
FLS Lubricants

36501-11

Key to lubricants

List of contents:Page:

1. General information	3
2. Typical characteristics	4 - 5
3. Keys to lubricants	6 – 21
BRUGAROLAS.....	6
CALTEX.....	7
CARL BECHEM	8
CASTROL	9
ENGEN PETROLEUM	10
ESSO/EXXON	11
FUCHS	12
KLÜBER LUBRICATION	13
KRAFFT	14
KUWAIT PETROLEUM	15
MOBIL OIL	16
OPTIMOL ÖLWERKE	17
ROCOL	18
SHELL	19
STATOIL	20
TRIBOL/MOLUB-ALLOY.....	21
 4. Special lubricants	 22
 5. Conversion table: FLS	 24

Edited by: NG	Proof reading:
Approved by: JBas	Translated by:

Pages: 24
MGN code: 4R100

1. General information

The Key to Lubricants is for guidance only.

The Key to Lubricants specifies the lubricant recommended for stationary machines.

A MAT No. designates each lubricant. The general requirements for the lubricants are given for each MAT No. In addition to the general requirements, the criteria applied by the manufacturer to determine the suitability of lubricants also include factors such as low particle contamination and filterability.

On pages 4 to 5 are stated type of lubricant, ISO VG, applications, and the general requirements for the lubricants.

All the mentioned specifications are internationally accepted specifications for lubricants.

On pages 6 to 21 are mentioned recommended lubricants from Oil and Lubricant Companies which meet the requirements under each MAT No.

Page 24 is a table for interconversion between FLS old designation for lubricants and the valid MAT No.

Other products than those specified in the Key to Lubricants may be used. If you need to use products which are not included in the Key to Lubricants you must first contact FLS Headquarter Office to have the lubricants accepted.

None of the products on page 22 can be replaced.
--

2. Typical characteristics

Lubricant MAT No.	Type of lubricant	ISO VG	Applications	General requirements (4)
7012	Hydraulic Oils HV	10	Hydraulic systems within a very large temperature range steering systems	ISO/DIS 11158 HV or DIN 51524 part 3 HVLP Cleanness ISO 4406 code 16/13
7013		15		
7024	Hydraulic Oils HM	32	Hydraulic systems bearings. Gears where EP is not required	DIN 51524 part 2 HLP and US Steel 127 Cleanness ISO 4406 code 16/13
7025		46		
7026		68		
7034	Compressor Oils	68	All types of air compressors	DIN 51506 VDL and ISO 6521 (Draft) DAB + DAG
7036		100		
7053	Turbine oils for rotary air compressors	32	Rotary air compressors High-speed bearings	DIN 51515 part 1 TD and ISO 8086 AR
7054		46		
7055		68		
7114	Pneumatic tool oils	32	All types of pneumatic tools	ISO 6743 part 11 PAC + PBC
7115		46		
7123	Oils for rotary blowers	150	Rotary blowers Bearings, Gears	DIN 51517 part 2 CL and ANSI/AGMA 9005-D94 R&O
7124		220		
7134	Cylinder oils	460	Large plain bearings Worm gear units	DIN 51502 Z (1)
7136		1000		
7152	Enclosed gear unit oils	100	Low and high-load gear units	ANSI/AGMA 9005-D94 and DIN 51517 part 3 CLP
7153		150		
7154		220		
7155		320		
7156		460		
7157		680		
7158		1000		
7175	Heat transfer oil	32	Heat transfer applications	DIN 51522 Q and ISO 6743 part 12 QC
7195	Transformer oil	7 or 10	Transformers, switches, circuit-breakers	BS 148 I or IA and DIN 57370 part 1 class A and IEC 296 Class I or IA
7215	Flushing oil	22	Flushing of machinery components	DIN 51501 AN DIN 51517 part 1 C DIN 51524 part 1 HL
7235	Engine oil	SAE 15W-40	Diesel and petrol engines	API CD-SG or CCMC/ACEA D4
7253 (2)	Kiln and mill gear lubricants		Open gears with dip lubrication Kiln and mill gear rims	Only approved products must be used (See page 22)
7256 (3)				
7257 (5)				
7265	Hand lubricant for open gear unit		Hand lubrication of chains and open gears	DIN 51513 BC or DIN 51826 G
7285	Wire lubricant		Wires	ISO 6743 Part 8 RD or RE

- (1) ISO VG 460 requirement DIN 51510 ZA except for the values: Viscosity at 100°C min. 25 cSt.
Flash point min. 260°C
- (2) Operational lubricant for temperated areas, the final choice depends on the operating conditions.
- (3) Running-in lubricant.
- (4) In addition to the general requirements, the criteria applied by the manufacturer to determine the suitability of lubricants also include factors such as low particle contamination and filterability.
- (5) Operational lubricant for tropical and sub-tropical areas, the final choice depends on the operating conditions.

Lubricant MAT No.	Type of lubricant	ISO VG	Applications	General requirements (4)
7341	Synthetic Oils Polyalphaolefin (PAO)	32	Bearings Gear units Hydraulic systems Air compressors For running at low and high temperatures	ANSI/AGMA 9005-D94
7342		46		
7344		100		
7345		150		
7346		220		
7347		320		
7348		460		
7349		680		
7350		1000	Atox roller bearings	Only approved products must be used (See page 22)
7353	Synthetic Oils Polyglycol (PG)	150	Bearings and gear units For running at high temperatures Not to be used in FLS Machinery	ANSI/AGMA 9005-D94
7354		220		
7355		320		
7356		460		
7357		680		
7425	Multipurpose grease	2	All types of bearings -20°C to 150°C	DIN 51825 KP 2 K -20 Viscosity: approx. 200-400 cSt at 40°C
7435	Low-temperature grease	2	Roller bearings at high speed -30°C to 120°C	DIN 51825 K 2 K -30 Viscosity: approx. 100-200 cSt at 40°C
7445	High-temperature grease	2	All types of bearings -20°C to 200°C	DIN 51825 K 2 R -20 Viscosity: approx. 100-600 cSt at 40°C
7455	Low-speed grease	1 or 2	All types of bearings dN-factor < 100.000	DIN 51825 K 1 or 2 K -10 Viscosity: approx. 500-3000 cSt at 40°C
7523 (1)	Spray lubricant Kiln and mill gear unit	1	Kiln and mill gear units with automatic spray lubrication	Only approved products must be used (See page 22)
7525 (2)		00		
7527 (3)		0 or 00		
7529 (5)		0 or 00		
7531 (6)		0 or 00		
7555	Anti-friction lubricant		Heavy loaded bearings and moving parts	Only approved products must be used (See page 22)

- (1) Priming lubricant, to be applied by hand before start-up. Not to be used in the spray lubrication equipment
- (2) Running-in lubricant
- (3) Operational lubricant for temperated areas, the final choice depends on the operating conditions.
- (4) In addition to the general requirements, the criteria applied by the manufacturer to determine the suitability of lubricants also include factors such as low particle contamination and filterability.
- (5) Operational lubricant for sub-tropical areas, the final choice depends on the operating conditions.
- (6) Operational lubricant for tropical areas, the final choice depends on the operating conditions.

