

# INSIDER

**CASTOOL & CASTOOL 180  
ARE FULLY CERTIFIED**

by  
Intertek Systems Certification:



While 2017 has been a good year for the economy, it has been a challenging year of increasing costs.

The cost of global alloys, electrodes, manufacturing consumables and energy have been climbing significantly over the past year, with no end in sight. Our tool steels are designed alloy rich, giving our customers the strength, control and optimum properties for application use. Our aim is to work on offsetting some of these unavoidable costs in our purchasing patterns and lean manufacturing without compromising the material quality or service level.

**H-13** (1.2344) is the principle material used for shot sleeves, liners, dummy blocks, stems etc. We purchase H-13 from:

SCHMOLZ + BICKENBACH  
International



**BÖHLER UDDEHOLM**

**H-13 19.6% increase in last 12 months**

**Beryllium copper** and copper are used for plunger tips, plunger bodies and in some cases rings. We purchase Copper and BeCu from:

**SCHMELZMETALL**

**Copper 9.1% increase in last 12 months**

**BeCu 13% increase in last 12 months**

Many customers are using **Con-Duct** to replace Copper and BeCu for plunger heads and bodies with improved longevity and lower cost.

We will be introducing price increases to most of our products March 1, 2018. We will be reviewing pricing every 3 months, and will do our best to remain competitive.

**NEW EMPLOYEES - CASTOOL:**

Su Biliu  
*Inside Sales Support*

Richard Hudson  
*Inventory Control*

Scott Kelly  
*Systems Technician*

Remzi Cevik  
*Equipment Technician*

**NEW EMPLOYEES - CASTOOL 180:**

Mr. Somnuk Kamsat (Tee)  
*Die Oven Assembler*  
*(Mechanical Engineer)*

**ARTICLE ALERT:**

*Watch for Castool's article  
in the April 2018 issue of*

**LIGHT METAL  
AGE**



# DIE CAST UPDATES

## Plunger Tips: AMP Allper Modular System

Combinations using the following materials:  
H-13, Dievar, Con-Duct and A45, A52, A25

### SUCCESS with CON-DUCT:

**Customer: Metaldyne**

- Previously 10 to 15k with DieVar AMP-R; increase to 55k with Con-Duct (CD)

**Customer: Hyundai**

- Previously getting 4 to 11k with DieVar AMP-R; now 25k with Con-Duct

**Customer: GM Bedford**

- Originally 1 to 2.2k with Semco; 14k with AMP-A Con-Duct/A-25

**Customer: Accurcast**

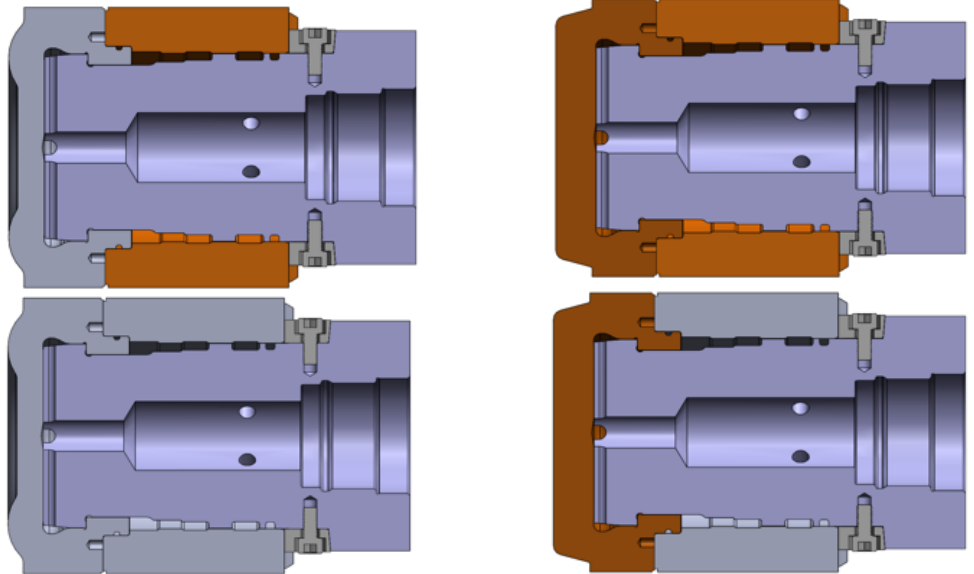
- ABP-A-CD A45 bushing went to 23k/shots; the old Semco tip was 4k/shots

