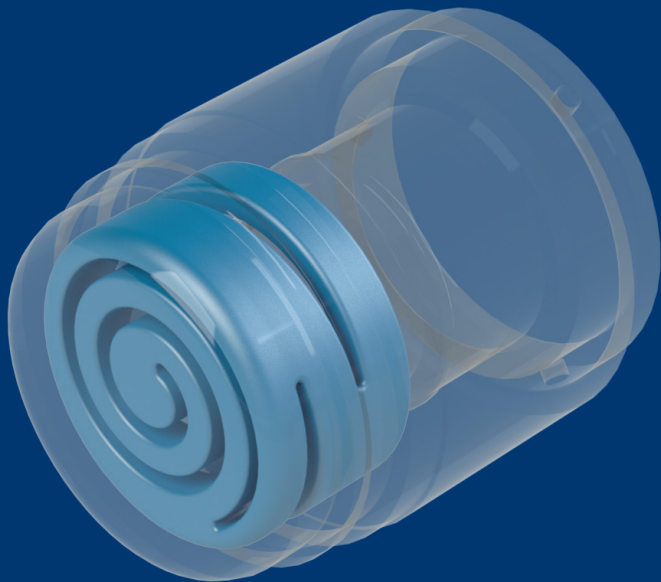




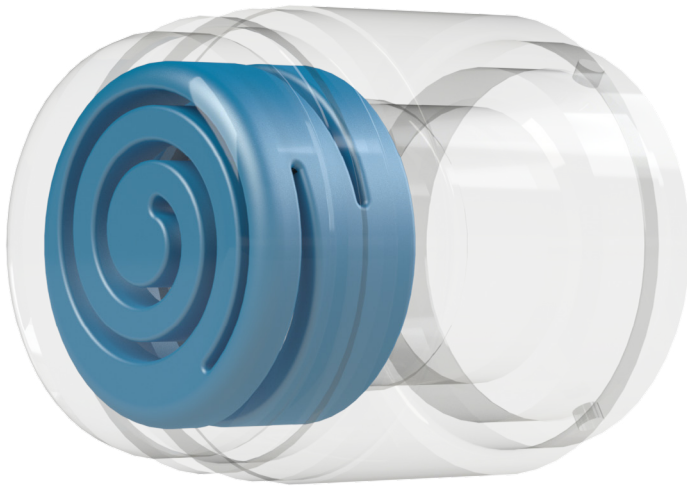
Products & Services > Die Casting
> iTherm® plunger

DATA SHEET

iTherm® plunger



iTherm® plunger

**DESCRIPTION**

iTherm® Piston is an ultimate solution in thermal effectiveness and durability.

It is highly innovative conformal-cooling single-body solution and proven-performer applied where optimum process solutions are required.

