Lube oil change intervals for built-in and marine engines

		Lube oil quality							
		DQC I-02		DQC II-05		DQC III-05		DQC IV-05	
	ACEA specification	E2-96		E3-96/E5-02 E7-04		-		E4-99/E6-04	
	API specification	CF/CF-4		CG-4/CH-4/CI-4		Specifications acc. to our company standard. see DQC-			
	worldwide specification	-		DHD-1		-		-	
	DEUTZ Oil 209 Liter 20 Liter 4 x 5 Liter	-		TLS-15W40D 0101 6333 0101 6332 0101 6331		TLX-10W40FE 0101 6337 0101 6336 0101 6335		DQC 4-5W30-UHP 0101 7850 0101 7849 -	
Engine Series	Engine model	Lube oil change intervals in OH							
		Oil load							
		normal	high	normal	high	normal	high	normal	high
B/FM 1008	All engines	125	125	125	125	125	125	125	125
BFM/L 1011	Naturally aspirated engines	1000	500	1000	500	1000	500	1000	500
BFM/L 2011	Charged engines	250	125	500	250	500	250	500	250
TD/D 226	Naturally aspirated engines	500	250	500	250	500	250	500	250
BFL 413/513	Charged engines	250	125	500	250	500	250	500	250
B/FL 912	Naturally aspirated engines	500	250	500	250	500	250	500	250
B/FL 913/914	Charged engines	250	125	500	250	500	250	500	250
	BF6L913/914C with 176 kW at 2500 rpm	-	-	-	-	500	250	500	250
BFM 1012	All engines except:	250		500		500		500	
	Engines in harvesting machines, block combined power stations, electricity generators **	-		-		500		500	
BFM 1013	All engines except:	250		500		500		500	
	Engines as of nonroad stage II	-		500		500		500	
	Engines in harvesting machines, block combined power stations, electricity generators **	-		-		500		500	
	BF4M1013FC	-		-		500		500	
	BF6M1013FC (P ≤ 200 kW), crankcase ventilation open	-		500		500		500	
	BF6M1013FC (P ≤ 200 kW), crankcase ventilation closed	-		-		500		500	
	BF6M1013FC (P > 200 kW), crankcase ventilation open	-		250		250		250	
	BF6M1013FC (P > 200 kW), crankcase ventilation closed	-		-		250		250	
	BF6M1013FC Genset 200 kVA crankcase ventilation open	-		500		500		500	
	BF6M1013FC Genset 200 kVA crankcase ventilation closed	-		-		-		500	
BFM 2012	All engines except:	250		500		500		500	
	BF4M2012C > 95 kW	-		-		500		500	
	BF6M2012C > 143 kW, as of non-road stage II at cylinder bore 101 or 98 mm with MV-system	-		-		500		500	
	BF6M2012C > 135 kW, as of non-road stage II at cylinder bore 98 mm with mech. Injection system	-		-		500		500	
	Other engines as of nonroad stage II	-		500		500		500	
	Engines in harvesting machines, block combined power stations, electricity generators **	-		-		500		500	
BFM 2013	All engines except:	250		500		500		500	
	Engines as of nonroad stage II	-		500		500		500	
	BF4M2013C, P > 90 kW	-		-		500		500	
	BF6M2013C, P > 120 kW	-		-		500		500	
	Engines in harvesting machines, block combined power stations, electricity generators **	-		-		500		500	
BFM 1015	All engines except:	250	125	500	250	500	250	500	250
	1015C as of nonroad stage II	-	-	500	250	500	250	500	250
	1015CP	-	-	-	-	500	250	500	250
	BF6M1015MC ≤ 300 kW	-	-	500	250	500	250	500	250
	BF8M1015MC ≤ 400 kW	-	-	500	250	500	250	500	250
	BF6M1015MC > 300 kW	-	-	-	-	500	250	500	250
	BF8M1015MC > 400 kW	-	-	-	-	500	250	500	250
BFM2015	All engines	-		-		500		500	
D 2008	All engines	250	125	500	250	500	250	500	250
TD/D 2009	All engines	500	250	500		500		500	
D 2011	All engines	500	250	1000	500	1000	500	1000	500
TD/w 2011	All engines	250	125	500	250	500	250	500	250
TD/i 2011	All engines	250	125	500	250	500	250	500	250
TCD/w 2011	All engines	250	125	500	250	500	250	500	250
TCD 2012 2V	crankcase ventilation open	-		500		500		500	
	crankcase ventilation closed	-		-		500		500	
TCD 2012 4V	crankcase ventilation open	-		500		500		500	
	crankcase ventilation closed	-		-		500		500	
TCD 2013 2V	crankcase ventilation open	-		500		500		500	
	crankcase ventilation closed	-		-		500		500	
TCD 2013 4V	crankcase ventilation open	-		500		500		500	
	crankcase ventilation closed	-		-		500		500	
TCD 2015	crankcase ventilation closed	-		-		500		500	

** Electricity generators here are to be understood as those with mains/parallel mode.
Emergency generators are dealt with TC 0199-99-1126.
General information: Engine oils that are released under higher DQC-classification may also be used in the next lower classes.

Remarks for built-in and marine engines

- Normal oil load for engines with low to medium load (up to 70%):
  Examples for built-in engines: Rollers, stacker trucks, rail vehicles, emergency pumps.
  Examples for marine engines: Ferries, tugs, light fishing vessels, river vessels, auxiliary engines.
- High oil load in engines with high workload (>70%) or other difficult factors, e.g. high dust load or strong dynamic operation:
  Examples for built-in engines: Tractors, harvesting machines, mining machinery, wheel loaders, hydraulic diggers, graders, waste compressors, block combined power stations, mains/parallel operation, engines with 2-stage combustion.
  Examples for marine engines: Speed boats, catamarans, yachts, gliders, generator drives.
- The assignments of the workload to the applications are examples, a different assignment may apply in individual cases.
- In the specified intervals between lubricant changes during the year have not been reached, the oil should be changed at least once a year.
- The following conditions apply for the lube oil change intervals:
  - Continuous ambient temperatures ≥ -10° C (≥ +14° F)
  - sulphur content in the fuel, ≤ 0.5 weight-%
- The lube oil change interval must be halved, at
  - continuous ambient temperatures < 10° C (<14° F) or oil temperature < 60° C or
  - sulphur content in the fuel > 0.5 to 1 weight-% or
  - operation with bio-diesel fuel

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