3. Keys to lubricants

FLS Lubricants

Oil Company: **Brugarolas S. A**

MAT No.	Type of lubricant	ISO VG	Product name
7012	Hydraulic Oils, HVI	10	Not available
7013		15	Not available
7024	Hydraulic Oils, HM	32	Fluid Drive HM-32
7025		46	Fluid Drive HM-46
7026		68	Fluid Drive HM-68
7034		68	Beslux Airlube 68
7036	Compressor Oils	100	Beslux Airlube 100
7053	Turbine Oils for Rotary Compressors	32	Beslux Airlube 32
7054		46	Beslux Airlube 46
7055		68	Beslux Airlube 68
7114	Pneumatic Tool Oils	32	Beslux Neulub 32
7115		46	Beslux Neulub 46
7123	Oils for Rotary Blowers	150	Beslux Gear 150
7124		220	Beslux Gear 220
7134	Cylinder Oils	460	Vulcasan BS
7136		1000	Vulcasan 222
7152	Enclosed Gear Unit Oils	100	Extra Gear 100
7153		150	Extra Gear 150
7154		220	Extra Gear 220
7155		320	Extra Gear 320
7156		460	Extra Gear 460
7157		680	Extra Gear 680
7158		1000	Extra Gear 1000
7175	Heat Transfer Oil	32	Beslux Term
7195	Transformer Oil	7 or 10	Lectroil
7215	Flushing Oil	22	Hidraulic B-22
7235	Engine Oil	15W-40*	Bradol Truck 15W-40
7253	Open Gear Unit Lubricants		See page 22
7256			See page 22
7257			See page 22
7265			G. Beslux Crown H-1/R
7285	Wire Lubricant		G. Beslux KBL
7341	Synthetic Oils Polyalphaolefin	32	Beslux Skydow NH-36
7342		46	Beslux Ultrasint 46
7344		100	Not available
7345		150	Beslux Gearsint 150
7346		220	Not available
7347		320	Not available
7348		460	Beslux Gearsint 460
7349		680	Not available
7350		1000	See page 22
7353	Synthetic Oils Polyglycol	150	Beslux Sincart 150-W
7354		220	Beslux Sincart 220-W
7355		320	Beslux Sincart 320-W
7356		460	Beslux Sincart 460
7357		680	Beslux Sincart 680-W
		NLGI	
7425	Multipurpose Grease	2	G. A. Plex-2
7435	Low-Temperature Grease	2	G. Beslux Plex 735
7445	High-Temperature Grease	2	G. Beslux VHT/S
7455	Low-Speed Grease	1 or 2	G. Beslux Plex EH-2
7523	Spray Lubricants Open Gear Unit	1	See page 22
7525		00	See page 22
7527		0 or 00	See page 22
7529		0 or 00	See page 22
7531		0 or 00	See page 22
7555	Anti-friction Lubricant		See page 22

* SAE 15W-40

FLS Lubricants

Oil Company: **Caltex**

MAT No.	Type of lubricant	ISO VG	Product name
7012	Hydraulic Oils, HVI	10	Not available
7013		15	Rando HDZ 15
7024		32	Rando HD 32
7025		46	Rando HD 46
7026		68	Rando HD 68
7034	Compressor Oils	68	RPM Compressor Oil 68
7036		100	RPM Compressor Oil 100
7053	Turbine Oils for Rotary Compressors	32	Regal R&O 32 or Regal EP 32
7054		46	Regal R&O 46 or Regal EP 46
7055		68	Regal R&O 68 or Regal EP 68
7114	Pneumatic Tool Oils	32	Not available
7115		46	Aries 46
7123	Oils for Rotary Blowers	150	Meropa 150
7124		220	Meropa 220
7134	Cylinder Oils	460	Vanguard 460
7136		1000	Vanguard 1000
7152	Enclosed Gear Unit Oils	100	Meropa 100
7153		150	Meropa 150
7154		220	Meropa 220
7155		320	Meropa 320
7156		460	Meropa 460
7157		680	Meropa 680
7158		1000	Meropa 1000
7175	Heat Transfer Oil	32	Texatherm 32 or Texatherm HT 22
7195	Transformer Oil	7 or 10	Transformer Oil BSI or Transformer Oil BSI Inhibited
7215	Flushing Oil	22	Rando HD 22 or Rando 22
7235	Engine Oil	15W-40*	Delo Multigrade SAE 15W-40
7253	Open Gear Unit Lubricants		See page 22
7256			See page 22
7257			See page 22
7265			Way Lubricant 220
7285	Wire Lubricant		Crater Fluid M
7341	Synthetic Oils Polyalphaolefin	32	Not available
7342		46	Not available
7344		100	Pinnacle EP 100
7345		150	Pinnacle EP 150
7346		220	Pinnacle EP 220
7347		320	Pinnacle EP 320
7348		460	Pinnacle EP 460
7349		680	Pinnacle EP 680
7350		1000	See page 22
7353	Synthetic Oils Polyglycol	150	Synlube CLP 150
7354		220	Synlube CLP 220
7355		320	Synlube CLP 320
7356		460	Synlube CLP 460
7357		680	Synlube CLP 680
		NLGI	
7425	Multipurpose Grease	2	Starplex 2 or Multifak EP 2
7435	Low-Temperature Grease	2	Starplex 2 or Ulti-Plex Synthetic EP
7445	High-Temperature Grease	2	Thermatex EP 2 or Ulti-Plex Synthetic EP
7455	Low-Speed Grease	1 or 2	Ultra-Duty Grease 2 or Polyurea HD
7523	Spray Lubricants Open Gear Unit	1	See page 22
7525		00	See page 22
7527		0 or 00	See page 22
7529		0 or 00	See page 22
7531		0 or 00	See page 22
7555	Anti-friction Lubricant		See page 22

* SAE 15W-40

FLS Lubricants

Oil Company: Carl Bechem GmbH

MAT No.	Type of lubricant	ISO VG	Product name
7012	Hydraulic Oils, HVI	10	Not available
7013		15	Not available
7024	Hydraulic Oils, HM	32	Bechem Staroil No. 32
7025		46	Bechem Staroil No. 46
7026		68	Bechem Staroil No. 68
7034	Compressor Oils	68	Bechem Staroil LV 68
7036		100	Bechem Staroil LV 100
7053	Turbine Oils for Rotary Compressors	32	Not available
7054		46	Bechem Turbinenöl TD 46
7055		68	Bechem Turbinenöl TD 68
7114	Pneumatic Tool Oils	32	Not available
7115		46	Not available
7123	Oils for Rotary	150	Bechem Staroil CBT 150
7124	Blowers	220	Bechem Staroil CBT 220
7134	Cylinder Oils	460	Bechem Spezialöl DVA 460
7136		1000	Not available
7152	Enclosed Gear Unit Oils	100	Berugear GS 100 BM, Bechem Staroil G 100
7153		150	Berugear GS 150 BM, Bechem Staroil G 150
7154		220	Berugear GS 220 BM, Bechem Staroil G 220
7155		320	Berugear GS 320 BM, Bechem Staroil G 320
7156		460	Berugear GS 460 BM, Bechem Staroil G 460
7157		680	Berugear GS 680 BM, Bechem Staroil G 680
7158		1000	Berugear GS 1000 BM
7175	Heat Transfer Oil	32	Bechem Therm B ISO VG 32
7195	Transformer Oil	7 or 10	Bechem Transformatorenöl T10
7215	Flushing Oil	22	Bechem Staroil CBT 220
7235	Engine Oil	15W-40*	Bechem Staroil Multigrade S 3 HD 15W/40
7253	Open Gear Unit Lubricants		See page 22
7256			Berulit EL 420 Fluid
7257			Berulit GA 2500 Fluid
7265			Berulit GA 443, Berulit GA 2500
7285	Wire Lubricant		Berulit WR 400, Bechem Seilstar
7341	Synthetic Oils Polyalphaolefin	32	Berusrnth Eural HYD 32
7342		46	Berusrnth Eural HYD 46
7344		100	Berusrnth GP 100
7345		150	Berusrnth GP 150
7346		220	Berusrnth GP 220
7347		320	Berusrnth GP 320
7348		460	Berusrnth GP 460
7349		680	Berusrnth GP 680
7350		1000	Berusrnth GP 1000
7353	Synthetic Oils Polyglycol	150	Berusrnth EP 150
7354		220	Berusrnth EP 220
7355		320	Berusrnth EP 320
7356		460	Berusrnth EP 460
7357		680	Berusrnth EP 680
		NLGI	
7425	Multipurpose Grease	2	Beruplex LI EP 2
7435	Low-Temperature Grease	2	High-Lub FA 67 II
7445	High-Temperature Grease	2	Berutox FH 28 KN
7455	Low-Speed Grease	1 or 2	High-Lub FA 50 MO
7523	Spray Lubricants Open Gear Unit	1	Berulit 443
7525		00	Berulit EL 420
7527		0 or 00	Berulit GA 400
7529		0 or 00	Berulit GA 800
7531		0 or 00	Berulit GA 2500
7555	Anti-friction Lubricant		See page 22