MAIN ADVANTAGES

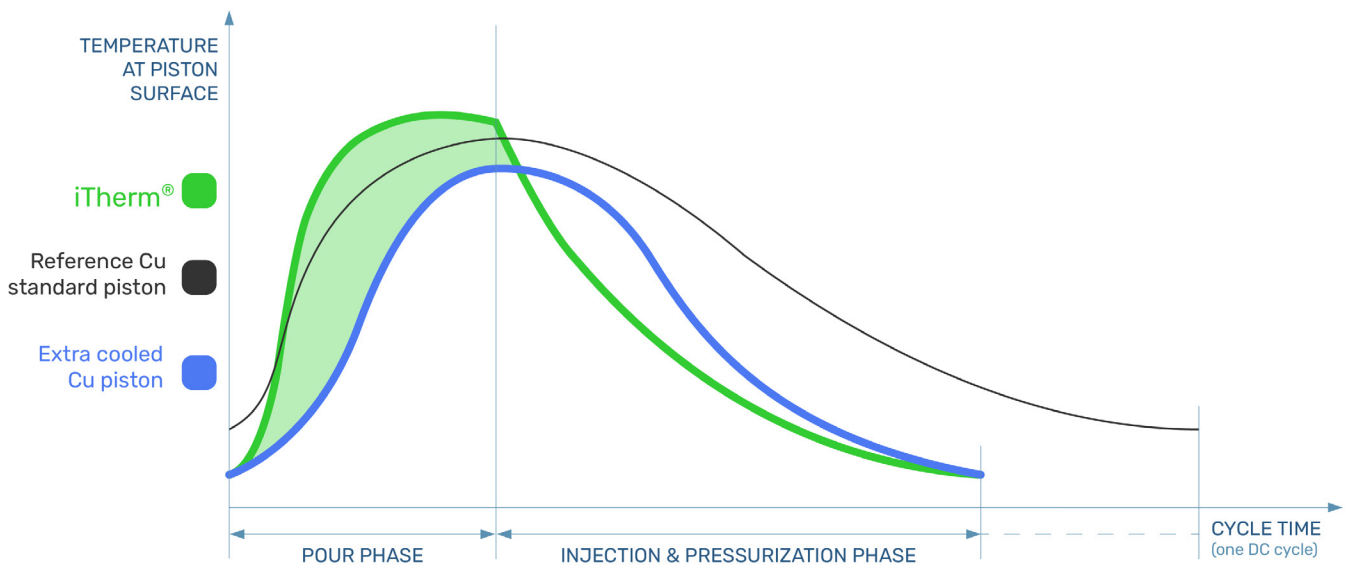
- Durability min 50.000 shots (see warranty)
- The piston has highest cooling effectiveness of all the products known; cooling of the biscuit exceeds that of copper pistons, and it is designed as such for further reduction of cycle time.
- Easy to maintain and replace.

iTherm® plunger

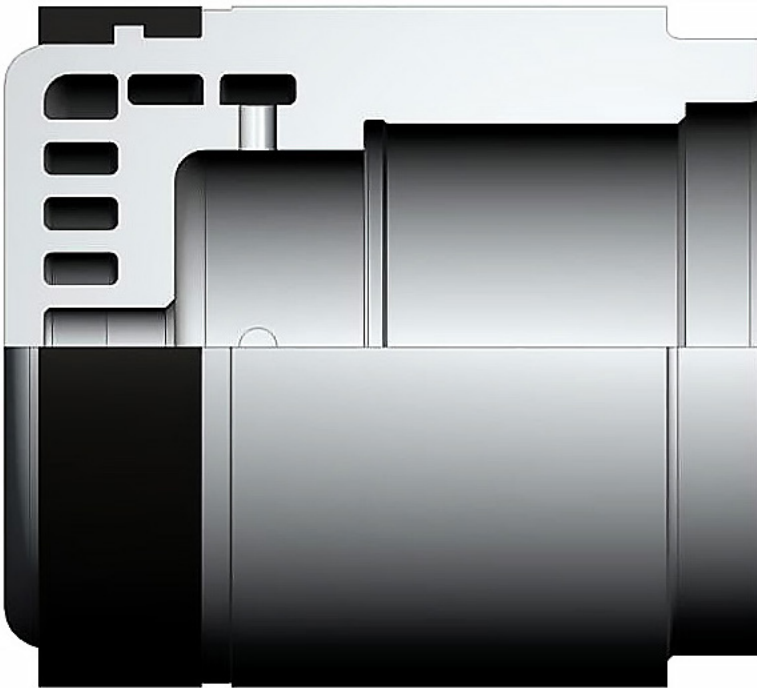
GRAPH

iTherm® Piston presents an optimum solution for stable process operation, in-service life, and reduction of cycle time in HPDC. There are three different types of iTherm® Pistons (V2.1, V3.1 and V4.1), each suitable to satisfy requirements of certain application.

