



**Recommended Oil Selection
and Viscosity Ranges**

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Linde Hydraulics Corporation recommends the use of premium grade hydraulic oils that are confirmed by the producer as suitable for high pressure applications. Suitable hydraulic oils are of the H-L type to DIN 51524 and H-LP type to DIN 51525 as well as engine oils to MIL-L 2 104 -B and C or MIL-L 46 152.

When selecting the pressure fluid, the working temperature of the hydraulic circuit must be taken into consideration so that the working viscosity of the fluid is within the recommended viscosity range for optimum performance.

Recommended Viscosity Range for Optimum Performance- 78 SUS to 120 SUS
(15 cSt to 25 cSt)

Maximum Allowable Working Viscosity Range: 45 SUS to 370 SUS
(6 cSt to 80 cSt)

Viscosity Limitations- 45 SUS (6 cSt) minimal viscosity
5000 SUS (1000 cSt) maximum viscosity, **INTERMITTENT** for Cold Starts

Oil Temperature Limitations: (-68)°F to 194°F
[(-20)°C to 90°C]

Refer to the following table for the ISO Class selection which corresponds to the application working temperature.

<u>ISO Class</u>	<u>Allowable Working Temp. Range</u>	<u>Optimum Temp. Range</u>
VG10	17°F to 127°F [(-8)°C to 53°C]	53°F to 74°F [12°C to 23°C]
VG22	53°F to 181°F [12°C to 83°C]	93°F to 118°F [34°C to 48°C]
VG32	68°F to 201°F [20°C to 94°C] *	110°F to 136°F [43°C to 58°C]
VG46	83°F to 219°F [28°C to 104°C] *	125°F to 153°F [52°C to 67°C]
VG68	97°F to 245°F [36°C to 118°C] *	144°F to 171°F [62°C to 77°C]
VG100	113°F to 275°F [45°C to 135°C] *	165°F to 194°F [74°C to 90°C]

* the upper temperature limit of the fluid exceeds the maximum allowable working temperature for Linde equipment.

For applications using a non petroleum base hydraulic fluid or for special applications where the given fluid specifications cannot be met, please consult Linde Hydraulics Corporation for assistance.