

# LOCATIONS



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

## MASTERING ALUMINUM DIE CASTING

In the automotive industry, die casters are adept at producing large, thin, and intricate aluminum castings. The size and complexity of these castings have increased significantly, with many now serving structural purposes.

This process is already being executed efficiently and profitably on a large scale. There are no hidden secrets in this craft. However, the distinction between knowing how to do it and actually executing it is significant.

When theory meets reality, the most fundamental principle of die casting becomes evident: a chain is only as strong as its weakest link.

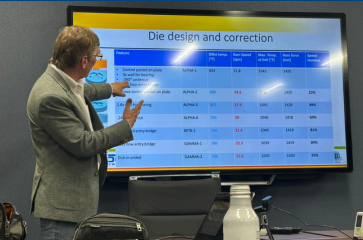


# BETTER CASTINGS FASTER

## ELEVATE YOUR CASTING PROCESS WITH ADVANCED PLUNGER TIPS

- SUPERIOR MATERIAL**
  - Rapid Cooling : High thermal conductivity and conformal cooling for quick solidification of molten aluminum.
  - Controlled Expansion : Minimized diameter growth for consistent performance.
- PRECISION ENGINEERING**
  - Reduced Vibration : Perfect clearance to prevent chatter and wear.
  - No Leakage : Optimal fit to enhance efficiency.
- ENHANCED SAFETY AND LONGEVITY**
  - Improved Safety : Advanced lubrication system with splash guard.
  - Extended Tool Life : Con-Duct offers exceptional toughness/crack resistance.

- ☒ **SAFE**
- ☒ **RELIABLE**
- ☒ **LONG-LIFE**
- ☒ **EFFICIENT**
- ☒ **ECONOMICAL**



Biscuit from Castool CDP-A Plunger Tip

## PATENTED



Many of Castool products and processes are **patented**.



