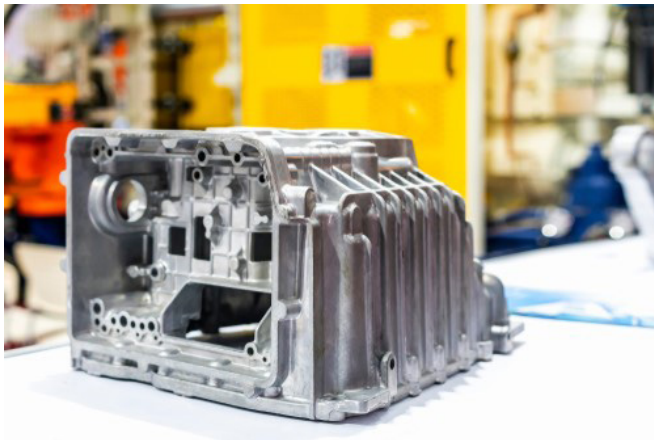




LINDQUIST STEELS, INC.
TOOL STEEL SPECIALISTS

THE PREMIER TOOL STEEL ADDITIVE POWDER METAL FOR DIE CAST DIES & TOOLING

DAP™-AM HTC 40 & DAP™-AM HTC 45 ARE THE PREMIER SPECIALLY DEVELOPED ADDITIVE METAL POWDERS DESIGNED FOR DIE CAST DIES AND ASSOCIATED TOOLING COMPONENTS.



**DAP™-AM HTC 40 IS BEST USED IN THE
40 TO 45 RC. HARDNESS RANGE.**

**WHILE DAP™-AM HTC 45 IS BEST USED IN THE
45 TO 50 RC. HARDNESS RANGE.**

Both grades offer unprecedented thermal conductivity, toughness, heat check resistance, and when combined with conformal cooling channels the performance is outstanding.

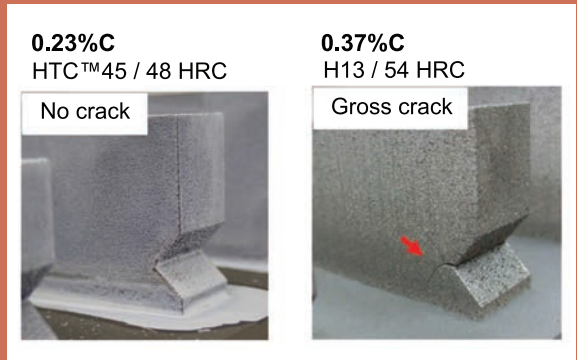
POSITION YOUR TOOLING WITH THE VERY BEST DAP™-AM HTC 40 & DAP™-AM HTC 45

THE DAP™-AM HTC ADDITIVE METAL POWDERS OFFER:

- Superior thermal conductivity
- Physical properties that are equal to or superior to conventional grades
- High resistance to cracking
- Excellent toughness at hardness
- Superior flowability & printability
- Simple post-print heat treatment
- Wide range of suitable applications
- Leadtime reduction
- Faster prototypes
- Improved cycle times & part quality
- Green manufacturing

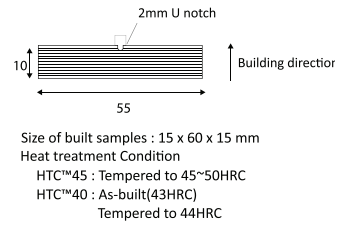
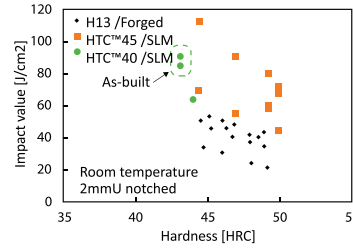


**ENGINEERED TO
HAVE BETTER CRACK
RESISTANCE & THERMAL
CONDUCTIVITY
COMPARED TO
MARAGING AND H13.**



Impact Toughness

Comparing in the same hardness range, the impact values of HTC™45 and HTC™40 are higher than that of forged H13



BOTH MATERIALS WHEN PRINTED PROPERLY HAVE A DENSITY OF 99.96% AND DUE TO THE POWDERS EXCELLENT FLOW RATE THE SURFACE FINISH IS SMOOTH AND CONSISTENT ENOUGH TO BE POLISHED WITH EASE.

Particle Size (µm)

-53 / +25

EACH GRADE HAS BEEN PROVEN AND QUALIFIED ON ALL MAJOR SLM, EBM, & PBF PRINTERS. PLEASE CONTACT US FOR ASSISTANCE WITH OPTIMAL PRINTING PARAMETERS.

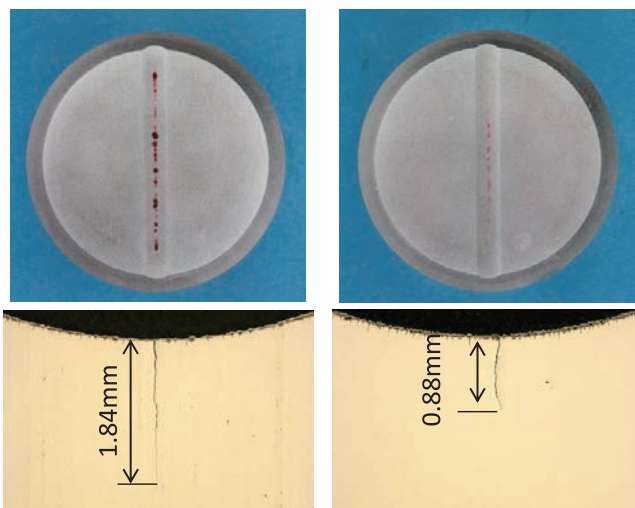
HEAT CHECKING RESISTANCE

DAP™-AM HTC 45 HAS BETTER HEAT CHECKING RESISTANCE THAN H13.

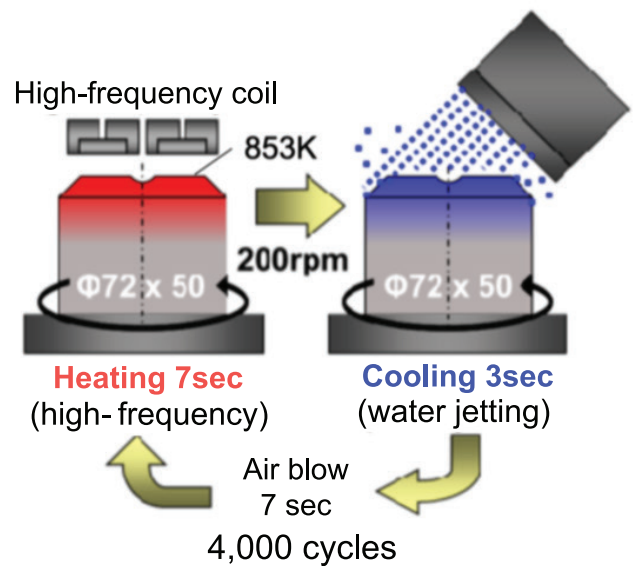
Forged H13(47.6HRC) HTC™45(48.9HRC)

Appearance after test

Crack depth at center of the specimen



R6, 1 mm Notched



Heat checking test procedures

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