* SAE 15W-40

FLS Lubricants

Oil Company: **Castrol**

MAT No.	Type of lubricant	ISO VG	Product name
7012	Hydraulic Oils, HVI	10	Hyspin AWS 10
7013		15	Hyspin AWH-M 15
7024	Hydraulic Oils, HM	32	Hyspin AWS 32
7025		46	Hyspin AWS 46
7026		68	Hyspin AWS 68
7034	Compressor Oils	68	Aircol PD 68
7036		100	Aircol PD 100
7053	Turbine Oils for Rotary Compressors	32	Perfecto T 32
7054		46	Perfecto T 46
7055		68	Perfecto T 68
7114	Pneumatic Tool Oils	32	Not available
7115		46	Not available
7123	Oils for Rotary Blowers	150	Alpha Max 150, Alpha SP 150
7124		220	Alpha Max 220, Alpha SP 220
7134	Cylinder Oils	460	Not available
7136		1000	Cresta 1000
7152	Enclosed Gear Unit Oils	100	Alpha Max 100, Alpha SP 100
7153		150	Alpha Max 150, Alpha SP 150
7154		220	Alpha Max 220, Alpha SP 220
7155		320	Alpha Max 320, Alpha SP 320
7156		460	Alpha Max 460, Alpha SP 460
7157		680	Alpha SP 680
7158		1000	Alpha SP 1000
7175	Heat Transfer Oil	32	Perfecto HT 5
7195	Transformer Oil	7 or 10	Insulating Oil BS 148
7215	Flushing Oil	22	Hyspin AWS 22
7235	Engine Oil	15W-40*	Turbomax 15W/40
7253	Open Gear Unit Lubricants		See page 22
7256			See page 22
7257			See page 22
7265			Not available
7285	Wire Lubricant		Not available
7341	Synthetic Oils Polyalphaolefin	32	Not available
7342		46	Not available
7344		100	Not available
7345		150	Alphasyn T 150
7346		220	Not available
7347		320	Not available
7348		460	Alphasyn T 460
7349		680	Not available
7350		1000	See page 22
7353	Synthetic Oils Polyglycol	150	Alphasyn PG 150
7354		220	Alphasyn PG 220
7355		320	Alphasyn PG 320
7356		460	Alphasyn PG 460
7357		680	Not available
		NLGI	
7425	Multipurpose Grease	2	Castrol LMX
7435	Low-Temperature Grease	2	Castrol LM
7445	High-Temperature Grease	2	Not available
7455	Low-Speed Grease	1 or 2	Not available
7523	Spray Lubricants Open Gear Unit	1	See page 22
7525		00	See page 22
7527		0 or 00	See page 22
7529		0 or 00	See page 22
7531		0 or 00	See page 22
7555			See page 22
7555	Anti-friction Lubricant		See page 22

* SAE 15W-40

FLS Lubricants

Oil Company: Engen Petroleum Lmt.

MAT No.	Type of lubricant	ISO VG	Product name
7012	Hydraulic Oils, HVI	10	Not available
7013		15	Engen TQH 10/15
7024	Hydraulic Oils, HM	32	Engen TQH 20/32
7025		46	Engen TQH 20/46
7026		68	Engen TQH 20/68
7034		68	Genair 68
7036	Compressor Oils	100	Genair 100
7053	Turbine Oils for Rotary Compressors	32	Engen Turbine 32
7054		46	Engen Turbine 46
7055		68	Engen Turbine 68
7114	Pneumatic Tool Oils	32	Not available
7115		46	Gentool 46
7123	Oils for Rotary Blowers	150	Gencirc 150
7124		220	Gencirc 220
7134	Cylinder Oils	460	Gencyl 460
7136		1000	Gencyl 1000
7152	Enclosed Gear Unit Oils	100	Gengear 100
7153		150	Gengear 150
7154		220	Gengear 220
7155		320	Gengear 320
7156		460	Gengear 460
7157		680	Gengear 680
7158		1000	Gengear 1000
7175	Heat Transfer Oil	32	Genheat 32
7195	Transformer Oil	7 or 10	Engen Transformer Oil
7215	Flushing Oil	22	Genheat 22
7235	Engine Oil	15W-40*	Engen Dieselube 500 Super
7253	Open Gear Unit Lubricants		See page 22
7256			See page 22
7257			See page 22
7265			Not available
7285	Wire Lubricant		Genshield Heavy
7341	Synthetic Oils Polyalphaolefin	32	Not available
7342		46	Not available
7344		100	Not available
7345		150	Gencirc SPL 4150
7346		220	Not available
7347		320	Not available
7348		460	Gencirc SPL 4460
7349		680	Not available
7350		1000	Not available
7353	Synthetic Oils Polyglycol	150	Gengear SPL 150
7354		220	Gengear SPL 220
7355		320	Not available
7356		460	Not available
7357		680	Not available
		NLGI	
7425	Multipurpose Grease	2	Engen Genlite EP 22
7435	Low-Temperature Grease	2	Engen Gengrease SPL 2HT
7445	High-Temperature Grease	2	Engen Gengrease HT 41M
7455	Low-Speed Grease	1 or 2	Engen Genlite EP 62
7523	Spray Lubricants Open Gear Unit	1	See page 22
7525		00	See page 22
7527		0 or 00	See page 22
7529		0 or 00	See page 22
7531		0 or 00	See page 22
7555	Anti-friction Lubricant		See page 22

* SAE 15W-40

FLS Lubricants

Oil Company: **ESSO / EXXON**

MAT No.	Type of lubricant	ISO VG	Product name
7012	Hydraulic Oils, HVI	10	Not available
7013		15	Univis N 15
7024	Hydraulic Oils, HM	32	Nuto H 32
7025		46	Nuto H 46
7026		68	Nuto H 68
7034	Compressor Oils	68	Exxolub 68
7036		100	Exxolub 100
7053	Turbine Oils for Rotary Compressors	32	Terepso 32
7054		46	Terepso 46
7055		68	Terepso 68
7114	Pneumatic Tool Oils	32	Not available
7115		46	Arox EP 46
7123	Oils for Rotary Blowers	150	Teresso 150, Nuto 150
7124		220	Teresso 220, Nuto 220
7134	Cylinder Oils	460	Cylepso TK 460
7136		1000	Cylepso 1000
7152	Enclosed Gear Unit Oils	100	Spartan EP 100
7153		150	Spartan EP 150
7154		220	Spartan EP 220
7155		320	Spartan EP 320
7156		460	Spartan EP 460
7157		680	Spartan EP 680
7158		1000	Not available
7175	Heat Transfer Oil	32	Essotherm 500
7195	Transformer Oil	7 or 10	Univolt N 53
7215	Flushing Oil	22	Nuto H 22
7235	Engine Oil	15W-40*	Essolube XT 301
7253	Open Gear Unit Lubricants		See page 22
7256			See page 22
7257			See page 22
7265			Not available
7285	Wire Lubricant		Not available
7341	Synthetic Oils Polyalphaolefin	32	Not available
7342		46	Not available
7344		100	Not available
7345		150	Spartan Synthetic EP 150
7346		220	Spartan Synthetic EP 220
7347		320	Spartan Synthetic EP 320
7348		460	Not available
7349		680	Not available
7350		1000	Spartan Synthetic EP 1000 or Terrestic SHP 1000
7353	Synthetic Oils Polyglycol	150	Not available
7354		220	Essol Glycolube 220
7355		320	Not available
7356		460	Essol Glycolube 460
7357		680	Not available
		NLGI	
7425	Multipurpose Grease	2	Beacon EP 2
7435	Low-Temperature Grease	2	Beacon EP 2
7445	High-Temperature Grease	2	Unirex N 2
7455	Low-Speed Grease	1 or 2	Not available
7523	Spray Lubricants Open Gear Unit	1	See page 22
7525		00	See page 22
7527		0 or 00	See page 22
7529		0 or 00	See page 22
7531		0 or 00	See page 22
7555	Anti-friction Lubricant		See page 22

