Answer Sheet – Blueprint Reading & GD&T; Quiz: TITAN-509LM

1. Material: 6061-T6 Aluminum.

2. Units: Inches.

3. General Tolerance: ±.030 for X, ±.010 for XX, ±.005 for XXX; Angles ±1°.

4. Surface Finish: 63 microinches.

5. Drawing Scale: 1:1 (Sheet 1) and 1:1.5 (Sheets 2–3).

6. Drawn by: W. Boyce, Date: 3/18/2019.

7. Burrs/Edges: 'Remove all burrs and break edges .010'.

8. Fillet Radius: Shall not exceed .020 unless specified.

9. Material Condition: Maximum Material Condition (MMC) symbol 'M' appears on GD&T; frames.

10. Threads: 10-32 UNF-3B tapped holes, .300 min depth.

11. Diameter Tolerance: .375 +.000/-.003.

12. Depth of 10-32 threads: .300 min.

13. Section A-A: .250 +.000/-.002.

14. R.025 ± .005 indicates controlled edge breaks with specific radius tolerance.

15. Positional Tolerance: .005 M A B (true position controlled relative to A and B at MMC).

16. Eight R.300 radii—located at corners and features marked 'TYP R.300'.

17. Detail A true position tolerance: .005 M A B (controlled by datums A and B).

18. Datum Reference Frame: A (primary), B (secondary), C (tertiary).

19. '.005 M A B' means true position tolerance of .005 at MMC, relative to datums A and B.

20. '.010 A B C' defines a total position tolerance of .010 relative to three mutually perpendicular datums (A primary, B secondary, C tertiary).