

# ForCAST

The Newsletter of the American Metalcasting Consortium

Spring 2020

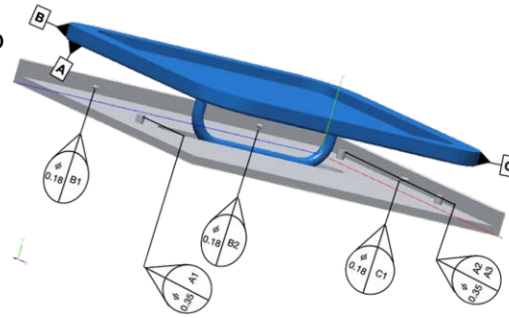


The AMC ForCast team hopes this newsletter finds you safe and healthy in the wake of the COVID-19 pandemic. We are truly facing an unprecedented time. Our hearts go out to anyone who has been impacted by the virus, especially to those who are sick, to whom we extend our heartfelt wishes for a full recovery. The majority of the AMC project teams are working remotely and successfully continuing their AMC R&D. In concern for the health and safety of our AMC associates, we have had to switch the annual AMC / JDMTP Technology Review to a virtual review. We will miss seeing the AMC team members, government sponsors, and industry partners at the annual event, but have already scheduled the 2021 AMC / JDMTP Review for June 16-17, 2021 at the Hilton Garden Inn O'Hare. We look forward to seeing everyone there. Please stay safe and healthy and contact the AMC team if you have any AMC-related questions or concerns.

## GD&T Success

In March, CAST-IT received an assistance request from Mike Neff, Naval Surface Warfare Center Indian Head Explosive Ordnance Disposal Technology Division, regarding a DLA 339 for a cast access door. Help was needed in understanding Geometric Dimensioning and Tolerancing (GD&T) principles and the location of two datum points that were not explicitly called out. CAST-IT created a short guide explaining GD&T, draft, and the implied location of the datums. This allowed the ESA to provide a timely response to the 339, reducing further delays. The team is in the process of creating a GD&T Casting Quality Tip to illustrate how GD&T can be used to help a casting be produced more easily.

Shown here is a casting, with its primary datums defined, being inserted into a functional gauge with datum target pins. Once seated on the pins, the casting's specified Datum A flatness can be verified while the casting is constrained for grinding the parting line and gating contacts. Processing 100% of the castings this way ensures a reliable machining set-up and final assembly.



***"Cannot express enough how helpful you folks have been. There are resources and tools I didn't realize were available to me until recently. Really appreciate the good info and again thank you gents!"*** — Mike Neff, NSWC Indian Head Explosive Ordnance Disposal Technology Division



## Upcoming Virtual AMC Technology Review

The AMC Technology Review, usually held in Chicago, will be conducted virtually on June 23-25, 2020. During these three half-days, AMC's project teams will present their respective R&D results and updates. DLA, JDMTP, and AMC leaders will review twenty-one projects and evaluate how each one is supporting DoD's need for rapid production of high-performance, cost-effective cast parts for weapons systems.

**AMC**  
AMERICAN METALCASTING CONSORTIUM

Visit AMC at DMC  
December 7-10, 2020  
Orange County Convention Center  
Orlando, FL



For more information about AMC go to: <https://amc.ati.org> or call 843-760-3483.

This AMC project is sponsored by the DLA Troop Support, Philadelphia, PA and the Defense Logistics Agency Research & Development (R&D) Office, Ft. Belvoir, VA.

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