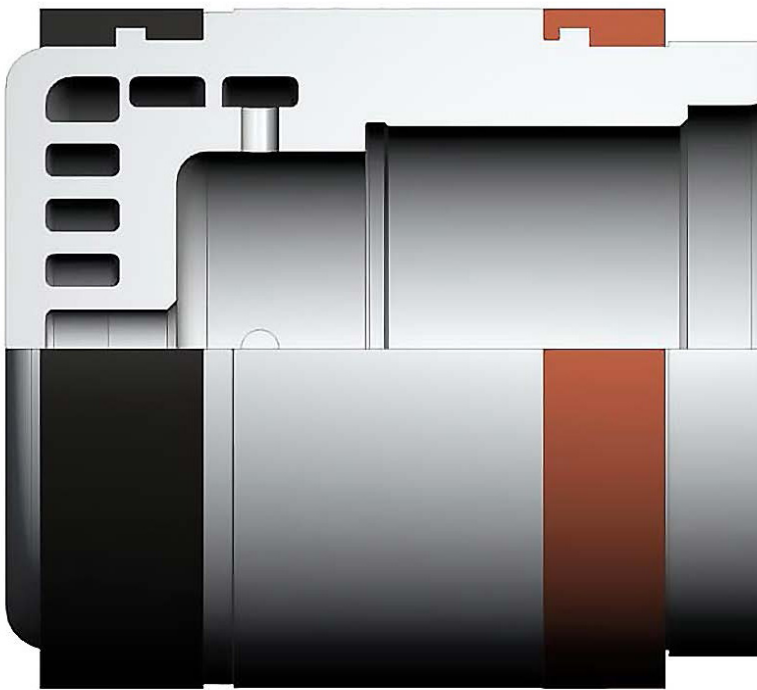
iTherm®+ Piston comes with additional surface protection and improvement in thermal characteristics.



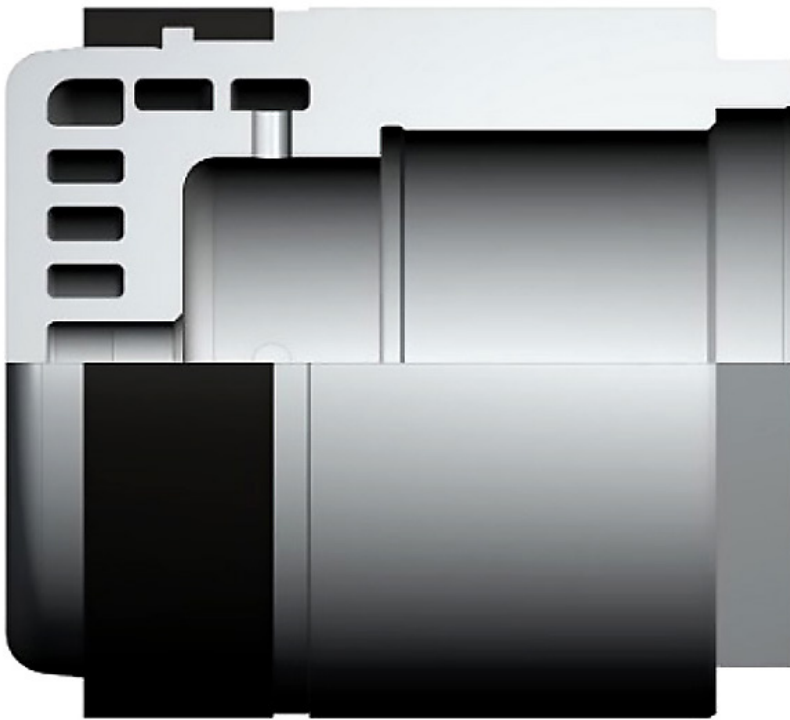
iTherm® PLUNGER V2.1



- Medium to big machines, from 70 up to 160 mm
- All applications
- Structural parts

