



Shell Tonna Oils T

High performance lubricant for machine tool slideways

Shell Tonna Oils T are specially designed for the lubrication of machine tool slides and tables. They are based on highly refined mineral oils and contain additives to enhance tackiness, anti-wear and stick-slip characteristics. They are specially recommended in cases where high exposure to soluble cutting fluids exist

Applications

- **Machine tool slideways, tables and feed mechanisms**

Developed for use on a wide range of materials used for machine tool slideway surfaces, including cast iron and synthetic materials.

Tonna T can be used also in the hydraulic and gearboxes system although in such applications Shell Tonna S Oils are generally preferable.

The lower viscosity grades are intended for horizontal slide lubrication (Tonna T 32 or 68). For vertical slides use Tonna T 220.

Advice on applications not covered in this leaflet may be obtained from your Shell representative.

Performance Features and Benefits

- **Ready separation from water-miscible cutting fluids**

Separates completely and immediately from water-miscible metalworking oils allowing easy removal by skimming. The formulation used prevents performances deterioration in case of contaminations.

- **Good slideway adhesion**

Provides very effective adhesion to slideway surfaces, resisting wash-off by metalworking fluids and those reducing oil consumption and giving more uniform working condition for the machine.

- **Good frictional properties**

"Stick-slip" problems are overcome allowing more accurate positioning. This provides benefits of improved finished surface quality and dimensional accuracy of workpieces.

- **Good anti-wear performance**

Provides anti-wear protection for slideways, gears, bearings and hydraulic system components.

- **Excellent corrosion prevention characteristics**

Provides effective protection of machine tool surfaces and components in the presence of water-miscible cutting fluids.

Specifications and Approvals

Tonna T meets the following specifications:

ISO 19378 / ISO 6743-13 GA and GB

DIN CGLP

Cincinnati Machine P-50 (ISO 220), P-47 (ISO 68),

P-53 (ISO 32)

Health & Safety

Guidance on Health and Safety are available on the appropriate Material Safety Data Sheet, which can be obtained from your Shell representative.

Protect the environment

Take used oil to an authorised collection point. Do not discharge into drains, soil or water



Typical Physical Characteristics

Shell Tonna T	32	68	220
ISO Viscosity Grade (ISO 3448)	32	68	220
Kinematic Viscosity @ 40°C mm ² /s 100°C mm ² /s (ISO 3104)	32 5.4	68 8.8	220 18.4
Viscosity Index (ISO 2909)	107	104	98
Density @ 15°C kg/m ³ (ISO 12185)	870	879	894
Flash Point °C (Cleveland Open Cup) (ISO 2592)	215	225	250
Pour Point °C (ISO 3016)	-30	-24	-15

These characteristics are typical of current production. Whilst future production will conform to Shell's specification, variations in these characteristics may occur.