* SAE 15W-40

FLS Lubricants

Oil Company: Fuchs Lubritech GmbH

MAT No.	Type of lubricant	ISO VG	Product name
7012	Hydraulic Oils, HVI	10	Renolin MR 3
7013		15	Renolin MR 310
7024	Hydraulic Oils, HM	32	Renolin B 10
7025		46	Renolin B 15
7026		68	Renolin B 20
7034		68	Renolin 102 L
7036	Compressor Oils	100	Renolin 104 L
7053	Turbine Oils for Rotary Compressors	32	Renolin SC 32
7054		46	Renolin SC 46
7055		68	Renolin SC 68
7114	Pneumatic Tool Oils	32	Not available
7115		46	Not available
7123	Oils for Rotary Blowers	150	Renolin DTA 150
7124		220	Renolin DTA 220
7134	Cylinder Oils	460	Not available
7136		1000	Renolin CH 500
7152	Enclosed Gear Unit Oils	100	Gearmaster CLP 100
7153		150	Gearmaster CLP 150
7154		220	Gearmaster CLP 220
7155		320	Gearmaster CLP 320
7156		460	Gearmaster CLP 460
7157		680	Gearmaster CLP 680
7158		1000	Gearmaster CLP 1000
7175	Heat Transfer Oil	32	Renolin Therm 350 S
7195	Transformer Oil	7 or 10	Renolin E 7
7215	Flushing Oil	22	Renolin MR 5
7235	Engine Oil	15W-40*	Titan Universal HD 1540
7253	Open Gear Unit Lubricants		Ceplattyn 100 HV
7256			Ceplattyn RN
7257			Ceplattyn 100 HV
7265			Ceplattyn 300, Ceplattyn KG 10 HMF
7285	Wire Lubricant		Ceplattyn 300, Ceplattyn BL
7341	Synthetic Oils Polyalphaolefin	32	Not available
7342		46	Not available
7344		100	Gearmaster SYN 100
7345		150	Gearmaster SYN 150
7346		220	Not available
7347		320	Not available
7348		460	Gearmaster SYN 460
7349		680	Gearmaster SYN 680
7350		1000	See page 22
7353	Synthetic Oils Polyglycol	150	Gearmaster PGP 150
7354		220	Gearmaster PGP 220
7355		320	Gearmaster PGP 320
7356		460	Gearmaster PGP 460
7357		680	Gearmaster PGP 680
		NLGI	
7425	Multipurpose Grease	2	Urethyn MP 2
7435	Low-Temperature Grease	2	Stabyl LT 50
7445	High-Temperature Grease	2	Urethyn MP 2
7455	Low-Speed Grease	1 or 2	Stabyl HD
7523	Spray Lubricants Open Gear Unit	1	Ceplattyn 300
7525		00	Ceplattyn RN
7527		0 or 00	Ceplattyn KG 10 HMF
7529		0 or 00	Ceplattyn KG 10 HMF
7531		0 or 00	Ceplattyn KG 10 HMF
7555	Anti-friction Lubricant		Ceplattyn HT

* SAE 15W-40

FLS Lubricants
Oil Company: Klüber Lubrication

MAT No.	Type of lubricant	ISO VG	Product name
7012	Hydraulic Oils, HVI	10	Not available
7013		15	Not available
7024	Hydraulic Oils, HM	32	Klüberoil 4 UH 1-32
7025		46	Klüberoil 4 UH 1-46
7026		68	Klüberoil 4 UH 1-68
7034	Compressor Oils	68	Klüber - Summit DSL 68
7036		100	Klüber - Summit DSL 100
7053	Turbine Oils for Rotary Compressors	32	Klüber - Summit SH 32
7054		46	Klüber - Summit SH 46
7055		68	Klüber - Summit SH 68
7114	Pneumatic Tool Oils	32	Not available
7115		46	Not available
7123	Oils for Rotary	150	Klüberoil GEM 1-150
7124	Blowers	220	Klüberoil GEM 1-220
7134	Cylinder Oils	460	Not available
7136		1000	Not available
7152	Enclosed Gear Unit Oils	100	Klüberoil GEM 1-100
7153		150	Klüberoil GEM 1-150
7154		220	Klüberoil GEM 1-220
7155		320	Klüberoil GEM 1-320
7156		460	Klüberoil GEM 1-460
7157		680	Klüberoil GEM 1-680
7158		1000	Not available
7175	Heat Transfer Oil	32	Not available
7195	Transformer Oil	7 or 10	Not available
7215	Flushing Oil	22	Not available
7235	Engine Oil	15W-40*	Not available
7253	Open Gear Unit Lubricants		Klüberfluid C-F 1 Ultra
7256			Klüberfluid B-F 1 Ultra
7257			Klüberfluid C-F 4 Ultra
7265			Grafloscon CA 901 Ultra Spray
7285	Wire Lubricant		Grafloscon C-SG 2000 Ultra
7341	Synthetic Oils Polyalphaolefin	32	Klübersynth GEM 4-32
7342		46	Klübersynth GEM 4-46
7344		100	Klübersynth GEM 4-100
7345		150	Klübersynth GEM 4-150
7346		220	Not available
7347		320	Not available
7348		460	Klübersynth GEM 4-460
7349		680	Klübersynth GEM 4-680
7350	Synthetic Oils Polyglycol	1000	Klübersynth EG 4 -1000
7353		150	Klübersynth GH 6-150
7354		220	Klübersynth GH 6-220
7355		320	Klübersynth GH 6-320
7356		460	Klübersynth GH 6-460
7357		680	Klübersynth GH 6-680
		NLGI	
7425	Multipurpose Grease	2	Microlobe GL 262
7435	Low-Temperature Grease	2	Microlobe GL 261
7445	High-Temperature Grease	2	Barrierta L 55-2
7455	Low-Speed Grease	1 or 2	Klüberlub BE 41-1501
7523	Spray Lubricants Open Gear Unit	1	Grafloscon A-G 1 Ultra
7525		00	Grafloscon B-SG 00 Ultra
7527		0 or 00	Grafloscon C-SG 0 Ultra
7529		0 or 00	Grafloscon C-SG 1000 Ultra
7531		0 or 00	Grafloscon C-SG 2000 Ultra
7555	Anti-friction Lubricant		Wolfracoat C

