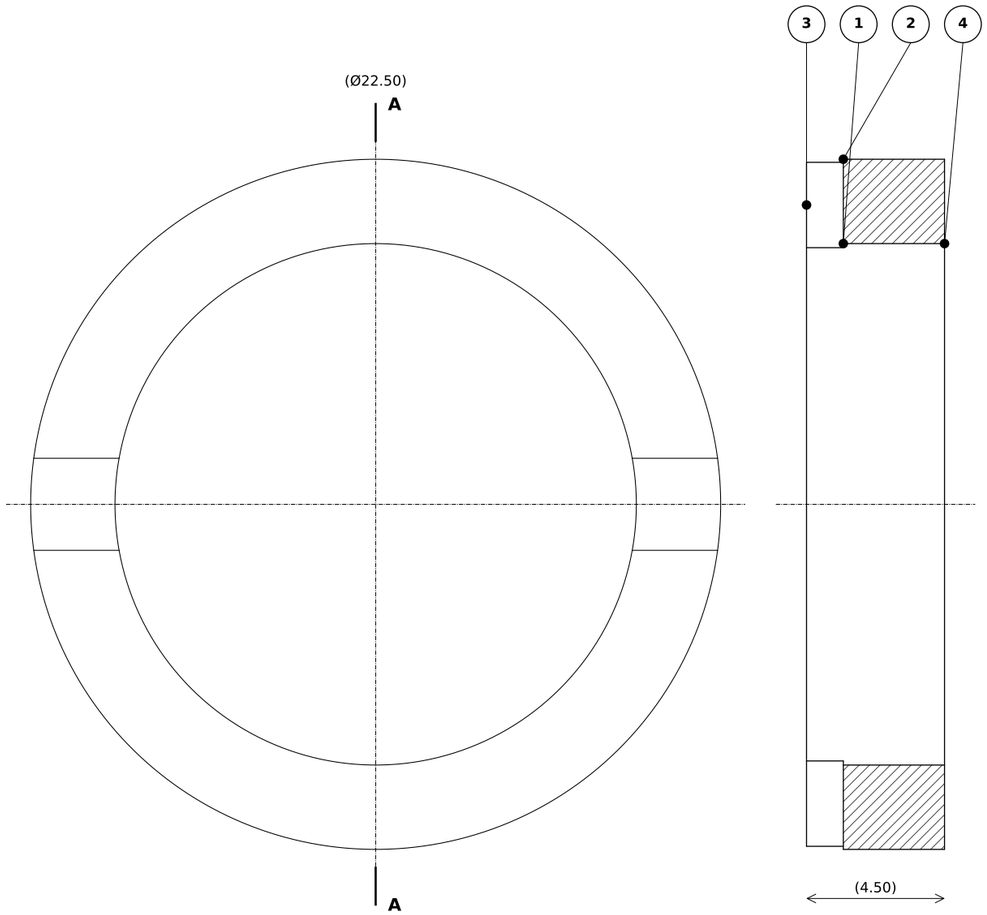

VIEW FROM THE INLET

SECTION A-A

REQUIREMENTS

1 M17×1-6H LEFT-HAND, through; mark "LH" on the face

2 OD Ø22.5 ±0.05 (turns inside the cartridge's cup with 1.25 mm to spare)

3 2 slots across the front face, 3.0 +0.1/0 wide, 1.2 deep, for a two-tang face spanner

4 Clamp face: perpendicular 0.005 to the thread

NOTES

1. Model is master: sizes not called out come from bearing_nut.step, at the general tolerance.
2. Break sharp edges 0.1–0.3 unless noted. No burrs. No tool marks across sealing or seating faces.
3. Surface finish Ra 1.6 µm unless noted. Threads to ISO 965 (metric fine).
4. Rotor set: balanced as one assembly (the shaft-and-turbine weldment, the compressor wheel, both nuts), two planes, ISO 21940-11 G2.5 at 86,000 rpm. Scribe the angular position after balancing; reassemble to it.
5. Experimental use only. Sold under Highland's experimental-use agreement.
6. Torque to the bearing maker's clamp load, then stake the nut's front edge into the shaft's slot. A new nut every time it comes off.
7. Inspection report, CMM and material certificates are add-ons on the quote.

HIGHLAND Turbojet, 170 N class

bearing_nut.step · highlandmetal.ca

PART Rear bearing nut	PART NUMBER HL-TJ-24		REVISION A
MATERIAL Steel 4140 prehard, 28-32 HRC (ASTM A434 bar)			
FINISH None, as machined		HEAT TREAT None	
TOLERANCE UNLESS NOTED ±0.13 mm (±0.005 in) unless noted; angles ±0.5°			
QUANTITY 1 per engine	MASS 5.9 g		SCALE 5:1
UNITS mm	PROJECTION Third angle	DATE 2026-11-20	SHEET A3, 1 of 1