosion of components made of ferrous and non-ferrous metals. The product can be used to maintain and lubricate weapons, machinery, precision mechanisms and spare parts. Because it is compatible with fuel fractions and forms a thin oil film, it can serve as a preservative for engines and injection pumps.
DEROFILM-220	835,5	5,2	3,2	-15	92	-	Oil recommended for cleaning metal products and inter-operational corrosion protection. In addition, the product washes away and dissolves grease-based impurities.

* Kinematic viscosity at 50°C [mm²/s]

Specification may change without notice as per OEM requirements

Anti-adhesive oils

Product name	Density at 15°C [kg/m³]	Kinematic viscosity at 40°C [mm²/s]	Flash point [°C]	Acid number [mg KOH/g]	Quality class	Application method	Product description
DEROMOULD Y-BIO	877,3	7,15	150	6,4	ISO 6743 B	• spray • roller	Low viscosity, biodegradable anti-adhesive oils intended for lubricating moulds made of steel, aluminium, plastic and wood, used in the manufacture of precast concrete and other concrete components. The products also protect steel moulds against corrosion in the short term.
DEROMOULD BIO-BIT	884,7	10,72	-	-	ISO 6743 B		
DEROMOULD V	842,7	4,7	146	6,1	ISO 6743 B	• spray	Anti-adhesive oil intended for lubrication of moulds used in the manufacture of precast concrete elements and other concrete components. The product can be used to lubricate cold metal and plastic moulds.
DEROMOULD VS	849,4	5,7	115	6,2	ISO 6743 B	• spray	Anti-adhesive oil intended for lubrication of moulds used in the manufacture of precast concrete elements and other concrete components. The product can be used to lubricate cold moulds.
DEROMOULD L	866,5	21,8	222	3,3	ISO 6743 B	• spray	Anti-adhesive oil intended for lubrication of cold moulds used in the production of concrete elements and lightweight concrete blocks.
DEROMOULD N	878,2	38,8	228	3,1	ISO 6743 B	• spray	Anti-adhesive oil intended for lubrication of moulds used in the production of concrete elements and lightweight concrete blocks. Oils can be used to lubricate cold moulds by spraying in the manufacture of cellular concrete.
DEROMOULD P	887,4	79,8	224	3,2	ISO 6743 B	• brush	Anti-adhesive oil intended for lubrication of moulds used in the production of concrete elements and lightweight concrete blocks.
DEROMOULD S	891,1	112,5	238	3,3	ISO 6743 B	• spray • roller	Anti-adhesive oils intended for lubrication of moulds used in the manufacture of cellular concrete blocks, where an increased thickness of the separation layer is required. Thanks to their suitable properties, the products can be used in the production process all year round.
DEROMOULD XS	894,4	156,1	228	3,0	ISO 6743 B		
DEROMOULD AZ	845,5	9,4	156	3,2	ISO 6743 B	• spray • brush	Anti-adhesive oil intended for lubrication of moulds used in the production of lightweight concrete blocks, concrete circles and fences and precast concrete elements of various sizes.
DEROMOULD MK S-E	874,6	7,2	142	6,7	ISO 6743 B	• spray • brush • roller	Low viscosity anti-adhesive oils intended for lubrication of steel, aluminium, plastic and wooden moulds used in the manufacture of precast concrete and ceramic products.
DEROMOULD MK S-L	863,5	6,2	150	6,4	ISO 6743 B		
DEROMOULD SEPAR	864,3	5,5	142	13,4	ISO 6743 B		
DEROMOULD SDA	866,5	7,8	154	10,7	ISO 6743 B		
DEROMOULD 30	867,8	6,8	146	74	ISO 6743 B		
DERONEX ANTI-ADHESIVE OIL B-0	864,1	17,5	184	6,0	ISO 6743 B	• spray • brush	Anti-adhesive oil intended for lubrication of steel moulds with large surface areas and high unit pressures.
DERONEX DIELUBE-Q	847,8	12,5*	110	5,9	ISO 6743 B	• spray • brush • roller	Anti-adhesive oil intended for lubrication of steel moulds in precast concrete and reinforced concrete production, as well as for steel and timber formwork in the construction industry.
DERONEX DIELUBE-Q	835,8	4,3*	100	5,4	ISO 6743 B	• spray • brush • roller	Oil used in the manufacture of stoneware and porcelain and electrical porcelain.
DERONEX CERAMIC PRODUCT OIL BQ	835,2	4,3*	100	6,2	ISO 6743 B	• spray • brush • roller	Anti-adhesive oil used in the manufacture of ceramic products. Product used in the manufacture of stoneware and porcelain and electrical porcelain as a component of kaolin paste.
DERONEX DISPESENT	881,9	30,3	202	-	-	• spray • brush	Separation oil intended for the preparation of a water-in-oil emulsion used to eliminate the phenomenon of asphalt mass sticking to the metal surfaces of asphalt transport vehicles, road paving machines and rollers.