* SAE 15W-40

FLS Lubricants

Oil Company: **Krafft**

MAT No.	Type of lubricant	ISO VG	Product name
7012	Hydraulic Oils, HVI	10	Not available
7013		15	Not available
7024	Hydraulic Oils, HM	32	FH-32 EP
7025		46	FH-46 EP
7026		68	FH-68 EP
7034		68	Kroil Basela 60 CP
7036	Compressor Oils	100	Kroil Basela 120 CP
7053	Turbine Oils for Rotary Compressors	32	Lubekrafft 17672 – TH 32
7054		46	Lubekrafft 17672 – TH 46
7055		68	Lubekrafft 17672 – TH 68
7114	Pneumatic Tool Oils	32	Not available
7115		46	Kroil Basela 50 PF
7123	Oils for Rotary Blowers	150	Kroil Basela 150
7124		220	Kroil Basela 220
7134	Cylinder Oils	460	Not available
7136		1000	Not available
7152	Enclosed Gear Unit Oils	100	Kroil Basela 100
7153		150	Kroil Basela 150
7154		220	Kroil Basela 220
7155		320	Kroil Basela 320
7156		460	Kroil Basela 460
7157		680	Kroil Basela 680
7158		1000	Kroil Basela 1000
7175	Heat Transfer Oil	32	Kroil Multigrado Termico
7195	Transformer Oil	7 or 10	Kroil Transformador
7215	Flushing Oil	22	FH-22
7235	Engine Oil	15W-40*	Multigrade 15W40 Injection TDI
7253	Open Gear Unit Lubricants		KGP-2/P
7256			KGP-2/P-E
7257			KGP-2/M
7265			KL Complex 2000 and KP-6 Spray
7285	Wire Lubricant		Not available
7341	Synthetic Oils Polyalphaolefin	32	Not available
7342		46	Not available
7344		100	Not available
7345		150	Kroil Sintlube 150
7346		220	Kroil Sintlube 220
7347		320	Kroil Sintlube 320
7348		460	Kroil Sintlube 460
7349		680	Not available
7350		1000	Not available
7353		150	Kroil Sintgear 150 G
7354	Synthetic Oils Polyglycol	220	Kroil Sintgear 220 G
7355		320	Kroil Sintgear 320 G
7356		460	Kroil Sintgear 460 G
7357		680	Not available
		NLGI	
7425	Multipurpose Grease	2	KEP-2 and KMS
7435	Low-Temperature Grease	2	KL-EP 2
7445	High-Temperature Grease	2	Sitela 2
7455	Low-Speed Grease	1 or 2	KL Complex 2000
7523	Spray Lubricants Open Gear Unit	1	Q3-4612
7525		00	KGP-2/P-E
7527		0 or 00	KGP-2/P
7529		0 or 00	KGP-2/P
7531		0 or 00	KGP-2/Plex 1500 (Base oil of ISO VG 2500)
7555	Anti-friction Lubricant		See page 22

* SAE 15W-40

FLS Lubricants

Oil Company: **Kuwait Petroleum**

MAT No.	Type of lubricant	ISO VG	Product name
7012	Hydraulic Oils, HVI	10	Q8 Haydn 10
7013		15	Q8 Handel 15
7024	Hydraulic Oils, HM	32	Q8 Haydn 32
7025		46	Q8 Haydn 46
7026		68	Q8 Haydn 68
7034		68	Q8 Schubert 68
7036	Compressor Oils	100	Q8 Schubert 100
7053	Turbine Oils for Rotary Compressors	32	Q8 Van Gogh 32
7054		46	Q8 Van Gogh 46
7055		68	Q8 Van Gogh 68
7114	Pneumatic Tool Oils	32	Not available
7115		46	Q8 Chopin 46
7123	Oils for Rotary Blowers	150	Q8 Goya 150
7124		220	Q8 Goya 220
7134	Cylinder Oils	460	Not available
7136		1000	Not available
7152	Enclosed Gear Unit Oils	100	Q8 Goya 100
7153		150	Q8 Goya 150
7154		220	Q8 Goya 220
7155		320	Q8 Goya 320
7156		460	Q8 Goya 460
7157		680	Q8 Goya 680
7158		1000	Not available
7175	Heat Transfer Oil	32	Q8 Gluck M
7195	Transformer Oil	7 or 10	Q8 Michelangelo S
7215	Flushing Oil	22	Q8 Haydn 22
7235	Engine Oil	15W-40*	Q8 T500 15W-40
7253	Open Gear Unit Lubricants		See page 22
7256			See page 22
7257			See page 22
7265			Q8 Giotto
7285	Wire Lubricant		Q8 Giotto
7341	Synthetic Oils Polyalphaolefin	32	Q8 Schumann 32
7342		46	Q8 Schumann 46
7344		100	Q8 Schumann 100
7345		150	Q8 Schumann 150
7346		220	Not available
7347		320	Not available
7348		460	Not available
7349		680	Not available
7350	Synthetic Oils Polyglycol	1000	Not available
7353		150	Not available
7354		220	Q8 Gade 220
7355		320	Q8 Gade 320
7356		460	Q8 Gade 460
7357		680	Not available
		NLGI	
7425	Multipurpose Grease	2	Q8 Rembrandt EP 2
7435	Low-Temperature Grease	2	Q8 Rubens LT 2
7445	High-Temperature Grease	2	Q8 Rubens WB
7455	Low-Speed Grease	1 or 2	Q8 Ruysdael WR 2
7523	Spray Lubricants Open Gear Unit	1	See page 22
7525		00	See page 22
7527		0 or 00	See page 22
7529		0 or 00	See page 22
7531		0 or 00	See page 22
7555	Anti-friction Lubricant		See page 22

- SAE 15W-40

FLS Lubricants

Oil Company: Mobil

MAT No.	Type of lubricant	ISO VG	Product name
7012	Hydraulic Oils, HVI	10	Not available
7013		15	Mobil DTE 11M
7024	Hydraulic Oils, HM	32	Mobil DTE 24
7025		46	Mobil DTE 25
7026		68	Mobil DTE 26
7034		68	Mobil Rarus 425 (ISO VG 46)
7036	Compressor Oils	100	Mobil Rarus 427
7053	Turbine Oils for Rotary Compressors	32	Mobil DTE Light
7054		46	Mobil DTE Medium
7055		68	Mobil DTE Heavy Medium
7114	Pneumatic Tool Oils	32	Not available
7115		46	Mobil Almo 525
7123	Oils for Rotary Blowers	150	Mobil DTE Extra Heavy
7124		220	Mobil DTE BB
7134	Cylinder Oils	460	Mobil 600W Super Cylinder Oil
7136		1000	Mobil Extra Hecla Super Cylinder Oil
7152	Enclosed Gear Unit Oils	100	Mobilgear 627
7153		150	Mobilgear XMP 150
7154		220	Mobilgear XMP 220
7155		320	Mobilgear XMP 320
7156		460	Mobilgear XMP 460
7157		680	Mobilgear XMP 680
7158		1000	Not available
7175	Heat Transfer Oil	32	Mobiltherm 605
7195	Transformer Oil	7 or 10	Mobillect 77
7215	Flushing Oil	22	Mobil DTE 22
7235	Engine Oil	15W-40*	Mobil Delvac MX (15W-40)
7253	Open Gear Unit Lubricants		See page 22
7256			See page 22
7257			See page 22
7265			Mobilgear OGL 007
7285	Wire Lubricant		Mobilarma 798
7341	Synthetic Oils Polyalphaolefin	32	Not available
7342		46	Not available
7344		100	Not available
7345		150	Mobilgear SHC XMP 150
7346		220	Mobilgear SHC XMP 220
7347		320	Mobilgear SHC XMP 320
7348		460	Mobilgear SHC XMP 460
7349		680	Mobilgear SHC XMP 680
7350		1000	Mobil SHC 639
7353	Synthetic Oils Polyglycol	150	Mobil Glygoyle 22
7354		220	Mobil Glygoyle 30
7355		320	Mobil Glygoyle HE 320
7356		460	Mobil Glygoyle HE 460
7357		680	Mobil Glygoyle HE 680
		NLGI	
7425	Multipurpose Grease	2	Mobilux EP 2
7435	Low-Temperature Grease	2	Mobilith SHC 100
7445	High-Temperature Grease	2	Mobiltemp SHC 100
7455	Low-Speed Grease	1 or 2	Mobilith SHC 1500
7523	Spray Lubricants Open Gear Unit	1	See page 22
7525		00	See page 22
7527		0 or 00	Mobilgear OGL 007
7529		0 or 00	Mobilgear OGL 009
7531		0 or 00	Mobilgear OGL 009
7555	Anti-friction Lubricant		See page 22