**Customer: MPT**

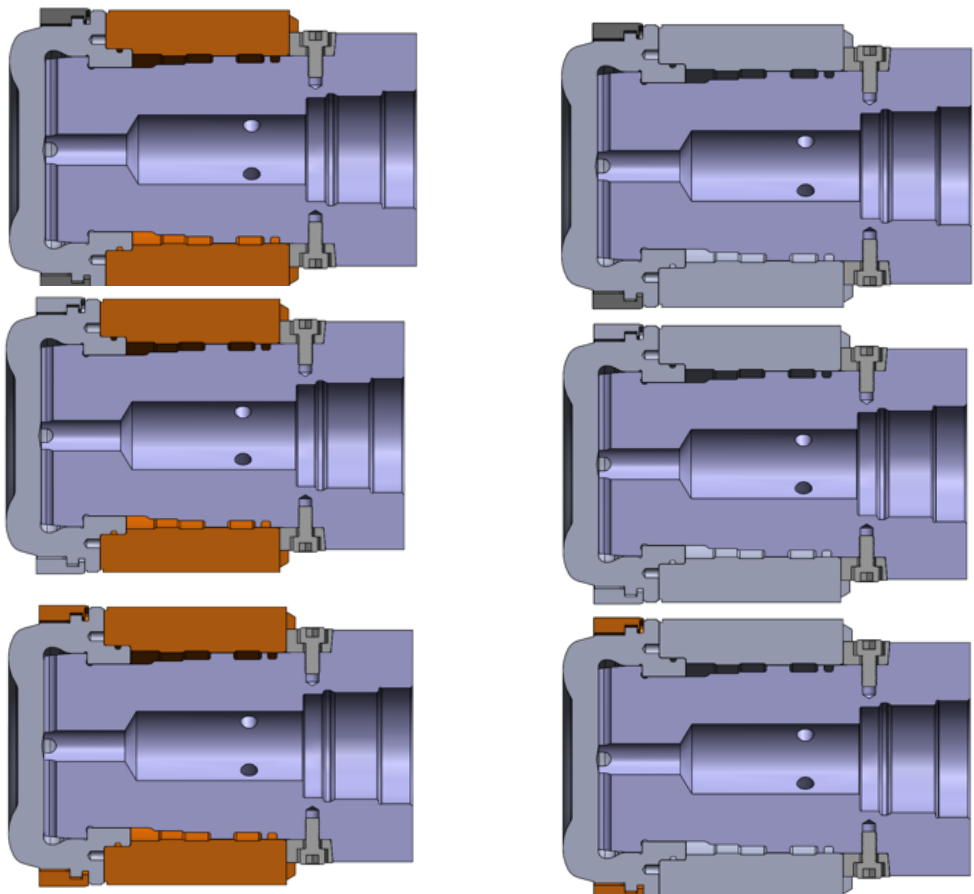
- AMP-R Dievar heads were 7k\shots; now using the AMP-R-CD, target is set to 30k/shots