* K mm²/s]

Specification may change without notice as per OEM requirements

Heat transfer medium

Deronex®

Product name	Density at 15°C [kg/m³]	Kinematic viscosity at 40°C [mm²/s]	Kinematic viscosity at 100°C [mm²/s]	Viscosity index	Flow temperature [°C]	Flash point [°C]	Residue after coking [% (m/m)]	Product description
DEROTHERM SYNT 3P	1025,8*	15,0	2,8	-	** -34	194	-	Synthetic heat transfer medium used in closed-loop heating equipment where temperatures from -20°C to 350°C occur, incidentally up to 375°C.
DEROTHERM 500	837,9	26.3	3.8	-	-28	135	-	Heat transfer oil for industrial cooling and heating systems, heaters and oil systems used for heating and closed-loop heating equipment.
DEROTHERM 600	851,1	18,6	4,1	107	-15	206	0,01	High-performance oil for heat exchange systems used in closed heating systems in the temperature range from -15°C to 285°C, industrial cooling and heating systems and heaters and oil systems for preheating.
DEROTHERM-M	866,7	30,2	5,2	100	-15	226	0,01	High-tech heat transfer medium recommended for closed and open, oil-fired heating systems, closed industrial systems, cooling and heating installations with operating temperatures up to 315°C–320°C (temperature in the oil mass) and for solid-fuel furnaces where additional heat extraction systems exist.
DEROTHERM-MH	877,7	40,1	5,9	94	-18	236	0,24	Heat transfer medium recommended for use in closed heating systems in the temperature range from -10°C to 285°C, industrial cooling and heating systems, heaters and oil heating systems and solid fuel fired furnaces where additional heat extraction systems are present.
DEROTHERM-HT	906,9	640,1	38,3	98	-15	302	0,61	Oil for lubricating machinery and equipment operating at temperatures of up to 200°C, e.g. conveyor chains in dryers.
DEROTHERM-100	879,3	33,1	5,4	98	-15	215	-	Heat transfer medium recommended for use in closed heating systems, industrial cooling and heating systems, heaters and oil systems for heating.
DEROTHERM-220	868,3	20,1	4,4	95	-18	216	0,03	Heating oil intended for use as a heat transfer medium in heating equipment and installations where the temperature of the oil in the mass does not exceed 200°C. Can be used in open systems as well as hermetically sealed systems.

* Density at 20°C [kg/m³]
**** Solidification temperature [°C]**

Specification may change without notice as per OEM requirements

Deronex®

Electrical insulating oils

Product name	Density at 15°C [kg/m³]	Kinematic viscosity at 40°C [mm²/s]	Kinematic viscosity at -30°C [mm²/s]	Flow temperature [°C]	Flash point [°C]	Breakdown voltage [kV]	Antioxidant content	Meets the requirements of	Product description
DEROTRANS BIJLIOIL	0,88	10,3	1000	-60	142	66	none	PN-EN IEC 60296 RIET edition 2012	Uninhibited electrical insulating oil intended for insulating and cooling various types of electrical equipment. The product is recommended for heavy-duty use in electrical equipment requiring oil, including the filling of power and distribution transformers, switches, rectifiers and switchgear.

Saw oils

Product name	Density at 15°C [kg/m³]	Kinematic viscosity at 40°C [mm²/s]	Viscosity index	Flow temperature [°C]	Flash point (in open cup) [°C]	Product description
SAW OIL 100-M	0,85	63,1	200	-26	>230	Biodegradable oil intended for lubricating the cutting system (chain) and guides of power saws used in forestry or horticulture.
SAW OIL 200-M	0,88	64,9	90	-30	>220	High-quality oil intended for lubricating the cutting system (chain) and guides of power saws used in forestry or horticulture.
SAW OIL 150-M	0,89	140,0	91	-28		
SAW OIL 220-M	0,89	157,4	97	-24		