* SAE 15W-40

FLS Lubricants

Oil Company: **Optimol Ölwerke Industrie**

MAT No.	Type of lubricant	ISO VG	Product name
7012	Hydraulic Oils, HVI	10	Not available
7013		15	Hydp HV 15
7024	Hydraulic Oils, HM	32	Hydp 32
7025		46	Hydp 46
7026		68	Hydp 68
7034	Compressor Oils	68	Not available
7036		100	Copp 100
7053	Turbine Oils for Rotary Compressors	32	Not available
7054		46	Turbinenöl 46
7055		68	Not available
7114	Pneumatic Tool Oils	32	Not available
7115		46	Not available
7123	Oils for Rotary	150	Ultra 150
7124	Blowers	220	Ultra 220
7134	Cylinder Oils	460	Not available
7136		1000	Not available
7152	Enclosed Gear Unit Oils	100	Optigear BM 100
7153		150	Optigear BM 150
7154		220	Optigear BM 220
7155		320	Optigear BM 320
7156		460	Optigear BM 460
7157		680	Optigear BM 680
7158		1000	Optigear BM 1000
7175	Heat Transfer Oil	32	Heat Transfer Oil 28
7195	Transformer Oil	7 or 10	Not available
7215	Flushing Oil	22	Hydo 22
7235	Engine Oil	15W-40*	Optilub Longlife 15 W 40
7253	Open Gear Unit Lubricants		See page 22
7256			See page 22
7257			See page 22
7265			Viscogen 4
7285	Wire Lubricant		Viscogen KL 300
7341	Synthetic Oils Polyalphaolefin	32	Not available
7342		46	Not available
7344		100	Optigear Synthetic A 100
7345		150	Not available
7346		220	Not available
7347		320	Not available
7348		460	Optigear Synthetic A 460
7349		680	Not available
7350		1000	Not available
7353		150	Optiflex A 150
7354	Synthetic Oils Polyglycol	220	Optiflex A 220
7355		320	Optiflex A 320
7356		460	Optiflex A 460
7357		680	Optiflex A 680
		NLGI	
7425	Multipurpose Grease	2	Olista Longtime 2
7435	Low-Temperature Grease	2	Longtime PD 2
7445	High-Temperature Grease	2	Firetemp XT 2
7455	Low-Speed Grease	1 or 2	Optipit
7523	Spray Lubricants Open Gear Unit	1	See page 22
7525		00	See page 22
7527		0 or 00	See page 22
7529		0 or 00	See page 22
7531		0 or 00	See page 22
7555			See page 22
7555	Anti-friction Lubricant		See page 22

* SAE 15W-40

FLS Lubricants

Oil Company: **Rocol**

MAT No.	Type of lubricant	ISO VG	Product name
7012	Hydraulic Oils, HVI	10	Not available
7013		15	Rocol Sapphire Hi-Power 15
7024	Hydraulic Oils, HM	32	Rocol Sapphire Hi-Power 32
7025		46	Rocol Sapphire Hi-Power 46
7026		68	Rocol Sapphire Hi-Power 68
7034		68	Rocol Sapphire Hi-Bar 68
7036	Compressor Oils	100	Rocol Sapphire Hi-Bar 100
7053	Turbine Oils for Rotary Compressors	32	Not available
7054		46	Not available
7055		68	Not available
7114	Pneumatic Tool Oils	32	Not available
7115		46	Not available
7123	Oils for Rotary Blowers	150	Not available
7124		220	Rocol Sapphire Hi-Torque 220
7134	Cylinder Oils	460	Not available
7136		1000	Not available
7152	Enclosed Gear Unit Oils	100	Rocol Sapphire Hi-Torque 100
7153		150	Not available
7154		220	Rocol Sapphire Hi-Torque 220
7155		320	Rocol Sapphire Hi-Torque 320
7156		460	Rocol Sapphire Hi-Torque 460
7157		680	Rocol Sapphire Hi-Torque 680
7158		1000	Not available
7175	Heat Transfer Oil	32	Not available
7195	Transformer Oil	7 or 10	Not available
7215	Flushing Oil	22	Not available
7235	Engine Oil	15W-40*	Not available
7253	Open Gear Unit Lubricants		See page 22
7256			See page 22
7257			See page 22
7265			Rocol Tufgear 85 & 90
7285	Wire Lubricant		Rocol Wire Rope Dressing
7341	Synthetic Oils Polyalphaolefin	32	Not available
7342		46	Not available
7344		100	Not available
7345		150	Not available
7346		220	Not available
7347		320	Not available
7348		460	Not available
7349		680	Not available
7350		1000	Not available
7353	Synthetic Oils Polyglycol	150	Not available
7354		220	Not available
7355		320	Not available
7356		460	Not available
7357		680	Not available
		NLGI	
7425	Multipurpose Grease	2	Rocol Sapphire 2
7435	Low-Temperature Grease	2	Rocol Sapphire Lo-Temp 2
7445	High-Temperature Grease	2	Rocol Sapphire Hi-Temp 2
7455	Low-Speed Grease	1 or 2	Not available
7523	Spray Lubricants Open Gear Unit	1	See page 22
7525		00	See page 22
7527		0 or 00	See page 22
7529		0 or 00	See page 22
7531		0 or 00	See page 22
7555	Anti-friction Lubricant		See page 22

* SAE 15W-40

FLS Lubricants

Oil Company: **Shell**

MAT No.	Type of lubricant	ISO VG	Product name
7012	Hydraulic Oils, HVI	10	Not available
7013		15	Tellus T 15
7024	Hydraulic Oils, HM	32	Tellus 32
7025		46	Tellus 46
7026		68	Tellus 68
7034	Compressor Oils	68	Corena P 68 (Pist.) Corena S 68 (Rot.)
7036		100	Corena P 100 (Pist.) Corena S 100 (Rot.)
7053	Turbine Oils for Rotary Compressors	32	Turbo T 32
7054		46	Turbo T 46
7055		68	Turbo T 68
7114	Pneumatic Tool Oils	32	Torcula 32
7115		46	Not available
7123	Oils for Rotary	150	Omala 150 or Morlina 150
7124	Blowers	220	Omala 220 or Morlina 220
7134	Cylinder Oils	460	Valvata 460
7136		1000	Valvata 1000
7152	Enclosed Gear Unit Oils	100	Omala 100
7153		150	Omala 150
7154		220	Omala 220
7155		320	Omala 320
7156		460	Omala 460
7157		680	Omala 680
7158		1000	Not available
7175	Heat Transfer Oil	32	Thermia B
7195	Transformer Oil	7 or 10	Diala B
7215	Flushing Oil	22	Tellus 22
7235	Engine Oil	15W-40*	Rimula TX 15W-40
7253	Open Gear Unit Lubricants		See page 22
7256			See page 22
7257			See page 22
7265			Malleus OGH
7285	Wire Lubricant		Ensis Fluid SX
7341	Synthetic Oils Polyalphaolefin	32	Not available
7342		46	Not available
7344		100	Omala HD 100
7345		150	Omala HD 150
7346		220	Not available
7347		320	Not available
7348		460	Omala HD 460
7349		680	Omala HD 680
7350		1000	Omala HD 1000
7353	Synthetic Oils Polyglycol	150	Tivela WA
7354		220	Tivela WB
7355		320	Tivela SC
7356		460	Tivela SD
7357		680	Not available
		NLGI	
7425	Multipurpose Grease	2	Albida EP2 or Alvania EP2
7435	Low-Temperature Grease	2	Albida EMS2 or Alvania RL2
7445	High-Temperature Grease	2	Stamina EP2 or Stamina HDS2
7455	Low-Speed Grease	1 or 2	Albida HD2 or Limona LX2
7523	Spray Lubricants Open Gear Unit	1	See page 22
7525		00	See page 22
7527		0 or 00	See page 22
7529		0 or 00	See page 22
7531		0 or 00	See page 22
7555	Anti-friction Lubricant		See page 22

