BETTER PROFILES FASTER

QUALITY · SAFETY · ENVIRONMENT

No single component of the extrusion production process should be examined or evaluated individually.

Each interacts with at least one other complementary element of the process. If the interacting elements are equally efficient, they will reinforce and enhance the function of each other.

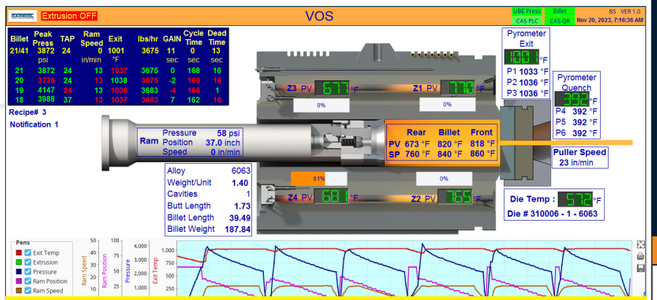
Only if the entire production process is considered as an integrated system, with all parts operating together in common cause, can maximum efficiency be approached.

All Castool products promote energy conservation and are environmentally friendly.

SAFE ● RELIABLE ● LONG-LIFE ● EFFICIENT ● ECONOMICAL

HALEX EXTRUSION DIES · EXCO · ALUMINUM EXTRUDERS COUNCIL MEMBER

SYSTEMS AND SERVICE



CONTROL SYSTEMS

HARDWARE

TRAINING

INSTALLATION

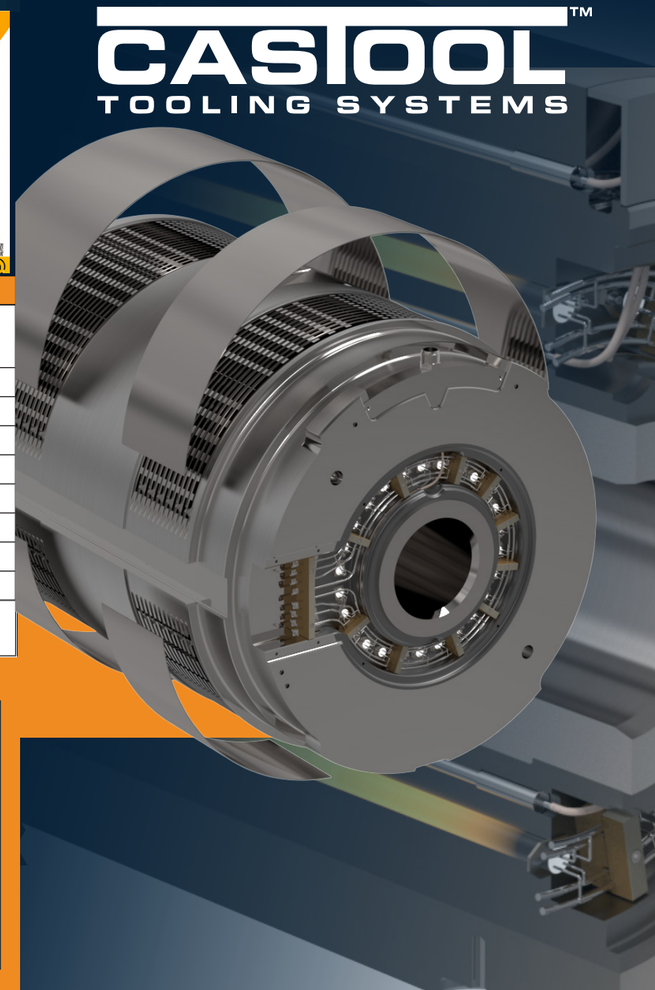
MATERIALS

ALLOY	Working hardness (HRC)	Hot strength	Toughness	Hot wear resistance	Thermal Conductivity (W/mk)	Cost
Con-Duct	34-38	●	●●●●●●●	●	●●●●	○
L6 (1.2714)	38-42	●◖	●●●	●◖	●●●	○
H-11(1.2343)	38-52	●●	●●◖	●●	●●	●
H-13(1.2344)	38-52	●●◖	●●◖	●●◖	●●	●
E40K	42-52	●●●	●●●◖	●●●	●●◖	●
Tuff Temper	42-52	●●●◖	●●	●●●●	●●◖	●●
Q10	42-52	●●●	●●●	●●●	●●◖	●●
DAC3	42-52	●●●	●●●	●●●	●●◖	●●

Extrusion processes can vary widely. Alloy types, pressures, cycle times, size and lubrication can all play a role. Choosing the best material for each component of the tooling system can be challenging, at the same time as being cost competitive.

The chart lists the thermal conductivity, wear properties, temperature range and cost factor for several of the materials Castool uses.