**Con-Duct offers superior value**

### AMP-A



### AMP-R

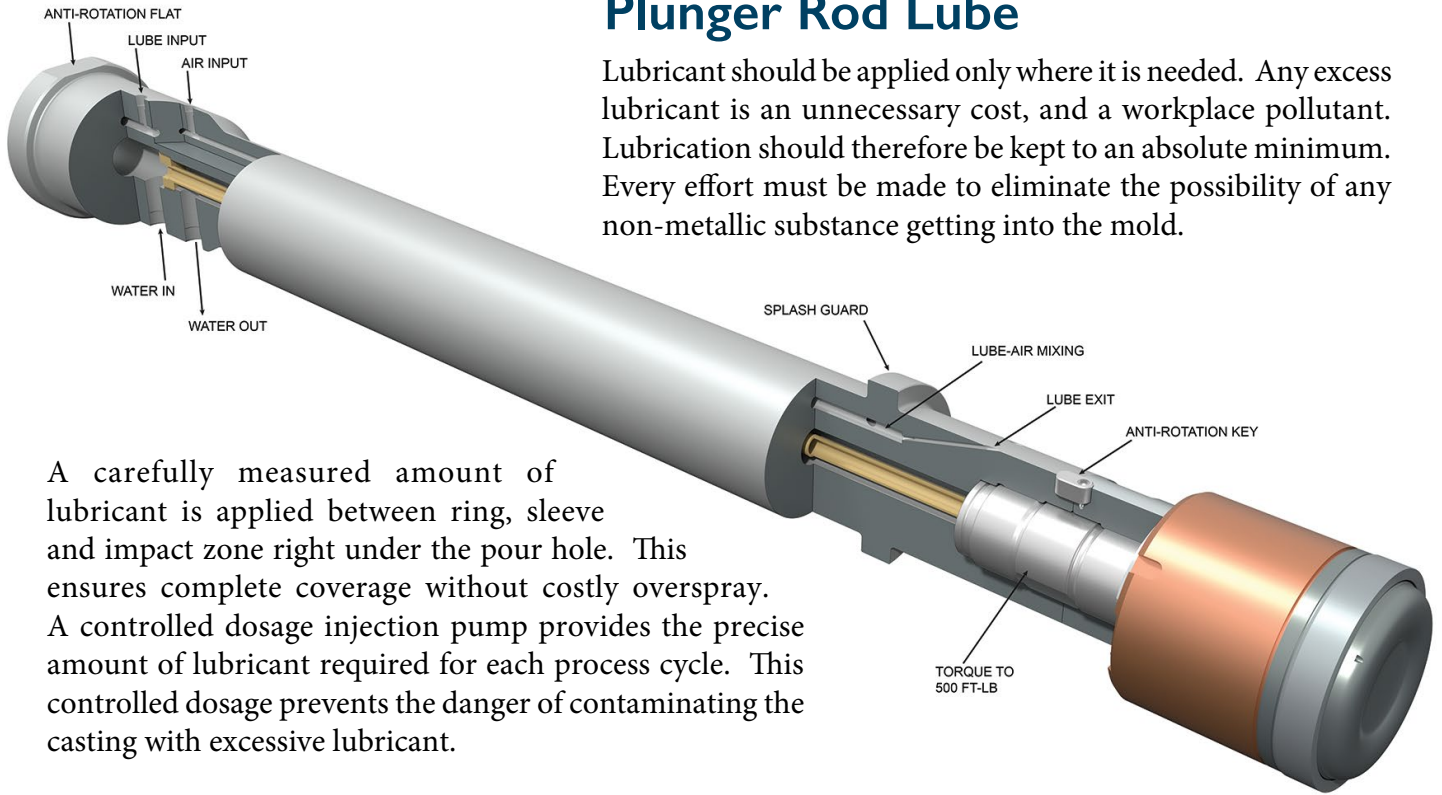




# DIE CAST UPDATES

## 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 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.

Castool's Die Cast Model makes its debut at



**DIE CAST TRADE SHOW  
BOOTH # 7A-412**

**January 16 - 18, 2018  
Nuremberg, Germany**



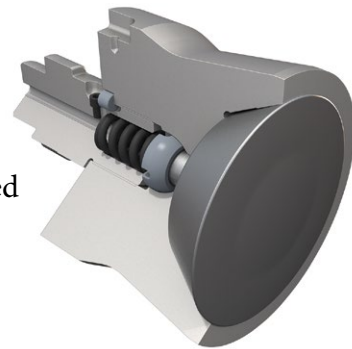




# EXTRUSION UPDATES

## Dummy Blocks

**MARATHON (TUFF-TEMPER):** This extra strong 2-piece block emphasizes quality of product plus length of operating life. Tuff-Temper is a patented steel developed by Castool. It has 3 times more Molybdenum than H13, making it stronger and tougher for the dummy block.