* SAE 15W-40

FLS Lubricants

Oil Company: **Statoil**

MAT No.	Type of lubricant	ISO VG	Product name
7012	Hydraulic Oils, HVI	10	Not available
7013		15	HydraWay HVXA 15
7024	Hydraulic Oils, HM	32	HydraWay HM 32, HydraWay HMA 32
7025		46	HydraWay HM 46, HydraWay HMA 46
7026		68	HydraWay HM 68, HydraWay HMA 68
7034	Compressor Oils	68	CompWay 68
7036		100	CompWay 100
7053	Turbine Oils for Rotary Compressors	32	TurbWay 32
7054		46	TurbWay 46
7055		68	TurbWay 68
7114	Pneumatic Tool Oils	32	RockWay EP 32
7115		46	RockWay EP 46
7123	Oils for Rotary Blowers	150	LubeWay XA 150
7124		220	LubeWay XA 220
7134	Cylinder Oils	460	CylWay 460
7136		1000	CylWay 1000
7152	Enclosed Gear Unit Oils	100	LoadWay EP 100
7153		150	LoadWay EP 150
7154		220	LoadWay EP 220
7155		320	LoadWay EP 320
7156		460	LoadWay EP 460
7157		680	LoadWay EP 680
7158		1000	LoadWay EP 1000
7175	Heat Transfer Oil	32	ThermWay 32
7195	Transformer Oil	7 or 10	VoltWay N7 X
7215	Flushing Oil	22	HydraWay HV 22
7235	Engine Oil	15W-40*	PowerWay 15W-40
7253	Open Gear Unit Lubricants		See page 22
7256			See page 22
7257			See page 22
7265			Not available
7285	Wire Lubricant		GreaseWay CaH 92 (spray)
7341	Synthetic Oils Polyalphaolefin	32	Mereta 32
7342		46	Mereta 46
7344		100	Mereta 100
7345		150	Mereta 150
7346		220	Not available
7347		320	Not available
7348		460	Mereta 460
7349		680	Mereta 680
7350		1000	See page 22
7353	Synthetic Oils Polyglycol	150	LoadWay SY 150
7354		220	LoadWay SY 220
7355		320	LoadWay SY 320
7356		460	LoadWay SY 460
7357		680	LoadWay SY 680
		NLGI	
7425	Multipurpose Grease	2	UniWay Li 62
7435	Low-Temperature Grease	2	UniWay Li 42
7445	High-Temperature Grease	2	UniWay LiX 625
7455	Low-Speed Grease	1 or 2	GreaseWay CaH 92
7523	Spray Lubricants Open Gear Unit	1	See page 22
7525		00	See page 22
7527		0 or 00	See page 22
7529		0 or 00	See page 22
7531		0 or 00	See page 22
7555	Anti-friction Lubricant		See page 22

* SAE 15W-40

FLS Lubricants

Oil Company: **Tribol/Molub-Alloy**

MAT No.	Type of lubricant	ISO VG	Product name
7012	Hydraulic Oils, HVI	10	Not available
7013		15	Not available
7024	Hydraulic Oils, HM	32	Tribol 943 AW 32
7025		46	Tribol 943 AW 46
7026		68	Tribol 943 AW 68
7034	Compressor Oils	68	Tribol 890/68
7036		100	Tribol 890/100
7053	Turbine Oils for Rotary Compressors	32	Tribol 1555/32, Tribol 943 AW 32
7054		46	Tribol 1555/46, Tribol 943 AW 46
7055		68	Tribol 1555/68, Tribol 943 AW 68
7114	Pneumatic Tool Oils	32	Tribol ATO 100 LS
7115		46	Not available
7123	Oils for Rotary	150	Tribol 1100/150
7124	Blowers	220	Tribol 1100/220
7134	Cylinder Oils	460	Not available
7136		1000	Not available
7152	Enclosed Gear Unit Oils	100	Tribol 1100/100
7153		150	Tribol 1100/150
7154		220	Tribol 1100/220
7155		320	Tribol 1100/320
7156		460	Tribol 1100/460
7157		680	Tribol 1100/680
7158		1000	Tribol 1100/1000
7175	Heat Transfer Oil	32	Not available
7195	Transformer Oil	7 or 10	Not available
7215	Flushing Oil	22	Not available
7235	Engine Oil	15W-40*	Not available
7253	Open Gear Unit Lubricants		Molub-Alloy 8031/3000-00
7256			See page 22
7257			Molub-Alloy 8031/3000-00
7265			Molub-Alloy 876 Heavy, Molub-Alloy 9790/2500-1
7285	Wire Lubricant		Molub-Alloy 909 Heavy
7341	Synthetic Oils Polyalphaolefin	32	Tribol 1555/32
7342		46	Tribol 1555/46
7344		100	Tribol 1510/100
7345		150	Tribol 1510/150
7346		220	Not available
7347		320	Not available
7348		460	Tribol 1510/460
7349		680	Tribol 1510/680
7350		1000	See page 22
7353	Synthetic Oils Polyglycol	150	Tribol 800/150
7354		220	Tribol 800/220
7355		320	Tribol 800/320
7356		460	Tribol 800/460
7357		680	Tribol 800/680
		NLGI	
7425	Multipurpose Grease	2	Tribol 4020/220-2, Molub-Alloy 860/220-2
7435	Low-Temperature Grease	2	Tribol 3785
7445	High-Temperature Grease	2	Tribol 4747/220-2
7455	Low-Speed Grease	1 or 2	Tribol 3020/1000-1, Tribol 3020/1000-2
7523	Spray Lubricants Open Gear Unit	1	Molub-Alloy 5011
7525		00	Molub-Alloy 5011
7527		0 or 00	Molub-Alloy 9790/2500-0
7529		0 or 00	Molub-Alloy 9790/2500-0
7531		0 or 00	Molub-Alloy 9790/2500-0
7555	Anti-friction Lubricant		See page 22

* SAE 15W-40

4. Special lubricants

Special lubricant approved by FLS for the mentioned applications.

All other products have either shown insufficient lubrication or have never been tested.

Lubricant MAT No.	Type of lubricant	Applications	Approved manufacturers
7253 (3)	Kiln and mill gear lubricants	Open gears with dip lubrication. Kiln and mill gear rims	Fuchs Lubritech*: Ceplattyn 100 HV Klüber Lubrication: Klüberfluid C-F 2 Ultra Molub-Alloy 8031/3000-00
7256 (2)			Carl Bechem: Berulit EL420 Fluid Fuchs Lubritech*: Ceplattyn RN Klüber Lubrication: Klüberfluid B-F 1 Ultra
7257 (4) (5)			Carl Bechem: Berulit GA2500 Fluid Fuchs Lubritech*: Ceplattyn 100 HV Klüber Lubrication: Klüberfluid C-F 4 Ultra Molub-Alloy 8031/3000-00
7350	Synthetic oil polyalphaolefin (PAO)	Atox roller bearings	Carl Bechem: Berusynth GP 1000 Esso (China): Spartan Synthetic EP 1000 Exxon: Terrestic SHP 1000 Klüber Lubrication: Klübersynth EG 4 – 1000 Mobil: SHC 639 Shell: Omala HD 1000
7523 (1)	Spray lubricant Kiln and mill gear unit	Kiln and mill gear units with automatic spray lubrication	Carl Bechem: Berulit 443 Fuchs Lubritech*: Ceplattyn 300 Klüber Lubrication: Grafloscon A-G 1 Ultra Krafft S. A.: Q3 4612 Molub-Alloy 5011
7525 (2)			Carl Bechem: Berulit EL 420 Fuchs Lubritech*: Ceplattyn RN Klüber Lubrication: Grafloscon B-SG 00 Ultra Krafft S. A.: KGP-2/PE Molub-Alloy 5011
7527 (3)			Carl Bechem: Berulit GA 400 Fuchs Lubritech*: Ceplattyn KG 10 HMF Klüber Lubrication: Grafloscon C-SG 0 Ultra Krafft S. A.: KGP-2/P Mobil: Mobilgear OGL 007 Molub-Alloy 8031/3000-00 or 9790/2500-0
7529 (4)			Carl Bechem: Berulit GA 800 Fuchs Lubritech*: Ceplattyn KG 10 HMF Klüber Lubrication: Grafloscon C-SG 1000 Ultra Krafft S. A.: KGP-2/P Mobil: Mobilgear OGL 009 Molub-Alloy 8031/3000-00 or 9790/2500-0
7531 (5)			Carl Bechem: Berulit GA 2500 Fuchs Lubritech*: Ceplattyn KG 10 HMF Klüber Lubrication: Grafloscon C-SG 2000 Ultra Krafft S. A.: KGP-2/Plex 1500 Mobil: Mobilgear OGL 009 Molub-Alloy 8031/3000-00 or 9790/2500-0
7555	Anti-friction lubricant	Heavy loaded bearings, and moving parts, low speed and intermittent movement	A. W. Chesterton Co.: 785 Parting Lubricant Fuchs Lubritech*: Ceplattyn HT Klüber Lubrication: Wolfracoat C