Specification may change without notice as per OEM requirements

Oils for locomotives

Deronex®

Product name	Quality class API	Viscosity class SAE	Kinematic viscosity at 100oC [mm²/s]	Viscosity index	Flow temperature [°C]	Flash point [°C]	Total alkaline number [mg-KOH/g]	Product description
RALLMAXX PREMIUM CD 40	CD	40	14,7	103	-24	230	13	Oil for heavy-duty railway compression-ignition engines operating under high thermal and mechanical loads.
RALLMAXX EXTRA CF 40	CF	40	14,5	100	-25	252	14	Engine oil intended primarily for lubricating heavy-duty, diesel railway internal combustion engines operating under heavy--duty operating conditions.
RALLMAXX PRIDE 40	CD	40	15,3	95	-18	220	9	Mineral engine oil, intended primarily for lubricating heavy--duty, diesel railway internal combustion engines operating under heavy-duty operating conditions. It can also be used to lubricate diesel engines of a similar type in other technical equipment.

Oils for pneumatic equipment

Product name	Density at 15°C [kg/m³]	Kinematic viscosity at 40°C [mm²/s]	Flow temperature [°C]	Flash point (in open cup) [°C]	Appearance at 20°C	Lubricating properties – weld load [kG]	Product description
ROCKDRILL VG 32	0,88	31,2	-18	>160	Clear, without any suspended matter	-	Oil intended for lubrication of pneumatically driven equipment, e.g. upholstery staplers, drills, assembly spanners, etc., requiring lubrication of internal moving parts.
ROCKDRILL VG 100	0,89	101,0	-30	>220		300	Oil intended for lubrication of heavy-duty pneumatic impact tools such as drills, pneumatic hammers, impact drills, etc.

Specification may change without notice as per OEM requirements

Deronex® Oils for shock absorbers

Product name	Density at 15°C [kg/m³]	Kinematic viscosity at 40°C [mm²/s]	Kinematic viscosity at -30°C [mm²/s]	Viscosity index	Flow temperature [°C]	Flash point (in open cup)	Resistance to foaming: sequence I sequence II sequence III	Product description
SHOCKERLUBEX	0,87	15,8	460	180	-49	164	70/0 90/0 50/0	Lubrication oil for telescopic shock absorbers intended to dampen vibrations in vehicle suspensions, truck loading ramps and vehicle hydraulics.

Solvents / Removers

Product name	Density at 15°C [kg/m³]	Kinematic viscosity at 40°C [mm²/s]	Flow temperature [°C]	Flash point [°C]	Product description
RUST-X	836,4	2,6	-	107	The remover is used, among other things, for cleaning, degreasing and maintaining metal parts.
RUST-X	837,4	2,6	-54	102	A solvent intended for use in coatings, adhesives and anti-adhesive agents.

Specification may change without notice as per OEM requirements

Greases

Deronex®

Product name	NLGI class	Type of thic-kener	Base oil	Base oil viscosity at 40°C [mm²/s]	Application temperature range [°C]	Penetration after kne-ading at 25°C [1/10 mm]	Dropping point [°C]	Colour
LITHIUM GREASES								
GREASE EP-2	2	lithium	mineral	100	-30÷140	265-295	200	green
GREASE AP-3	3					220-250		
GREASE DLC-60000	3	lithium	mineral	100	-30÷140	220-260	205	brown
DLC-XC-RED GEL	1	lithium	mineral	100	-30÷130	310-340	200	Red
LITEN LT-42	2					265-295	202	Red
LITEN LT-43	3					220-250	205	Red
GREASE-AP	0	lithium	mineral	98	-20÷120	355-385	190	brown
GRESE AP-1	1					310-340	200	
GREASE AP-2	2					265-295	200	
GREASE AP-3	3					220-250	200	
DEROLIPREX	0	lithium	mineral	98	-20÷110	350-390	170	brown
DEROLIPREX 90	00					395-435	160	
TRANSMISSION GREASE	1	lithium	mineral	100	-30÷130	310-340	200	brown
DEROMOLY	2/3*	lithium	mineral	50	-30÷120	240-280	> 180	dark grey, MoS2 additive
DEROMOLY	2/3*			50	-30÷120	240-280	> 180	dark grey, graphite additive
DEROMOLY	1/2*			200	-25÷120	270-310	> 180	dark grey, MoS2 additive
DEROMOLY	00			300	-20÷90	400-430	> 150	dark grey, graphite additive

EP - Extreme Pressure
AW - Antiwear
MoS2 - Molybdenum disulphide
* Non-standard penetration range
** Products available on request
RED/GREEN/BLUE AVAILABLE

