Way Lubricant

Machine Tool Slideway Lubricant

Product Data Sheet

Customer benefits

Smooth, chatter-free, accurate operation

Special friction modifier provides high lubricity to reduce friction and drag which can cause stick-slip and machine tool chatter, adversely affecting surface finish on machined pieces. Tackiness additive provides a high strength, thick oil film that enables accurate table positioning.

Protects metal surfaces

EP additive system produces a protective film under heavily loaded conditions to prevent wear and scoring of slideways and guides. Rust and corrosion inhibitor protects machine components.

Stays in place

Special tackiness agent prevents fluid from draining away from lubricated surfaces, particularly on vertical ways. Tackiness and high film strength minimizes squeeze-out of the lubricant on heavily loaded ways, and prevents fluid wash out by emulsifiable cutting fluids

Enhances coolant bath life

Excellent demulsibility and coolant separability properties enable rapid separation of the way oil from the coolant reducing the tendency of bacteria growth from oil contamination.

Combined hydraulic/slideway application

Lubricant inventory is reduced where an ISO 32 grade is required for use as way lubricant and machine tool hydraulic oil.

Applications

Can include;

- Machine tool slideways and guides:
  - Combined slideway/machine tool hydraulic systems like those in lathes, planers, shapers, drilling and tapping machines, etc.,
  - Some Horizontal slideways requiring lighter VG 32 oils
- Other industrial applications requiring an adhesive, corrosion inhibited lubricant with EP properties

Product features:

• **Way Lubricant** is a high quality, machine tool slideway lubricant formulated from highly refined mineral oil, with EP, friction modifier, rust and corrosion inhibitors and tackiness additives, together with good demulsibility properties for coolant separation.

Typical key properties

WAY LUBRICANT		
ISO Grade	Test Method, ASTM	32
Product Code		540422
AGMA Grade		0
Flash Point, COC, °C	D92	220
Pour Point, °C	D97	-18
Kinematic Viscosity,		
cSt @ 40°C	D445	33.6
cSt @ 100°C	D445	5.8
Viscosity Index	D2270	115

1508

Performance standards

Meets the Requirements for;

- Cincinnati Machine Specification P-53 Combination Hydraulic and Way Oil
- Cincinnati Machine Stick-Slip Procedure

ENVIRONMENT, HEALTH and SAFETY

Information is available on this product in the Material Safety Data Sheet (MSDS) and Customer Safety Guide. Customers are encouraged to review this information, follow precautions and comply with laws and regulations concerning product use and disposal.

To obtain a MSDS for this product, visit: www.chevronlubricants.com.

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Service considerations

Machine tool carriages typically operate on slideways under high loads and slow speeds. The carriages must be able to start in motion quickly and smoothly and then continue in motion at a constant speed. Excessive frictional resistance at start-up compared to friction resistance while in motion can cause undesirable erratic or jumpy motion, which is commonly referred to as machine tool chatter or stick-slip. Effective way oils must have a low stick-slip value (static coefficient of friction to kinematic coefficient of friction ratio) to prevent stick-slip problems.

Way oils must also possess tackiness to prevent run-off of the lubricant, particularly on vertical ways.

Extreme pressure properties are also required to prevent scoring of slideways and guides.

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