* Fuchs Lubritech previously Reiner Chemische Fabrik

- (1) Priming lubricant, to be applied by hand before start-up. Not to be used in the spray lubrication equipment
- (2) Running-in lubricant
- (3) Operational lubricant for temperated areas, the final choice depends on the operating conditions.
- (4) Operational lubricant for sub-tropical areas, the final choice depends on the operating conditions.
- (5) Operational lubricant for tropical areas, the final choice depends on the operating conditions.

Lubricant Company addresses:

- A. W. Chesterton Co.: A. W. Chesterton Co., 225 Fallon Road, Middlesex Industrial Park,
Stoneham, Massachusetts 02180-2999 USA
Phone: +1 781-438-7000
Fax: +1 781-438-8971
<http://www.chesterton.com>
- Carl Bechem GmbH: Carl Bechem GmbH, Weststrasse 120
D-58089 Hagen, Germany
Phone: +49 (0) 2331-935-0
Fax: +49 (0) 2331-935-199
<http://www.bechem.de>
- Fuchs Lubritech GmbH: Fuchs Lubritech GmbH, Hans-Reiner-Strasse 7-13
D-67685 Weilerbach, Germany
Phone: +49 (0) 6374-924-5
Fax: +49 (0) 6374-924-940
<http://www.fuchs-lubritech.de>
- Klüber Lubrication: Klüber Lubrication München KG, Postfach 701047
D-81310 München, Germany
Phone: +49 (0) 89 7876-0
Fax: +49 (0) 89 7876-333
<http://www.kluber.com>
- Krafft S. A.: Krafft, S. A. P. O. Box - 14
20140 - Andoain (Guipuzcoa), Spain
Phone: +34 943 41 04 60
Fax: +34 943 41 04 24
<http://www.krafft.es>
- Mobil: Exxon Mobil, European EB/EOM Services
Moorburger Bogen 12, D-21079 Hamburg, Germany
Phone: +49 (0)40 7671 1556
Fax: +49 (0)40 7671 1578
<http://www.mobil.com>
- Molub-Alloy: Castrol Industrie GmbH
Erkelenzer Strasse 20
D-41179 Mönchengladbach
Phone: +49 (0) 21 61 9 09 -30
Fax: +49 (0) 21 61 9 09 -400

5. Conversion table: FLS

Before 1979 FLS No.	1979 FLS No.	Old FLS designation	Valid MAT No.
		HY-10/15	7012
		HY-10/15	7013
192	100	HY-32	7024
	101	HY-46	7025
	102,103	HY-68	7026
	112	CP-68	7034
	113	CP-100	7036
		TU-32	7053
		TU-46	7054
		TU-68	7055
	110	PT-32	7114
	111	PT-46	7115
			7123
			7124
157	120	CY-460	7134
	121	CY-1000	7136
	143	EP-100	7152
104, 134, 154	144	EP150	7153
105, 135	145	EP-220	7154
107, 137	147	EP-320	7155
140	148	EP-460	7156
	150	EP-680	7157
		EP-1000	7158
		HT-32	7175
	190	TF-10	7195
		FC-22	7215
183	184	MO-15/40	7235

Before 1979 FLS No.	1979 FLS No.	Old FLS designation	Valid MAT No.
149	160	GL-O	7253
		GL-R	7256
149	160	GL-O	7257
161,162, 165	171,172, 175	GL-H	7265
		WL-P	7285
			7341
			7342
			7344
			7345
			7346
			7347
		SY-460*	7348
		SY-680*	7349
			7350
			7353
			7354
			7355
		SY-460*	7356
		SY-680*	7357
203, 206, 207, 214, 215	204, 220, 230, 240	BG-U	7425
	250	BG-LT	7435
	216	BG-HT	7445
		BG-LS	7455
		SL-P	7523
		SL-R	7525
		SL-O	7527
		SL-O	7529
		SL-O	7531
		FL-U	7555

* SY-460 and SY-680 are designations for polyalphaolefin and polyglycol oils.

---oOo---

Bemærk!

Løse bolte, skruer og kiler kan give anledning til alvorlige maskinskader.

Husk derfor at efterse alle bolte-, skruer- og kileforbindelser nogen tid efter, at en ny eller repareret maskine er taget i brug. Eventuelle løse møtrikker og skruer må ufortøvet efterspændes, og løse kiler drives fast.

Ved korrespondance ang. maskiner, motorer, gear etc. bedes refereret til nummeret, der er stemplet i de respektive mærkeplader.

Note!

Loose bolts, screws, and keys may give rise to serious break-downs.

Examine therefore all bolted, screwed, and keyed joints some time after a new or repaired machine has been put into use. Any slackened nuts or screws must be tightened up immediately, and loose keys driven home.

In correspondence concerning machines, motors, gears, etc. please refer to the number stamped on the name plate of the particular equipment.

Important!

Des avaries sérieuses peuvent survenir aux machines par suite de desserrage de boulons et de vis ou de déblocage de clavettes.

Quelque temps après la mise en service d'une machine neuve ou réparée, il est très important de resserrer les assemblages boulonnés, vissés ou clavetés. Resserrer sans délai les écrous et vis défaits éventuels et enfoncer les clavettes débloquées.

Dans la correspondance concernant les machines, les moteurs, les réducteurs de vitesse, etc., se référer au numéro estampillé sur les plaques signalétiques respectives.

Achtung!

Gelockerte Schrauben, Schraubenmuttern und Keile können zu ernsthaften Maschinenschäden Anlaß geben. Eine passende Zeit nach Inbetriebnahme einer neuen oder ausgebesserten Maschine versäume man daher nicht, sämtliche Schrauben- und Keilverbindungen nachzusehen. Muttern, Schrauben und Keile, die sich etwa gelockert haben, sind unverzüglich nachzuziehen bzw. festzutreiben.

In Briefen, die Maschinen-, Motoren- und Getriebefragen zum Gegenstand haben, bitten wir um Bezugnahme auf die in den betreffenden Kennschildern eingestempelte Nummer.

¡Atención!

Los pernos, tornillos y chavetas sueltos pueden ocasionar graves daños a la maquinaria.

Por este motivo, todas las uniones hechas por pernos, tornillos y chavetas deben repasarse transcurrido algún tiempo después de ser puesta en marcha una máquina nueva o reparada. Los pernos y tornillos flojos deben apretarse en el acto, y las chavetas sueltas deben asegurarse.

En toda la correspondencia sobre maquinaria, motores, reductores, etc., deberá indicarse el número de fabricación que va estampado en la placa de características del elemento en cuestión.

Observar!

Pernos, chavetas e parafusos frouxos podem dar origem a graves avarias nas máquinas.

Convém, pois, inspeccionar regularmente todas as ligações de pernos, chavetas e parafusos, algum tempo depois do início de funcionamento de uma máquina nova ou consertada. Devem-se reapertar imediatamente as porcas e parafusos frouxos e fixar bem as chavetas soltas.

Na correspondência que trate de máquinas, motores, reductores de velocidade etc., pede-se o favor de fazer referência ao número que está gravado nos respectivos letreros.

