WAY OILS

RESIST EMULSIFICATION BY SYNTHETIC COOLANTS AND SOLUBLE OILS

Description

Orelube WAY OILS are specially-formulated for the lubrication of slideways on milling, horizontal and vertical boring machines, drilling machines, screw machines, planers, grinders, shapers, lathes and slotters. They contain a tackifier agent enabling them to adhere strongly to sliding surfaces and prevent oil from being squeezed off the heavily-loaded ways.

The presence of friction modifiers prevent the stick-slip motion and chatter that occurs with machine ways. This erratic, noisy motion is due to the starting friction encountered by the way at each end of its back-and-forth movement. These special additives provide the proper ratio of static (starting) to kinetic (running) coefficient of friction so that starting friction is lower than running friction. This allows tools to start easily and move smoothly throughout their motion.

For a way lubricant to provide continuing protection to a slideway, it must remain on the surface. However, most widely-used way lubricants use additives that make them sensitive to the alkalinity of synthetic coolants and soluble oils. **WAY OILS** are formulated not to be affected by alkalinity thus resisting removal by coolants and soluble oils.

A related problem with way lubricants is their tendency to emulsify in coolants. The resistance to emulsification by WAY OILS will reduce the amount of tramp oil to be separated thus simplifying coolant management.

Benefits

- · Close tolerances can be held
- · Improved finish on the workpiece
- Decrease in production reject
- Protection against corrosion of ferrous and copper alloys
- · Highly-resistant to removal by the detergency of synthetic coolants and soluble oils

Applications

WAY OIL 68 exceeds the requirements of Cincinnati Milacron P-47 specification.

WAY OIL 220 exceeds the requirements of Cincinnati Milacron P-50 specification.

WAY OIL LIGHT and MEDIUM are for applications which require different viscosity grades.



Typical Properties	68	220	LIGHT	MEDIUM
Viscosity, ASTM D-445				
cSt @ 40 C	68.9	209.1	30.6	113.2
cSt @ 100 C	9.1	18.8	5.3	12.1
Flash Point, F	410	455	380	430
Pour Point, F	+5	+10	0	+10
Copper Corrosion, ASTM D-130				
3 hrs @ 100 C	1a	1a	1a	1a
Rust Test, ASTM D-665 A and B	Pass	Pass	Pass	Pass
Stick-Slip Test Ratio	0.71	0.69		
Thermal Stability Test B				
Neutralization No. (TAN)	0.04	0.04	0.04	0.04
Precipitate (mg/100 ml)	None	None		
Copper rod rating	3	5		
Steel rating	1	1		