Specification may change without notice as per OEM requirements

Product description	Additional properties
Grease intended for lubricating: automotive rolling bearings, universal joints during assembly, linkages and guides of machines and other machine elements, plain bearings operating in the permissible temperature range.	-
Greases intended for lubricating covered rolling bearings operating in conditions of high demands with regard to properties such as: oxidation resistance, corrosion protection, water resistance and mechanical stability.	Multifunctional products, enhanced by additives with antioxidant, anticorrosive and lubricity-enhancing properties.
Greases intended for rolling and plain bearings.	Refined with a package of additives with antioxidant, anti-rust and lubricating effects. The choice of grease depends on the method of grease supply to the bearing (e.g. central lubrication or manual lubrication), the rotational speed and the operating temperature of the bearing.
Greases recommended for lubricating rolling bearings operating under high loads as well as in less loaded bearings where impact loads are present.	For bearing lubrication of equipment with central lubrication systems, operating at low temperatures and requiring very long-distance grease transfer.
	Intended for lubricating equipment with central lubrication systems, operating at moderate temperatures and requiring long-distance grease transfer.
	Intended for bearing lubrication of equipment with individual and central lubrication systems operating at high ambient temperatures and requiring short-distance grease transfer.
	Intended for lubricating bearings of equipment with an individual system.
Greases recommended for lubricating closed spur and bevel gears.	Applicable in the medium temperature range specified and with medium transmission sealing.
	Applies at the lower temperatures of the specified temperature range and with a good seal.
Grease intended for lubricating gears – spur and bevel gears of power tools.	The grease has very good anti-wear and anti-corrosion properties, which safeguard the proper operation of friction nodes during their service life.
Grease intended primarily for lubricating plain bearings operating under high pressures and dynamic stresses. It is also suitable for lubricating gears, pins, bushings and other mechanisms, as well as slow-running roller bearings.	Due to its high content of solid lubricant (5% MoS2) not recommended for rolling bearings with higher speeds.
Grease intended primarily for lubricating plain bearings operating under high pressures and dynamic stresses. It is also suitable for lubricating gears, pins, bushings and other mechanisms, as well as slow-running roller bearings.	Due to its content of solid lubricant not recommended for rolling bearings with higher speeds.
Grease intended primarily for lubricating plain bearings operating under high pressures and dynamic stresses. It is also suitable for lubricating gears, pins, bushings and other mechanisms, as well as slow-running roller bearings.	Due to its high content of solid lubricant (5% MoS2) not recommended for rolling bearings with higher speeds.
It is mainly intended for lubricating closed, difficult-to-seal transmissions. It has very good adhesion to metal surfaces.	-

Specification may change without notice as per OEM requirements

Greases

Deronex®

Product name	NLGI class	Type of thickener	Base oil	Base oil viscosity at 40°C [mm²/s]	Application temperature range [°C]	Penetration after kneading at 25°C [1/10 mm]	Dropping point [°C]	Colour
CALCIUM GREASES								
GREASE -CAL	1*	calcium	mineral	40	-20÷60	300-350	95	brown
GREASE CAL	≥ 2*	calcium	mineral	100	-20÷60	>250	95	dark grey, granite addition
GREASE CAL EP-1	1	calcium	mineral	42	-20÷60	305-345	100	brown
GREASE CAL EP-2	2					260-300		
GREASE CAL-2	2	calcium	mineral	100	-10÷60	260-300	100	brown
GREASE CAL-3	3					215-255		
GREASE-CAL-GEL	1	calcium	mineral	130	0÷60	290-325	100	brown
GREASE-CAL-GEL-2	2					250-285	100	
L GREASE FOR MECHANICAL BRAKES (PRG-L)	0/1*	calcium	mineral	150	0÷60	280-380	120	brown
Z GREASE FOR MECHANICAL BRAKES (PRG-Z)	00*				-20÷60	>380	120	
GREASE FOR CHISELS AND DRILLS	1	calcium	mineral	40	-20÷60	300-350	95	brown
LITHIUM-CALCIUM GREASES								
LICOM EP 00/000	00/000*	lithium-calcium	mineral	35	-30÷90	400-460	165	brown
LICOM EP 00/000	00/000*		synthetic	19	-45÷90			
LICOM EP-1	1	lithium-calcium	mineral	150	-35÷160	310-340	220	brown
LICOM EP-2	2*				-30÷160	270-295	245	
LICOM EP-3	3				-25÷160	220-250	250	
SULFONATE GREASES								
GREASE DLC-LL	1/2*	calcium sulfonate	mineral	420	-30÷180	285-315	> 300	brown
GREASE DLC-LL	2			180	-25÷180	265-295		
SPECIALITY GREASES								
DEROSPRAY (PTFE)	spray grease	PTFE	-	-	-30÷250	-	-	white
LR STEEL CABLE GREASE	4	special	mineral	420	-	-	> 55	brown
WAX-FLOW	-	paraffin	mineral	-	-	-	> 48	dark brown to dark green