CASTOOL™ TOOLING SYSTEMS



CASTOOL™ TOOLING SYSTEMS CANADA

CASTOOL™ HEAT TREAT CANADA

CASTOOL 25 MEXICO

CASTOOL 90 MOROCCO

CASTOOL 180 THAILAND

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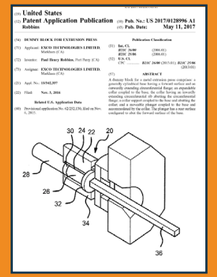
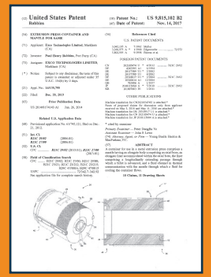
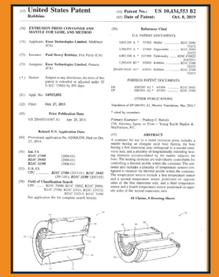
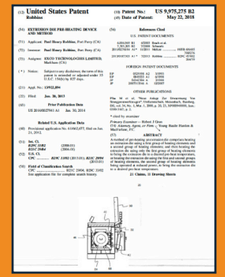
02/2024

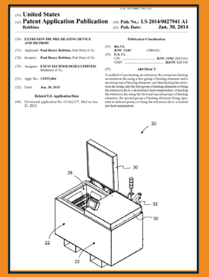
MANY OF *CASTOOL PRODUCTS AND PROCESSES ARE* PATENTED.



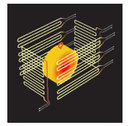








DIE HEATERS

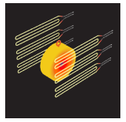


4 - SIDE HEATING

SINGLE CELL

TWIN CELL

TCX100/200/Custom



2 - SIDE HEATING

APPROVED

TRIPLE CELL

TRC40/50/60

MASTER CONTROLLER

Die Jacks and Splitters Available

SHEAR BLADES/ LUBRICATION

SHEAR BLADES

Alloy and Profile Specific

KNIFE

2-PIECE KNIFE

DELTA

90 DEGREE

SCOOP

2-PIECE SCOOP

Controllers, Applicators and Lubricants

TOOL RELEASE

Boron Nitirde Protection

ALU-JECT

Sodium Based Release Agent

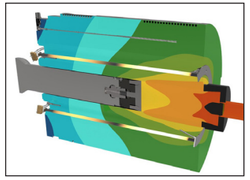
Stick, Liquid

NO SMOKE, WATER BASED BIODEGRADABLE

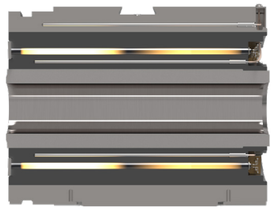
CONTAINERS/RELINES

QR (Quick Response) CONTAINER

3-PIECE FOR ADDED STRENGTH

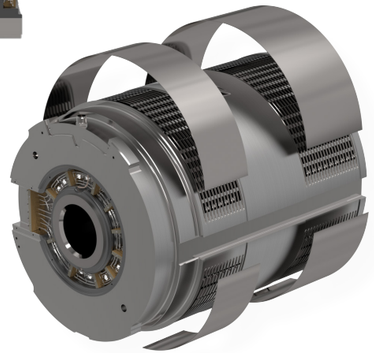


Preferred Thermal Gradient



QR maintains stable liner temperature by dissipating heat as generated by the process. Optional air control for increased productivity

CONTROL PANELS



Die Management Software, Visual Optimization System, Remote Optical Pyrometers

TOOLING

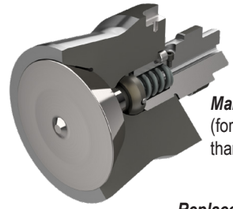
COLD-CLEAN OUT BLOCKS

with expansion slots

DUMMY BLOCKS

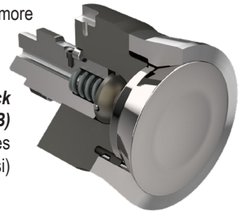
H-13 (1.2344) and Tuff Temper

- Proven designs
- Efficient operation
- Reliable

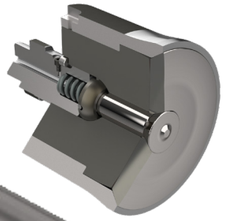


Marathon
(for high pressure, more than 100 ksi)

Replaceable Ring Block (RRB)
(for pressures less than 100 ksi)



High Pressure Ring Block (HPR)
(for extra high pressure, long cycle times)



STEMS / SPACERS

PRESS TOOLING : Die Rings, Bolsters, Pressure Rings, Billet Shears, Die Slides, Horseshoes, Tie Rods, Tool Rams, Tool Containers, Heated Ram Noses, Piercing Mandrels, Scalper Blades...

AST Accurate Sensors Technologies

Swiss Steel Group

HOT WORK TOOL STEELS

Ipsen NITREX