

Product dossier DEMO-CYLINDER-001 / rev A

Status: geometry demonstration only. No manufacturing release.

Geometry: cylinder, radius 25 mm, height 100 mm; 64-segment STL. Nominal volume = 196.349541 cm³. The tessellated volume is slightly smaller. STL unit convention: mm.

Material / grade / heat treatment / lot: UNKNOWN. Intended use, load spectrum, environment, tolerance and quantity: UNKNOWN.

Route: Fab 3 is a candidate only. Turning or other processes require workholding, tool access, machine capability and inspection planning. No CAM toolpath or G-code is supplied.

Cost: NOT ESTIMATED. Required: material quotation, machine and setup time, labour, energy, QA, scrap, overhead, currency, price date and accepted batch quantity. $C_{unit} = \frac{\sum(\text{cost categories})}{N_{accepted}}$.

Patent review: NOT PERFORMED. Required: jurisdiction, intended commercial use, search query, search date, patent families, independent claims mapping, legal status and qualified review. This PDF is not a patent or clearance.

EU requirements: UNDETERMINED until product use is specified. Machinery, pressure equipment or other regimes may or may not apply. No CE mark or conformity assessment is claimed.

Inspection: geometry only; mesh closedness and positive volume checked by tests. Material behaviour, dimensional production tolerance and safety are unverified.

Release gates: complete requirements, source data, verification, prototypes, repeatability tests, process capability, standards applicability and review approval.