### SUCCESS with TUFF-TEMPER:

**Customer: Hydro Monterrey Precision Tubing**

- 1000/3000 series alloy and high pressure 118Ksi – 1 week with RRB; **2 months** with Marathon Tuff-Temper

**Customer: Hydro Chrzanow**

- High pressure 125ksi – 1 week with HPR; **1 month plus** with Marathon Tuff-Temper

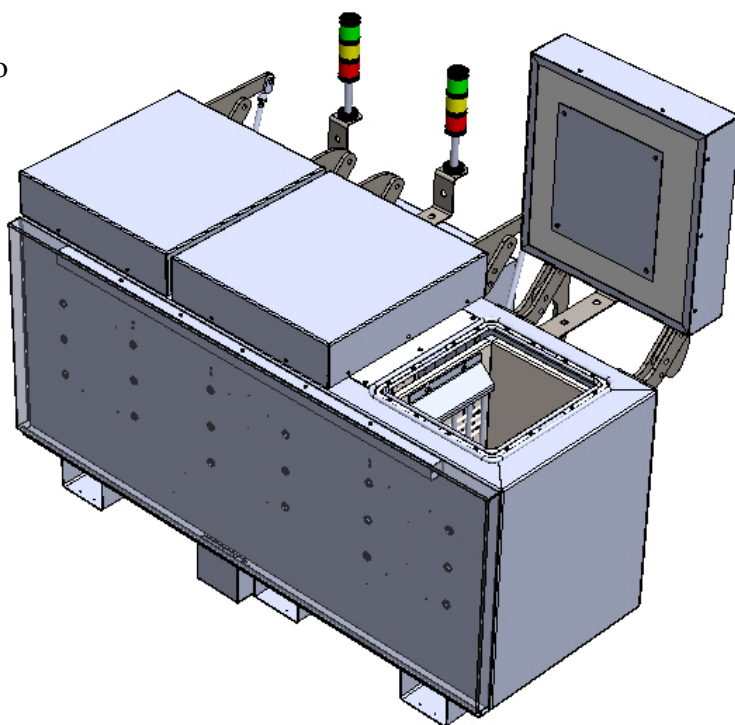
### Marathon Tuff Temper is now delivered to:

Daihan Climate Control Korea  
Hydro Mexico  
Constellium Nuit St George France  
Purso Oy Finland  
Alexandrai USA  
Eurometal Poland  
Profile Precision Extrusions USA  
Hydro Kofem Hungary  
Fabal Aluminium Turkey  
Astas Turkey  
Aliplast Lublin Poland

Hydro Rockledge USA  
Universal Alloys USA  
Profilatu SPA Italy  
Profil Precision Extrusions USA  
Hydro Chrzanow Poland  
Adla Portugal  
Impol Poland  
ILT Korea  
LMS Korea  
Ilsim Korea

## New Wiring for Die Ovens

For ease of access, thermocouple and element wiring is now on the front of the die ovens, with an access panel to cover and protect.





## Die Oven installs around the world



Installation of 4 TRC60 with Master Controller at ELVIAL - Greece



Installation of 2 TRC60 with Master Controller at MIFA - The Netherlands





# EXTRUSION UPDATES

## High Temperature Plug

### SUCCESS with QR Containers

#### Customer: Kaiser

- 6082 alloy QR Container install
- 9.5 ipm (*inches per minute*) now 21 ipm (5 shapes)
- *\*120% increase in ram speed*

#### Customer: Canart

- 6063 alloy QR Container install
- 14.5 ipm now 26 ipm (barrier puller speed)
- *\*79% increase in ram speed*

