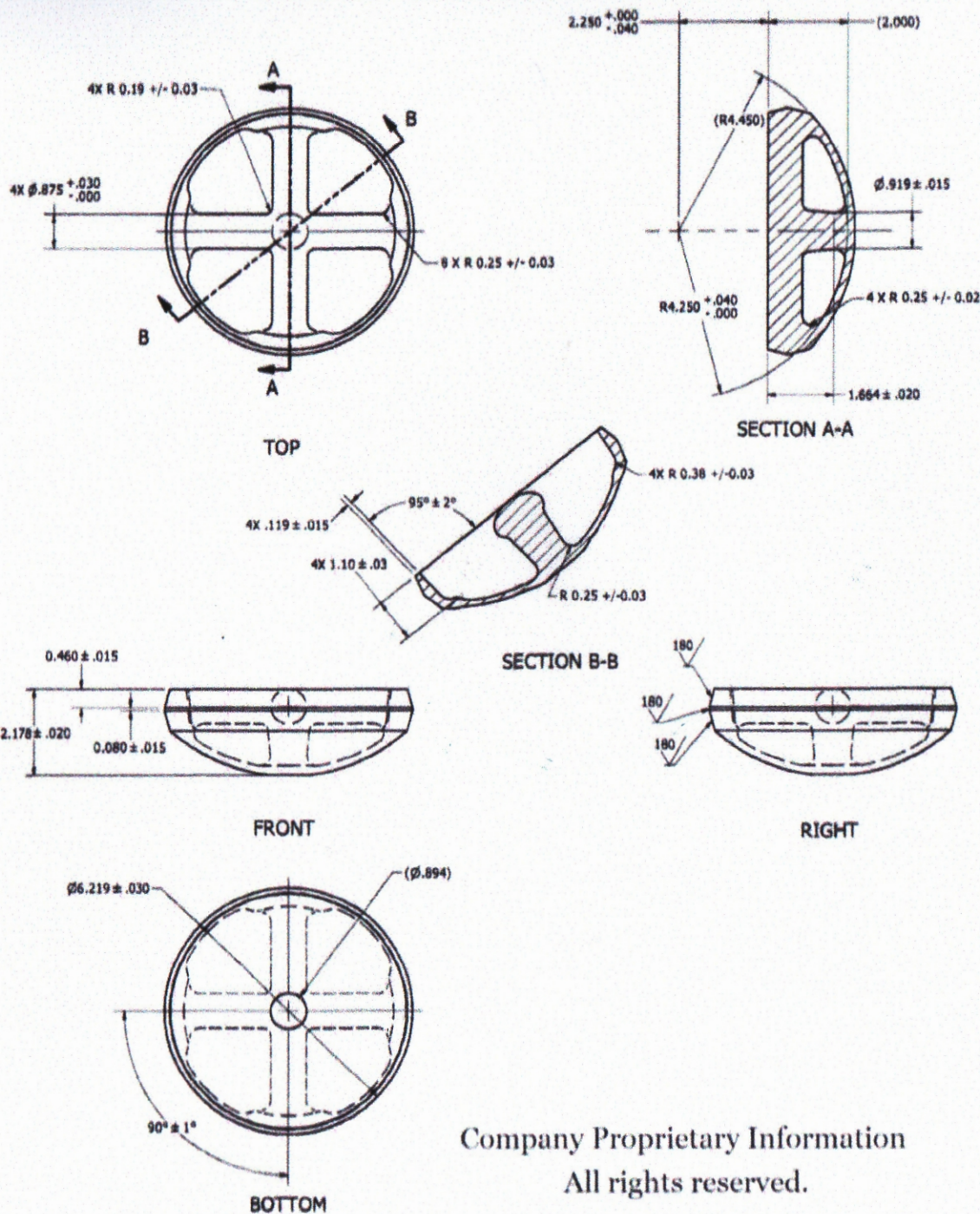




Company Proprietary Information
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NOTES:

- 1) Vacuum Investment Cast Tie Down Using Inconel 718 Material.
- 2) Unless Otherwise Noted, All Surfaces to be Finished to 125 Microlines Ra (Arithmetic Average).
- 3) After fabrication (Casting), Each Tie Down is to be Hot Isostatic Pressed (HIP) for 3 to 5 hours at 2125 to 2175 degrees Fahrenheit at a pressure of 15 ksi to remove Voids and Increase the Fatigue Life, Ductility, and Strength to the equivalent of a machined part. Then the Casting is to be Solution Annealed followed by Precipitation Heat Treat to the Equivalent of 185 ksi Ultimate Strength and 150 ksi Yield Strength per AMS 5662, 5663.
- 4) All Fillet Radii are 0.19 ± 0.03 Unless Otherwise Specified.
- 5) Optional: After fabrication and heat treatment, Sandblast and then Primer Coat most of Tie Down fitting, except surfaces that are later to be welded (180 Ra surface finish areas) during installation, with Coating to be in Accordance with Mil-PRF-23236, Type V, Class 7, Grade C. The Purchaser May opt to Waive the Application of the Primer Coating in the Purchase Specification. See Installation Drawing for notes about Final Painting. Painting to be in Accordance with NAVSEA Standard.
- 6) All Referenced Commercial, Federal, or Military Specifications, Publications, and Standard/Type Drawings Shall be the Latest Issue.
- 7) Fabrication and NDT Inspection Shall Be in Accordance With Mil-Std-2175 (Class 1, Grade A), Mil-Std-271, ASTM E 192, Mil-I-6866 & Mil-Std-453. All castings to be visually inspected followed by a Penetrant Inspection after fabrication for Surface defects and then Radiographically inspect for internal inclusions, flaws and voids. Note all defects On the NDT Inspection Report. Part must not have any defects in size, quantity or location that may cause premature failure during fatigue or static loading, and that are greater than allowed for a Class 1, Grade A casting per Mil-Std-2175.
- 8) Abbreviations are in Accordance With ANSI/ASME Y14.38 and Mil-STD-25, Except as Noted.
- 9) Break all Sharp Edges/Corners to 0.030/0.005 Radius.
- 10) All Dimensions in Inches.
- 11) No Weld Repair Allowed.



ISO 1
Top View



ISO 2
Bottom View

DRAWN David Burchell	6/5/2023	BURCHELL PROFESSIONAL GROUP INC.		
CHECKED David Burchell		TITLE		
QA		Heavy Duty TIE-DOWN (Type 14)		
REV'D David Burchell		SIZE		
APPROVED David Burchell		C		
		SCALE		
		1 / 2		
		DWG NO		
		TD10002-14C ForWebsite		
		REV		
		-		
		SHEET 1 OF 2		