

203M | **Armor Plate with Moly-D** Machine and Way Oil

DESCRIPTION:

Special problems are encountered in the lubrication of ways and slides of machine tools. At low speeds and under heavy loads, the lubricant tends to wipe off, producing higher friction. When the machine is operated at high speeds and low loads, a fluid film can form that will lift and float the slide. Since this film varies in thickness, it can produce wavy surfaces on the parts being machined or cause them to run off size. This is a hydroplaning effect, much like slick automobile tires on a wet surface.

COMPOSITION:

Armor Plate with Moly-D Machine and Way Oil is a petroleum base lubricant containing the following:

- Extreme Pressure Additives
- Anti-Foam Agents
- Anti-Friction Additive
- Demulsifiers
- Adhesive/Cohesive Additives
- Oxidation Inhibitors
- Anti-Wear Additives
- Dispersant Additives
- Corrosion Inhibitors
- Rust Inhibitors

PERFORMANCE CHARACTERISTICS:

Precision machining calls for the slides and ways to operate under boundary film conditions at all times. Boundary lubrication is an extreme pressure condition where the thinnest film possible of oil is used that still effectively provides the needed lubrication.

Stick slip and chatter is a condition caused by what is technically referred to as the static coefficient of friction being greater than the dynamic coefficient. This means it takes more force to get something started from a dead stop and start moving smoothly than it does after it is in motion. It is similar to pulling a heavy piece of furniture across the floor; the greatest force comes in starting and then many times it will "chatter" or bounce slightly in the initial movements. In precision machining, this activity is unacceptable. The stop-start action and the bouncing or chatter can damage the part when dealing with tolerances of thousandths of an inch.

The Moly-D in Armor Plate 203M is exceptional in preventing stick slip and chatter due to its superior anti-friction qualities which equalize the two coefficients of friction.

Rust protection is a very important consideration. This lubricant gives superior rust and corrosion protection which is maintained on the metal surfaces by the adhesive/cohesive additives.

Another problem in machining is that on vertical slides the lubricant can drain off the surfaces, but with the adhesive/cohesive additive components, this problem is diminished.

Armor Plate with Moly-D Machine and Way Oil resists squeezing out, running, dripping and is non-gumming.



PRIMROSE PLUS

203M Armor Plate with Moly-D Machine and Way Oil

USES:

Excellent on lathes, planers, shapers, slotters, boring and drilling machines where the type of lubrication is usually pressurized oil circulation to lubricate flat, V guide or table ways. Also on milling machines where wick oil lubrication is used for saddles and sliding ways.

APPLICATIONS:

Can be used in all machines requiring superior lubrication of ways and slides as well as a general purpose machine oil. Among other makes of machines, they are recommended for:

- Bridgeport
- American Edistal
- South Bend
- Trans World Steel
- Clausing Colchester
- Sundstrand
- Powermatic Burke
- Leland-Gifford

TYPICAL

SPECIFICATIONS:

	No. 1	No. 2	No. 3	No. 4	No.5
API Gravity @ 60°F.	31.4	29.8	28.9	28.2	27.5
Flash, COC °C	350	440	460	480	530
Viscosity, SUS @ 100°F	215	315	525	775	1160
SUS @ 210°F	47	53	65	78	95
Viscosity Index	101	100	99	98	98
Pour Point, °F	5	5	10	10	15