

PLUNGER /SHOT SLEEVE LUBRICANTS LIQUID



PURPOSE

Plunger lubricant formulated for lubrication of all types of plunger tips: beryllium copper, bronze, steel and all diameters

- ▶ Reduce friction between the sleeve and the plunger
- ▶ Provide consistent shot velocities
- ▶ Extend the operation life of both shot sleeve and plunger tip
- ▶ Eliminate the contaminants getting into the casting

FUNCTION

- ▶ A carefully measured amount of lubricant is vaporized to form a fine mist.
- ▶ The lubricant spray and air nozzle assembly is securely mounted just behind the plunger assembly.
- ▶ The nozzle technology effectively atomizes the lubricant to reduce overall consumption.
- ▶ Nozzles can be quickly interchanged to provide different spray patterns.
- ▶ Spray pressure and duration are both adjustable

CLS 200



Vegetable ester based lubricant that is biodegradable. It is blue in colour, remains in solution and has a high flashpoint. It also has low smoke, and is very well priced.

Type : CLS-200 Vegetable ester based

Part No : CLS-200 Lubricant

Packaging : 19 L pail, 208 L drum or 1,250 L tote

Application:

A minimum quantity of CLS 200 is applied only where needed. Depending on shot sleeve diameter and length : ALD, ACL and CRL can be used.

ALS 192



High temperature resistant lubricant for aluminum, magnesium and zinc die casting. It contains an important quantity of solid particles for improvement of tooling life and casting quality.

Type : ALS-192 Boron nitride synthetic oil

Part No : ALS-192 Lubricant

Packaging : 10 kg plastic container

Note : specific weight is 0.9 kg/L

Application :

minimum quantity specifically applied to where required for casting of structural parts, magnesium parts, and castings with additional heat treatment

BENEFITS OF THE CASTOOL LIQUID LUBRICANTS

CLS 200

- Biodegradable
- Does not contain graphite
- Good adherence to Tips/Rings and Sleeves
- Excellent thermal stability
- High flashpoint
- Low viscosity
- Minimal smoke

ALS 192

- Decreased volume of lubrication
- Reduced chance of contamination of casting
- Very low coefficient of friction, longer component life and constant shot velocity
- Reduced cost per casting
- Very good anti-wear properties, High load capacity
- Non-wet against molten Aluminum
- Good adherence to Tips/Rings and Sleeves

With the Liquid Lubricants, Castool again sets a new standard of excellence in the die casting industry.

Results may vary depending on individual press characteristics and setup.



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CHART

Comparison Chart	Oil/Graphite	ALS 192	CLS 200
Boiling point	> 300 °C (570 °F)	> 300 °C (570 °F)	> 300 °C (570 °F)
Flash point	> 230 °C (445 °F)	> 230 °C (445 °F)	> 260 °C (500 °F)
Viscosity (Kinematic)	100 mm²/s @40°C	100 mm²/s @40°C	37 mm²/s @40 °C

LUBRICATION

Castool offers several methods to apply lubricant to the plunger/ shot sleeve interface.

DIA : < 90 mm Lube-Drop (ALD)

DIA : 90 mm < DIA. < 120 mm Combi-Lube (ACL)

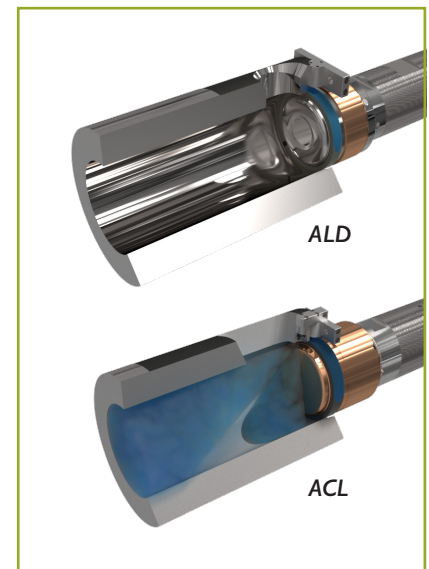
DIA : > 120 mm Lube-Drop (ALD) or Combi-Lub(ACL) plus Rod Lube (CRL)

LUBE-DROP (ALD)

For medium size shot sleeves, the ALD (Allper Lube-Drop) system delivers the lubricant directly on top of the plunger or ring to greatly reduce friction between the sleeve and plunger.

COMBI-LUBE (ACL)

For larger and longer sleeves, it is difficult to adequately lubricate the complete interior of the shot sleeve. This can be accomplished with an ACL (Allper Combi-Lube) system. A lubricant is delivered directly on top of the plunger and sprayed onto the bore and pour hole area.



CASTOOL ROD LUBE (CRL)

Castool's plunger rod lubrication system with splash guard offers safety and increased longevity of all tooling components for long shot sleeves. A small measured amount of lubricant is applied only on the die end bore of the shot sleeve prior to plunger return.

SCHMELZMETALL
HIGH VACUUM COPPER

ALLPER
PLUNGER SYSTEMS

**Deutsche
Edelstahlwerke**
HOT WORK TOOL/STEELS

CASTOOL MAKES DIE CASTING BETTER