

Effect of the Particle Size Distribution of Irregular Al Powder on Properties of Parts for Electronics Fabricated by Binder Jetting

Joanna Marczyk and Marek Hebda *

Faculty of Materials Engineering and Physics, Cracow University of Technology,
Warszawska 24, 31-155 Cracow, Poland; joanna.marczyk@pk.edu.pl

* Correspondence: marek.hebda@pk.edu.pl

Supplementary Materials

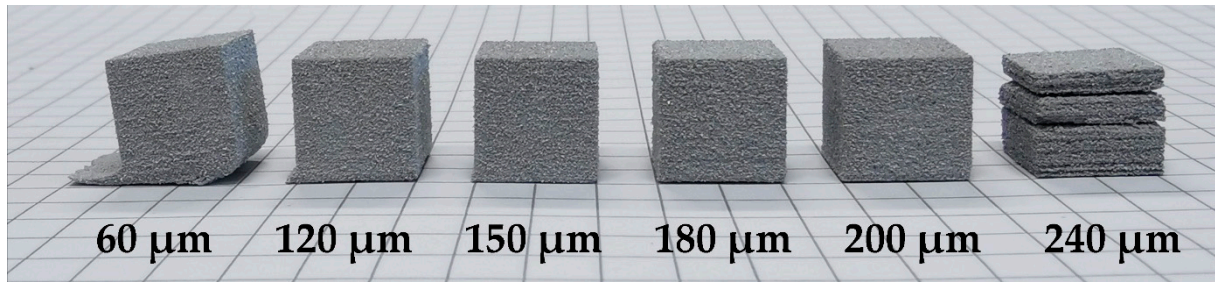


Figure S1. AL160 parts printed with a variable layer thickness (from the left: 60 μm , 120 μm , 150 μm , 180 μm , 200 μm , and 240 μm)

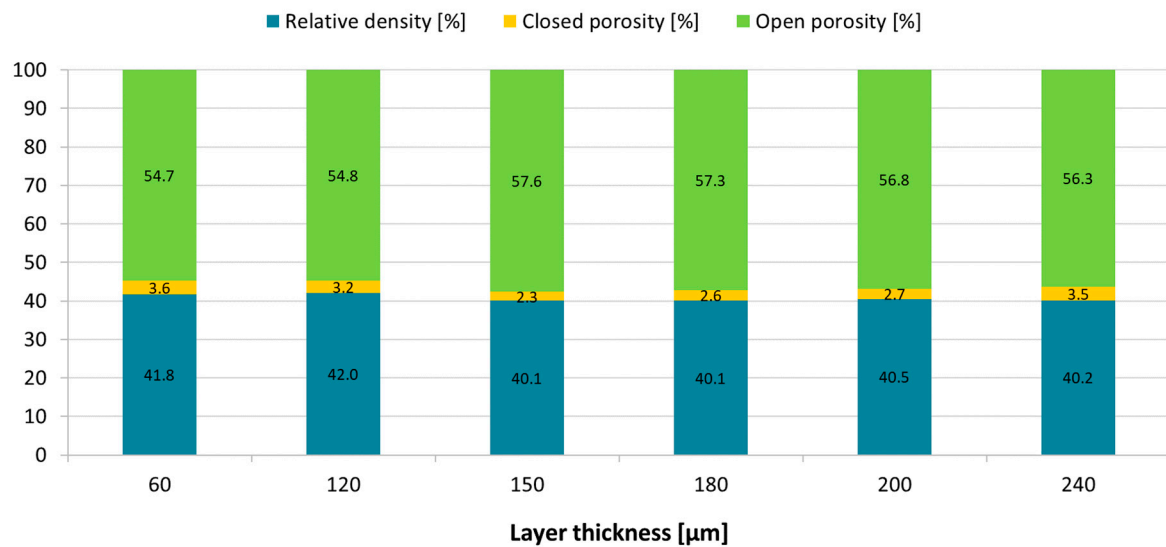


Figure S2. Influence of layer thickness on relative density and porosity of AL160 samples

