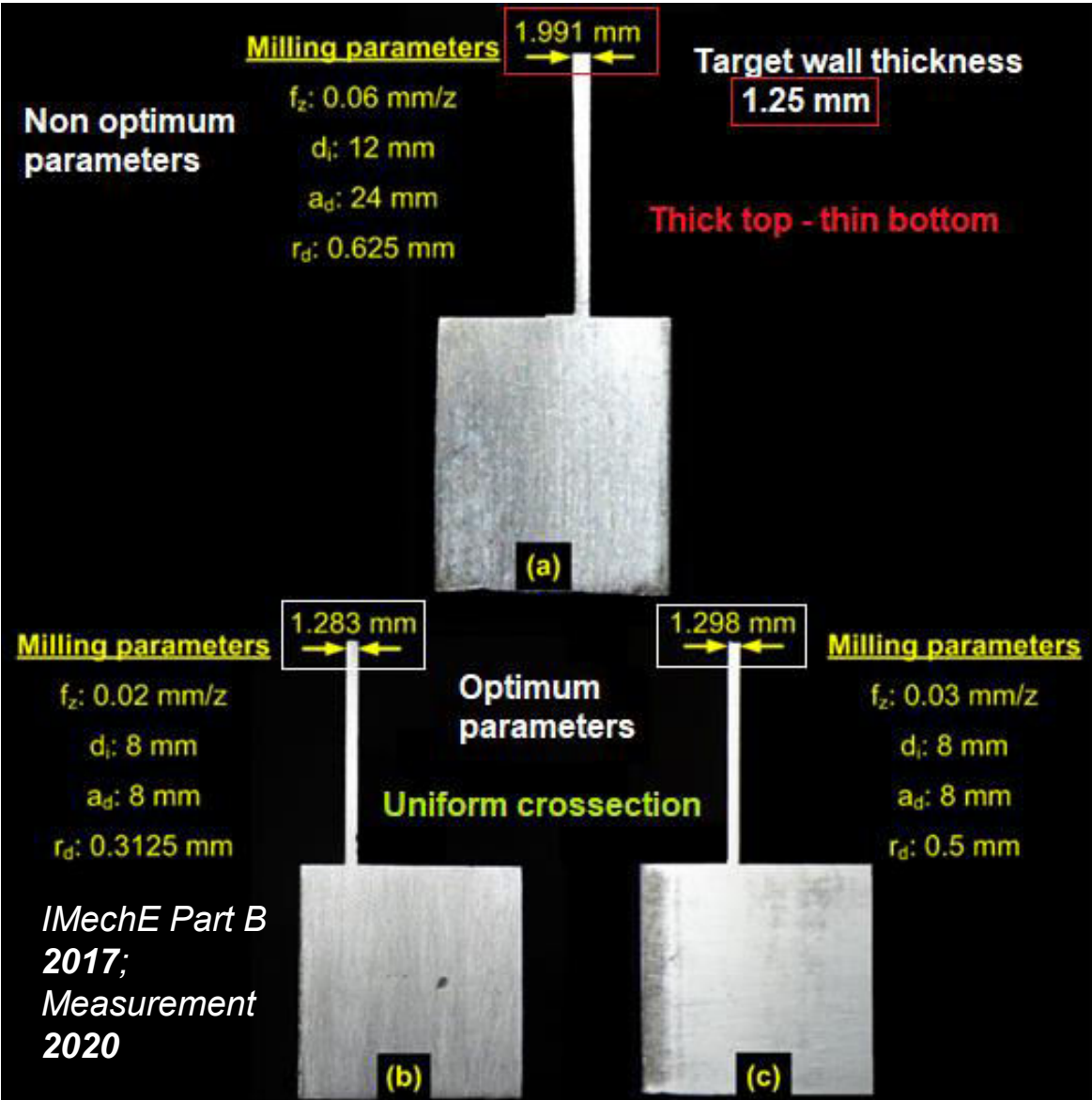


Prof. Shrikrishna N. Joshi, Mechanical Engg., IIT Guwahati



Thin-wall machining of aerospace alloys

SERB-DST Funded Project (completed)
 INR 35.34 Lakhs (2013-2017) as PI

f_z = feed (mm per tooth)

d_i = tool diameter (mm)

a_d = axial depth of cut (mm)

r_d = radial depth of cut (mm)

Thickness deviation at top portion was improved from **59.2% to 2.64 to 3.84%** with optimum levels

Precise machining of a curvilinear ultra-thin-wall part **750 μ m**

Important deliverables to make the aircrafts and automobiles lighter

On 3-axis CNC milling machine at medium cutting speed in real-life shop floor conditions

Sponsored project
 01 completed

Ph.D. students
 01 completed (thin-wall)

M. Tech. projects
 03 (thin-wall)

Intl. Journal papers
 09 (thin-wall)

Book chapters 02 (thin wall)