## TOTAL SOLUTION



CONTROL SYSTEMS



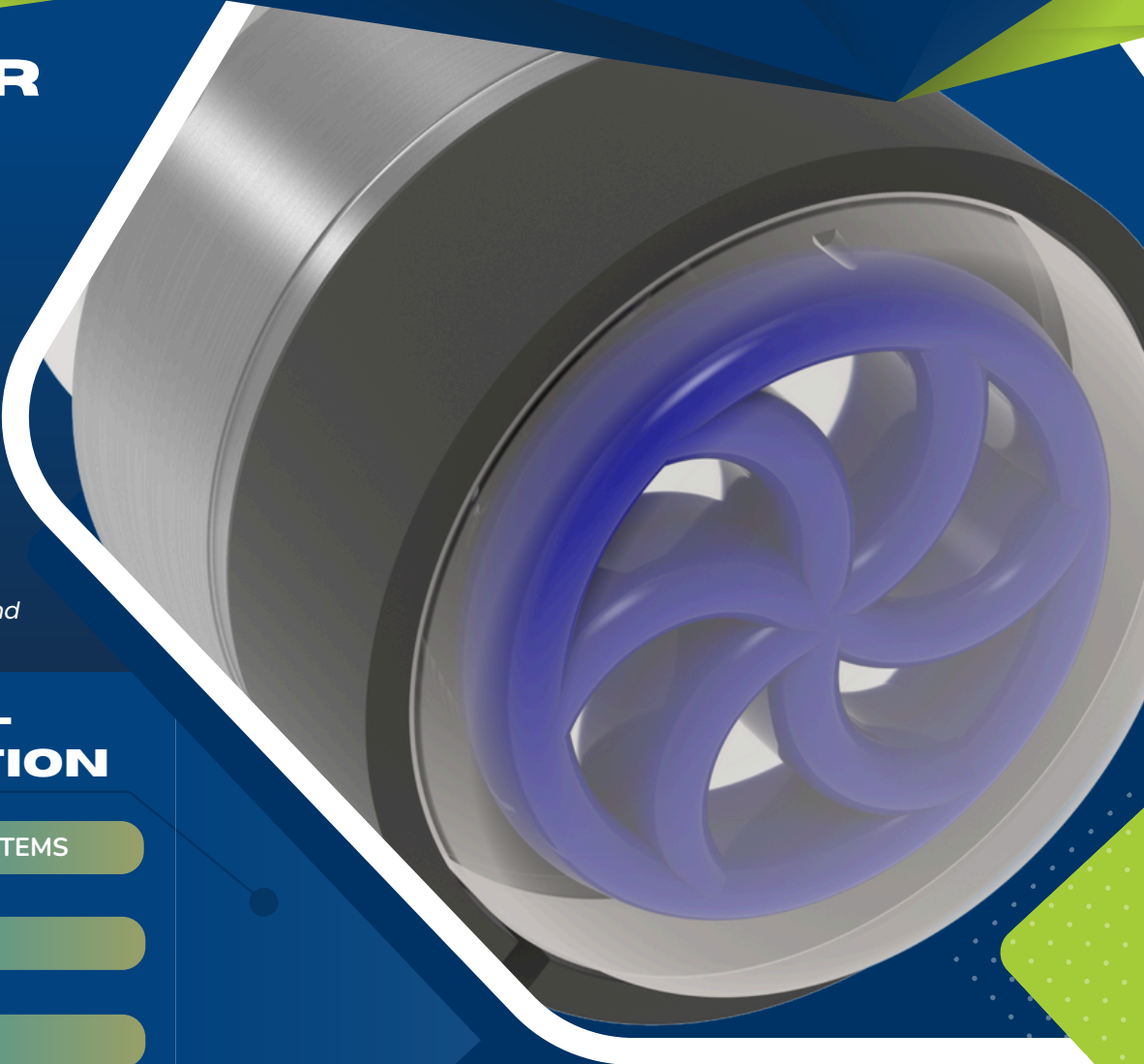
HARDWARE



TRAINING



INSTALLATION



+1905.852.0121



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



NITREX

PROTERIAL





## VENTING

### VACUUM CONTROL SYSTEMS

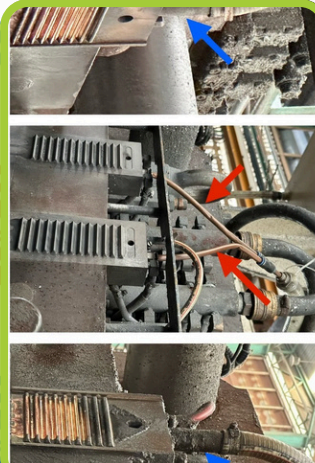
- ✓ REDUCES MACHINE DOWNTIME
- ✓ REDUCES SCRAP
- ✓ REDUCES PRODUCTION COST AND ENERGY USAGE



### CHILL VENTS



- ✓ INCREASED RECOVERY
- ✓ REDUCED DOWNTIME
- ✓ LONG LIFE



## SHOT SLEEVES / INSERTS

Gun-drilled shot sleeves up to  
24" dia. X 100" (610mm dia. X 2540mm)



Efficient & Economical

3-Piece Sleeve made with Con-Duct, H-13 & Tuff-Temper with Split Collar



**GIGA**  
PRESS  
TOOLING

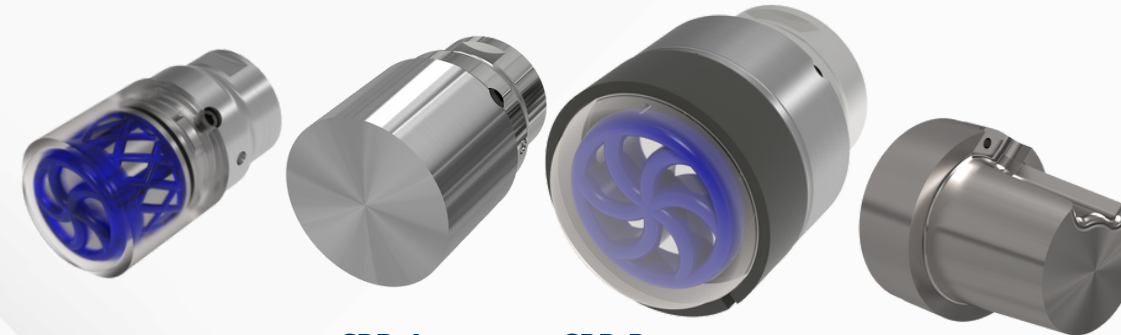
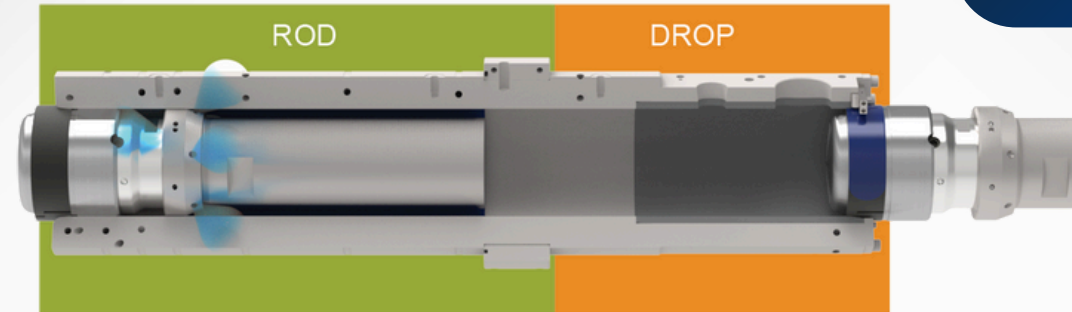
We vacuum harden and quench all hot work tool steel to give the best possible microstructure. The chemistry and microstructure are examined and filed by our in-house metallurgical laboratory.

**Press Tooling** : Shot blocks, distributors, shot plates, cooling rings, platen sleeves, die sleeves, tie rods, couplers, bushings, spreaders, runners, water jackets, die inserts ....

## PLUNGER TIPS / LUBRICATION / SHOT BLOCKS

### LUBRICATION SYSTEMS

Controllers, Application and Lubricants



**CDP-A**  
40-100 mm

**CRP-A**  
100-350 mm

**CRP-R**  
100-350 mm

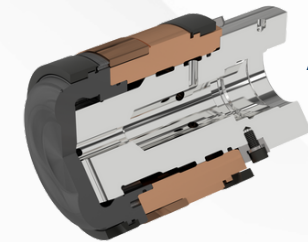
**SHOT BLOCK**  
Distributor

The plunger face of the **CDP & CRP** have cooling channels that follow its shape, allowing water flow to be closer to the heat source.

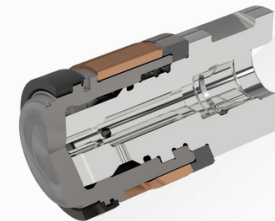
This results in more than twice the contact area compared to Allper plungers, which improves heat dissipation.

Moreover, **Con-Duct** has 80% better thermal conductivity than tool steel, and 4 times the toughness, making it a superior material for **HPDC**

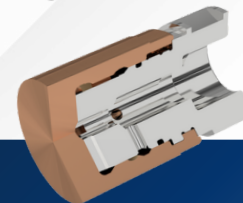
A-25, A-45, A-52, Dievar  
H-13(1.2344) and **Con-Duct**



**AMP-RVR**



**ABP-R**



**ABP-A**



**CLS-200**

- ✓ HIGH FLASH POINT
- ✓ LOW VISCOSITY
- ✓ BIODEGRADABLE



**CON-DUCT**