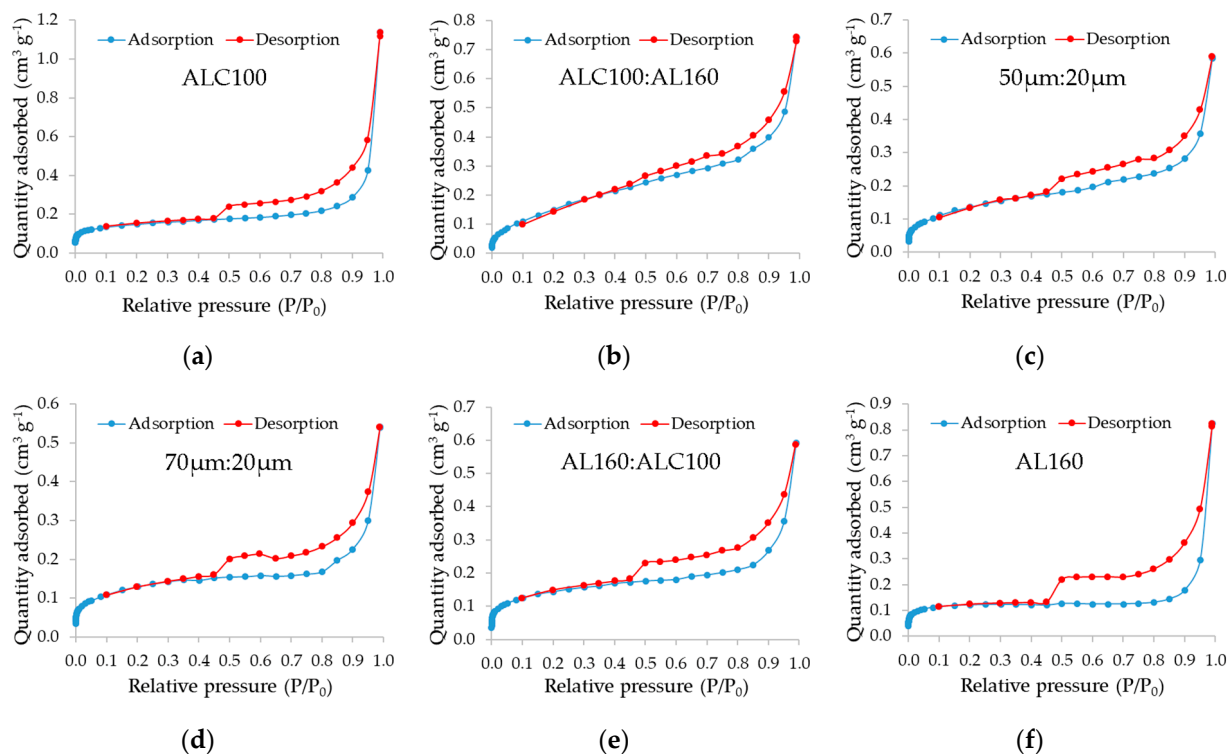


Figure S3. Nitrogen adsorption-desorption isotherms of aluminum powders: (a) ALC100; (b) ALC100:AL160; (c) 50 μ m:20 μ m; (d) 70 μ m:20 μ m; (e) AL160:ALC100; (f) AL160, where (b–e) were made with a share of 73-27 wt. %

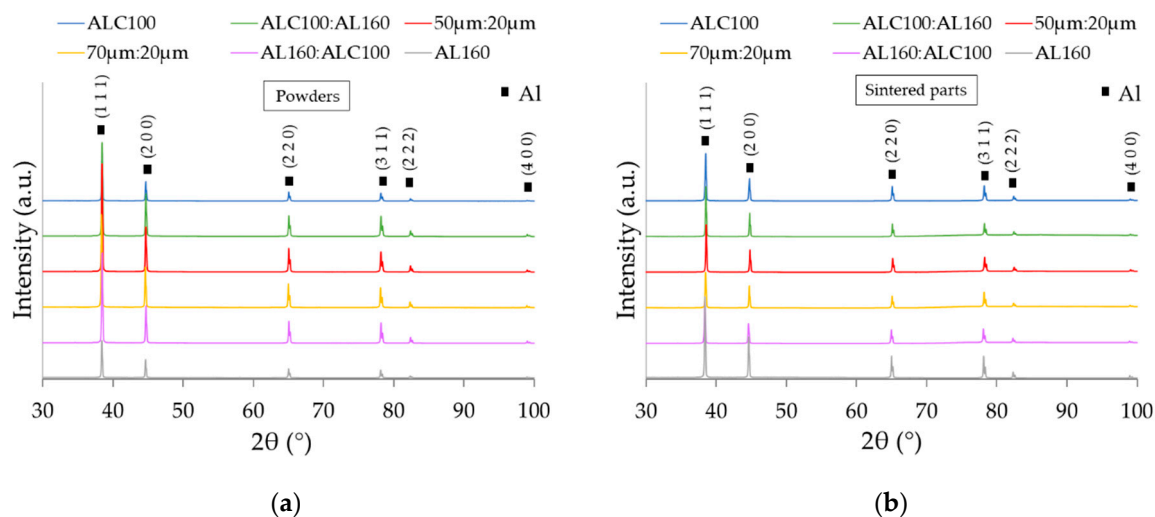


Figure S4. XRD patterns for (a) aluminum powders; (b) 3D printed parts with the Binder Jetting method.