iTherm® PLUNGER V3.1

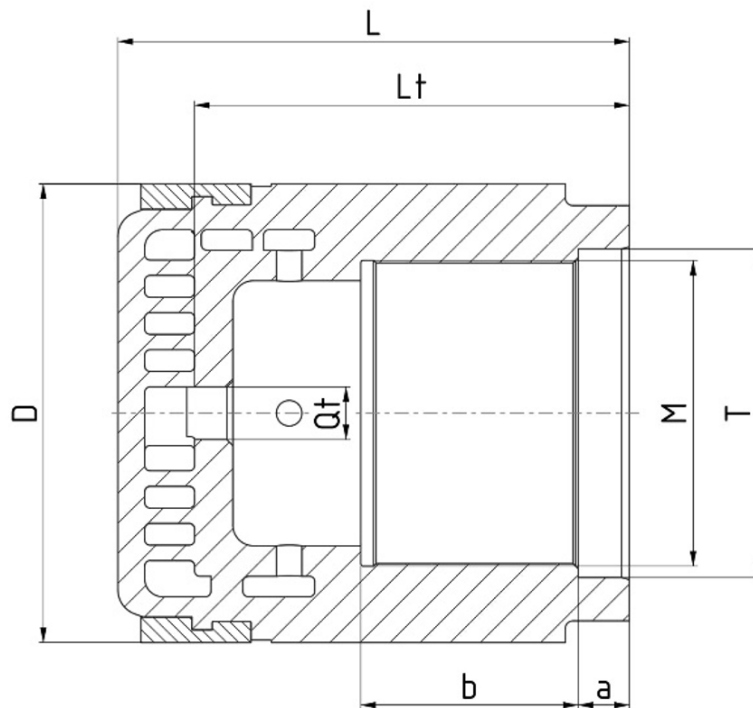
- Medium to big machines, from 70 up to 160 mm, or from 3,00" up to 6,00"
- All Al and Mg casting applications
- Structural parts

iTherm® PLUNGER V4.1

- Biggest machines, from 120 up to 180 mm or from 4,50" up to 7,00"
- All applications
- Specially designed for engine blocks casting or other large castings

iTherm® plunger

iTherm® PLUNGER V4.1



D	70	75	80	85	90
L	120	120	120	120	120
T x a	49x20	49x20	57x20	57x20	67x20
M x B	M36x2 x 35	M36x2 x 35	M48x2 x 35	M48x2 x 35	M58x2 x 35
Lt	102	102	102	102	102
Qt	12,5	12,5	12,5	12,5	12,5

D	95	100	105	110	115
L	120	120	125	130	135
T x a	67x20	77x20	77x20	84x20	84x20
M x B	M58x2 x 35	M62x2 x 35	M62x2 x 40	M72x2 x 45	M72x2 x 50
Lt	102	102	102	107	112
Qt	12,5	12,5	16,5	16,5	16,5

iTherm® plunger

D	120	125	130	135	140
L	140	145	150	150	160
T x a	94x20	94x20	99x20	99x20	99x20
M x B	M76x2 x 55	M76x2 x 55	M85x2 x 55	M85x2 x 55	M85x2 x 65
Lt	116	116	126	126	136
Qt	16,5	16,5	16,5	16,5	16,5

D	145	150	160	170	180
L		170	180	190	200
T x a		116x20	116x22	129x22	129x22
M x B		M105x2 x 75	M105x2 x 75	M120x2 x 85	M120x2 x 85
Lt		146	155	160	170
Qt		16,5	16,5	18,5	18,5

All dimensions are in mm

OPERATING INSTRUCTIONS

- iTherm® plungers are designed to operate with water as the coolant with forced coolant flow.
- Coolant flow must be established before startup, before any shots are made.
- Coolant center-feed tube length (Lt), diameter (Qt) installation must be according to specification. This means center tube must seat properly in the front of the piston to form a complete cooling circuit.
- There are no restrictions on coolant temperature. Unregulated tower water at room temperature (20-30°C) is frequently used, with no adverse impact on component. This means that the shot tip is the most effective surface for cooling the biscuit.

**Do you need a slightly different
design or component?**

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