CALCIUM GREASE RED/BLUE/GREEN AVAILBALE

EP - Extreme Pressure
AW - Antiwear
MoS2 - Molybdenum disulphide
* Non-standard penetration range
** Products available on request

Specification may change without notice as per OEM requirements

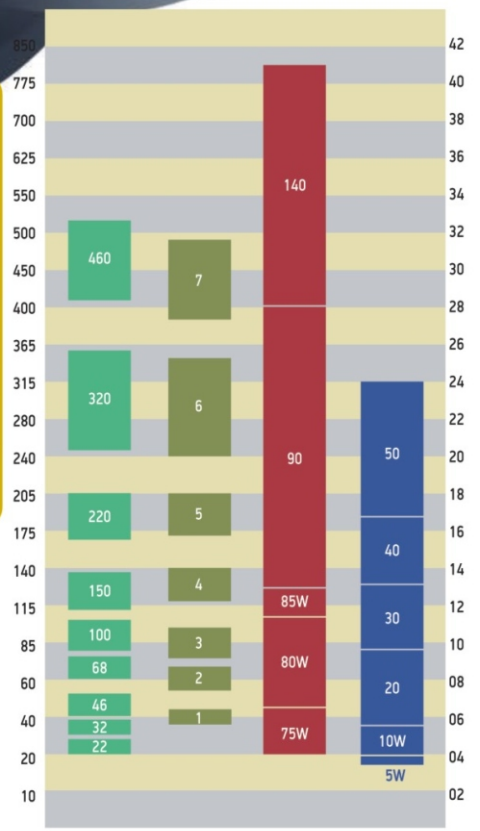
Product description	Additional properties
It is intended exclusively for the periodic lubrication of car chassis, pins, joints, guides. The grease is not suitable for lubrication of rolling bearings and water pump.	The soft consistency of the grease allows for easy use of pneumatic lubrication devices. It is quite resistant to cold water.
Grease intended for lubrication of: car springs, open gears, worm gears, screw threads exposed to corrosive action, chains and other heavily loaded friction nodes. It can be used as a typical assembly grease.	The product is resistant to cold water. It is not suitable for lubricating any automotive components other than springs. It cannot be used in rolling bearings and other precision mechanisms.
Greases intended for lubricating heavily loaded rolling bearings, particularly under impact load, also when water is present, e.g. metal rolling mills, presses, heavy construction machinery, etc.	Recommended for central lubrication systems.
	Recommended for manual lubrication and for lubricators located close to the lubrication node.
Greases recommended for lubricating plain bearings and other friction surfaces. The products are not suitable for lubricating rolling bearings.	Machine grease 2 is used for lubrication when fed through long, small-diameter lines.
	Machine grease 3 is used for lubrication when a higher sealing ability of the bearings is required and when the grease is supplied through larger diameter conduits and over shorter distances.
Recommended for lubricating rolling bearings in rolling mills and auxiliary equipment with a central lubrication system at operating temperatures of up to 60°C as well as in other equipment operating under high and shock loads.	CSW-1 is recoammended when supplying grease through long, small-diameter lines or at low ambient temperatures.
	SW-2 is recommended when the grease lines are shorter and larger in diameter and when the sealing properties of the grease are required.
Seasonal lubricants intended for lubricating railway shunting equipment of brake mechanisms.	Product to be used in summer.
	Product to be used in winter.
Grease intended for periodic corrosion protection of chisels, drills and other metal components in power tools. The product is water and moisture resistant.	Prevents the drill or chisel from seizing with the power tool chuck. It can be used on most machinery and equipment requiring a grease of NLGI 1 consistency.
Greases intended for lubricating friction interfaces in heavy commercial vehicles and buses by means of central lubrication systems. They can be used to lubricate various types of reduction gears lubricated with plastic grease.	The product is MAN 283 Li-P 00/000 approved.
	Synthetic oil-based product.
Greases intended mainly for lubricating rolling bearings operating under high loads, i.e. when: C/P < 7 for bearings with predominantly radial load C/P > 15 for bearings with predominantly axial load and also when there are shock loads in the operation of less loaded bearings.	Intended for lubricating equipment with central lubrication systems, operating at moderate temperatures and requiring long-distance grease transfer.
	Intended for bearing lubrication of equipment with individual and central lubrication systems operating at high ambient temperatures and requiring short-distance grease transfer.
	Intended for lubricating bearings of equipment with an individual system
High-temperature sulfonate grease intended for lubricating machine components in the mining, metallurgical, heavy industry and marine sectors, especially for friction nodes exposed to high impact loads and low torques operating under high dust and water and brine exposure conditions.	The grease is ideal in coal and copper mines for lubricating bearings, pin connections and other mechanisms of machinery and equipment operating in the specified temperature range. The product also proves its worth in tough metallurgical applications, for lubricating stand roller bearings of rolling mills.
High-temperature sulfonate grease intended for lubricating machine elements in the metallurgical industry, especially roller bearings of rolling mills and other friction nodes exposed to high temperatures.	Thanks to its extraordinary thermal stability, the grease recovers its original structure after returning to ambient temperature. It is ideal for lubricating machine and equipment components in coal mining, copper mining, cement plants, steel and heavy industry and in all friction nodes exposed to extreme pressures and water.
Grease intended for lubricating machine parts exposed to high temperatures or significant water influences. After application and drying, it leaves a protective layer on the lubricated parts in the form of an oil film, which protects very well against oxidation, thus increasing resistance to ageing. It is resistant to water, steam and aggressive media (most acids and alkalis).	In addition to individual applications, it can be used in industry to lubricate the following components: plain and spherical bearings, chains – also fitted with O-Ring or X-Ring seals, cogs, sprockets, levers, slideways, linear guide systems, spindles, hinges, wire ropes, ball joints, conveyors operating in ovens and dryers.
Grease intended for the maintenance of wire ropes of various designs during their manufacture.	Not suitable for lubricating drum hoist shaft ropes or for Koepe pulley hoist ropes.
It is intended for temporary corrosion protection of metal products during storage and transport, particularly for protection in mild climates.	It is hot-applied in liquid form.

