High-energy-density Targets Fabricated by The University of Michigan

SALLEE KLEIN, Univ of Michigan - Ann Arbor, J. S. DAVIS, L. GAO, R. S. GILLESPIE, M.J. MACDONALD, G. MALAMUD, M. J.-E. MANUEL, W.C. WAN, R.P. YOUNG, C. C. KURANZ, P.A. KEITER, R P. DRAKE, university of michigan — The University of Michigan has been fabricating their own targets for high-energy-density physics experiments for well over the past decade. We utilize the process of machined acrylic bodies and tightly toleranced mating components that serve as constraints, enabling our group to build repeatable targets. We favor traditional machining, utilizing 3D printing when it suits, taking advantage of the very best part of both of these methods of creating precision parts for our targets. Here we present several campaigns shot at the OMEGA, Titan and Trident facilities and methods used to those fabricate targets.

1This work is funded by the U.S. Department of Energy, through the NNSA-DS and SC-OFES Joint Program in High-Energy-Density Laboratory Plasmas, grant number DE-NA0002956, and the National Laser User Facility Program, grant number DE-NA0002719

Sallee Klein
Univ of Michigan - Ann Arbor

Date submitted: 15 Jul 2016