#### Customer: MI Metals

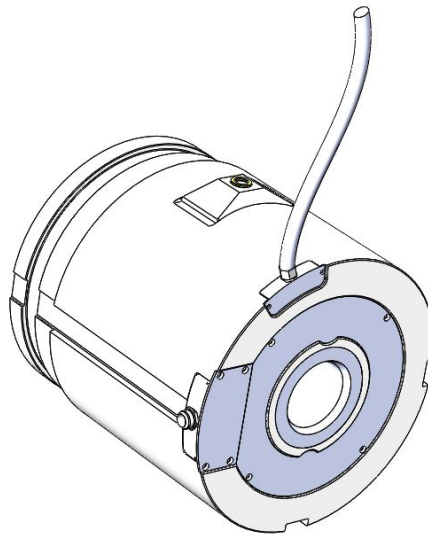
- 6063 alloy QR Container install
- 14 ipm now 23 ipm
- 15 ipm now 24 ipm
- *\*42 to 64% increase in ram speed*

#### Customer: Alexandria

- 6061 alloy QR Container install
- 8.5 ipm now 15 ipm
- 10 ipm now 13 ipm
- *\*30 to 76% increase in ram speed*



- New high temperature plug makes installation much easier
- Round versus flat bus bars saves space and adds integrity



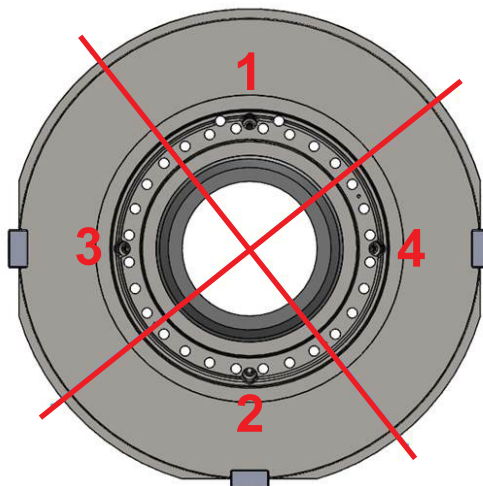
## Thermocouple Conduit

We have been making QR containers for 15 years. In some cases, the thermocouple terminal blocks on the mantle have been failing after many years. We are recommending that customers use a solid lead from the mantle instead of the ceramic terminal blocks.

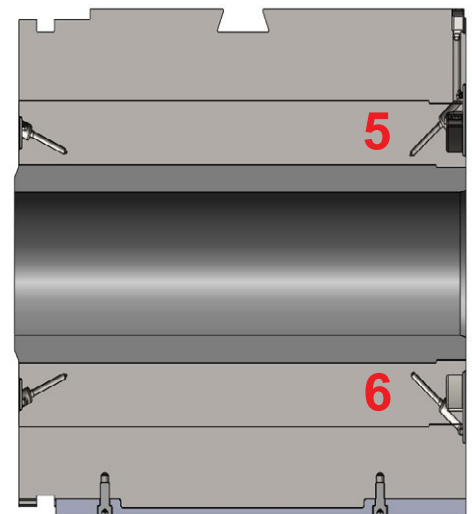
## QRX 6-Zone Container

We are making our first QRX type containers for a customer in Taiwan for 12, 13 and 14" billet.

The QRX is similar to the QR container with the exception of having 4 control zones on the container exit, to better manage metal flow for large shapes.



Die end view



# THE INTERNATIONAL TEAM

**Dan Dunn**  
**Jad Samra**

*Extrusion Sales Director*  
*Die Cast Sales Director*

Ken Chien  
Natalya Pieri  
Keattikhun Chaichana

*Product Director*  
*Product Specialist Europe*  
*Product Specialist Asia*

Jean Dembowski  
Tanmanun Tiantip  
Christine Kaschuba  
Sue Lotton  
Sue Su  
Dan Phudis  
Ploy Robbins

*Commercial Manager*  
*Commercial Supervisor*  
*Customer Service*  
*Customer Service*  
*Customer Service*  
*Customer Service*  
*Marketing Director*

**CANADA / USA**

Krystean Rose  
Matt Binns  
Andre Lulianetti  
Jon Veenstra  
Sebastien Derooy  
Ron Steinenger  
Sam Durbin  
Tom Troxclair

*Castool*  
*Castool*  
*Castool*  
*JW Industries LLC*  
*Sea Bass Outdoors*  
*R-Bet Sales Inc*  
*R-Bet Sales Inc*  
*Troxclair and Associates*