Specification may change without notice as per OEM requirements

Deronex®

specification tables

Comparative viscosity classification
ISO | AGMA | SAE



CLASSIFICATION NLGI

Category NLGI	Classification	Cone Penetration in tenths of a millimeter 0,1mm ΕΠΙ 5s ΣΕ 25°C
000	Very Fluid	445-475
00	Fluid	400-430
0	Semi-Fluid	355-385
1	Very Mild	310-340
2	Mild	265-295
3	Semi-Hard	220-250
4	Hard	175-205
5	Very Hard	130-160
6	Solid	85-115

CLASSIFICATION DIN 51502

Symbol	Behavior in the water	Operating temperature (°C)
B	0 or 1	-20 - 50°C
C	0 or 1	-20 - 60°C
D	2 or 3	-20 - 60°C
E	0 or 1	-20 - 80°C
F	2 or 3	-20 - 80°C
G	0 or 1	-20 - 100°C
H	2 or 3	-20 - 100°C
K	0 or 1	-20 - 120°C
M	2 or 3	-20 - 120°C
N	0 or 1	-20 - 140°C
R	0 or 1	-20 - 140°C
0 no variation	1 minor variation	2 variation 3 strong variation

CLASSIFICATION DIN 51502

Type of grease	Symbol	Symbolization
Γ'Bearing greases according to DIN 51825, for temperatures -20 - 140°C	K	
Greases for high stress, for temperatures -20 - 140°C	KP	
Greases for temperatures > 140°C	KH	
Greases for low temperatures DIN 51825 / Tab. 2		
-30 - 120°C	KTA	△
-40 - 120°C	KTB	
-55 - 120°C	KTC	
Greases of closed gear wheels	G	
Greases of closed gear wheels	OG	
Greases sliding bearings	M	
Synthetic greases - Esters	G	◇
- Polyglycols	PG	
- Silicones	SI	

Tab. 2 Types of plastic greases and their characteristics	
Type of grease by thickener	**Distinguishing features**
Lithium greases	• versatile application • good water resistance • high durability
Calcium greases	• poor resistance to high operating temperatures • poor grip • very good water resistance
Aluminium complex greases	• very good temperature resistance • very good water resistance • good grip
Bentonite greases	• very good heat resistance • no miscibility with other greases • very good pumpability
Sulfonate greases	• excellent water resistance • excellent load-bearing capacity • very good temperature resistance
Lithium complex greases	• very good temperature resistance • very high durability and mechanical stability

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NOTE :