

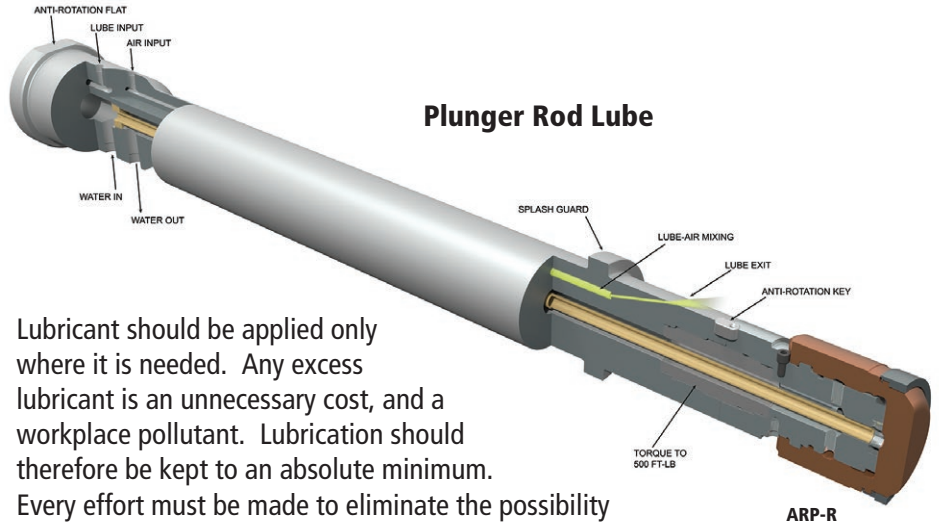
The lubrication system has been developed in conjunction with the ALLPER-Plunger system to reduce the friction between the sleeve and the plunger; to thus ensure the smooth passage of the plunger through the sleeve. This is essential for consistent shot velocities and to extend the operating life of both the shot sleeve and the plunger tip. This is necessary for the long shot sleeve or when there is excessive wear under the pour spout.

## PURPOSE

- 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 contaminates 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.



**Plunger Rod Lube**

Lubricant should be applied only where it is needed. Any excess lubricant is an unnecessary cost, and a workplace pollutant. Lubrication should therefore be kept to an absolute minimum. Every effort must be made to eliminate the possibility of any non-metallic substance getting into the mold.

A carefully measured amount of lubricant is applied between the ring, sleeve and impact zone right under the pour hole. This ensures complete coverage without costly overspray. A controlled dosage injection pump provides the precise amount of lubricant required for each process cycle. This controlled dosage prevents the danger of contaminating the casting with excessive lubricant.

### Small size shot sleeve

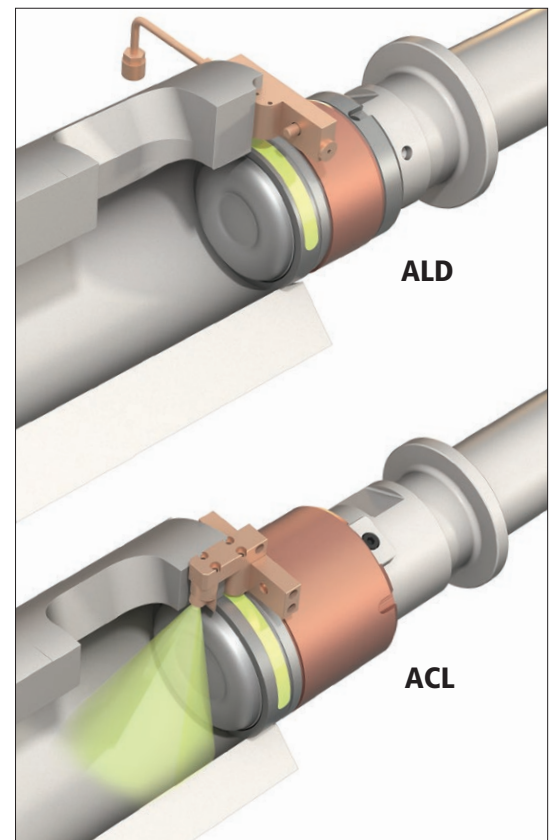
For small size shot sleeves, typically the wear is not as severe as for a medium or large sleeve. A built-in slot and lubrication channel on chamfer section delivers lubricants on top of the plunger ring.

### Lube Drop

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

### Combi Lube

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.



## BENEFITS of the Castool Lubrication System

- Reduce cost per shot
- Increase plunger life
- Increase shot sleeve life
- Reduce contaminates
- Reduce scrap rate
- Reduce downtime

With the Castool Lubrication System, Castool again sets a new standard of excellence in the die cast industry.

Results may vary depending on individual press characteristics and setup.



[www.castool.com](http://www.castool.com)

## HIGH VISCOSITY LIQUID LUBRICANTS

### ALS-192

High temperature resistant sleeve lubricant for aluminium, magnesium and brass die casting. Contains an important quantity of solid particles for improvement of life-time and casting quality.

Type: ALS-192 Boron nitride synthetic oil  
Part No.: ALS-192 Lubricant  
Packaging: 10 kg plastic container

Note: specific weight is 1.1. (10 kg = 11 litres)

**Application:** to be specifically applied for casting of structural parts, magnesium parts, and castings with additional heat treatments

### CLS-200

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

Type: CLS-200 Vegetable based ester  
Part No.: CLS-200 Lubricant  
Packaging: 19 L pail, 208 L drum or 1250 L tote



## CASTOOL LUBRICATION SYSTEMS

All lubricants used in combination with our dispensing units ALD (Drop Lube System) or ACL (Drop + Spray System) bring the following advantages:

- minimum volume of lubricant used (the right amount at the right place)
- no lubricant loss
- clean environment DCM
- life time improvement of the shot sleeves and plunger tips
- important savings



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CASTOOL MAKES DIE CASTING BETTER

**CASTOOL**  
TOOLING SYSTEMS®