**LATIN AMERICA**

Valentin Meneses  
Carlos Lima  
Osvaldo Lomas  
Alberto Forcato

*Kautec America*  
*KTC Brasil*  
*Casmet*  
*Forcato Tecnologia*

**EUROPE**

Emmanuel Bach  
Olivier Druhen  
Bertrand Schnell  
Emmanuel Mandrelli  
Pascal Schroung  
Lars-Goran Nilsson  
Luciano Pedrini  
Jakub Jasiewicz  
Edgar Seufert  
Jurgen Barz

*Comexale*  
*Comexale*  
*Comexale*  
*Comexale*  
*Comexale*  
*TEL Nordic APS*  
*Techno Moulds*  
*KDO Komponenty Dla Odlewnictwa*  
*Schmelzmetall*  
*Schmelzmetall*

**UAE**

Emmanuel Mandrelli

*Comexale*

**ISRAEL**

Tuvia Kornfield

*NTK Plants Management*

**TURKEY**

Cenk Sommez

*BCM Makina Kimya*

**SOUTH AFRICA**

Olivier Druhen

*Comexale*

**JAPAN**

Shigeyoshi Takagi  
Tetsuya Ishida  
Nobou Nagayama  
Yasunori Ito  
Nami Ito

*Techno Consul Benchmarks*  
*Tandem Technologies*  
*Rio Tinto Japan Ltd.*  
*KBS Kubo Manufacturing Co*  
*KBS Kubo Manufacturing Co*

**KOREA**

JH Song  
SW Song  
Taek Jean Hwang

*ANK Ltd*  
*ANK Ltd*  
*GS Tech Solutions*

**TAIWAN**

Jack Lee

*Shiny Lee*

**CHINA**

Daniel Cheng  
Lungshun Cheng  
Steven Shiyang

*OEA Bridge Link*  
*OEA Bridge Link*

**THAILAND**

Manu Mekdhanasarn  
Patcharee Parkong

*Siam Anglo Alloy Company Ltd*  
*Siam Anglo Alloy Company Ltd*

**VIETNAM**

Manu Mekdhanasarn  
Patcharee Parkong  
Tran Thi Thanh Thuy

*Siam Anglo Alloy Company Ltd*  
*Siam Anglo Alloy Company Ltd*  
*Thang Long Mechanics Equipment Co*

**INDONESIA**

Yovinus Krisnanto

*PT Wilisindomas Indahmakmur*

**MALAYSIA**

Manu Mekdhanasarn  
Patcharee Parkong  
Chek Tay

*Siam Anglo Alloy Company Ltd*  
*Siam Anglo Alloy Company Ltd*  
*Lustre Specialty Materials*

**SINGAPORE**

Manu Mekdhanasarn  
Patcharee Parkong

*Siam Anglo Alloy Company Ltd*  
*Siam Anglo Alloy Company Ltd*

**INDIA**

Sachin Kumar

**AUSTRALIA/NEW ZEALAND**

Doug Loader

*Extrusion Machine Co New Zealand*



2018



# TRADE SHOWS

Our global presence is key to our success



**EXTRUSION CONFERENCE  
SPONSOR**

**March 15 - 17, 2018  
California, USA**



**EXTRUSION  
PRESS MAINTENANCE  
WORKSHOP**

**April 16 - 17, 2018  
Atlanta, USA**



**EXTRUSION  
TABLE TOP EXHIBIT**

**September 11 -13, 2018  
Chicago, USA**



**EXTRUSION  
TRADE SHOW**

**October 9 - 11, 2018  
Dusseldorf, Germany**



**DIE CAST TRADE SHOW  
BOOTH # 514**

**October 15 - 17, 2018  
Indianapolis, USA**



**DIE CAST  
TRADE SHOW**

**October 24 -26, 2018  
Guadalajara, Mexico**



**DIE CAST  
TRADE SHOW**

**November 8 - 10, 2018  
Yokohama, Japan**



**EXTRUSION & DIE CAST  
TRADE SHOW**

**November 21 - 24, 2017  
Bangkok, Thailand**



**DIE CAST  
TRADE SHOW**

**December 6 - 8 2018  
New Delhi, India**