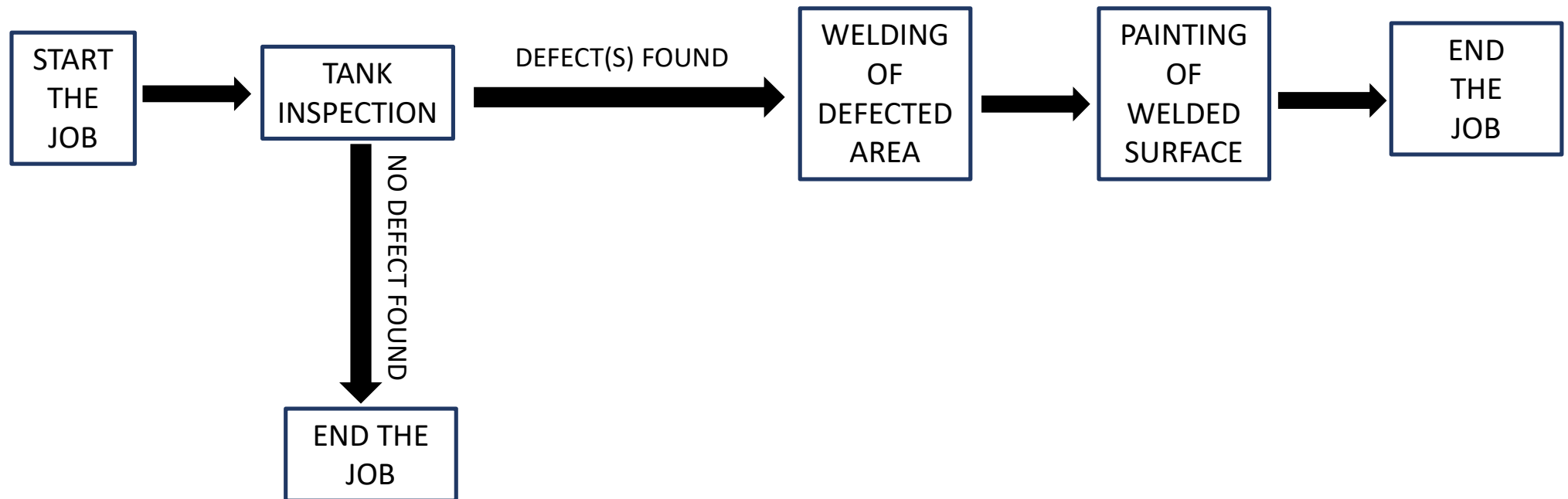


# TASK : API 653 TANK INSPECTION AND REPAIR WELDING



## SEQUENCE OF TASKS

1. EXTERNAL VISUAL INSPECTION OF THE WELDS, PLATES AND APPURTENANCES
2. SURFACE PREPARATION (CLEANING OF SURFACES OF LUBRICANTS,DUSTS,RESIDUE,SHARP OBJECTS,SCRAPING OFF SHARP EDGES)
3. EXTERNAL UT (ULTRASONIC THICKNESS) TESTING OF TANK OUTER SHELL PLATE
4. CLIMBING UNTO THE TOP(ROOF) OF THE TANK
5. EXTERNAL VISUAL INSPECTION OF THE ROOF
6. ULTRASONIC TESTING OF THE OUTER PLATE OF THE ROOF OF THE TANK
7. CLIMBING INTO THE TANK
8. SURFACE PREPARATION OF INNER SHELL PLATE AND FLOOR OF THE TANK (CLEANING OF SURFACES OF LUBRICANTS,DUSTS,RESIDUE,SHARP OBJECTS,SCRAPING OFF SHARP EDGES)
9. ULTRASONIC TESTING OF THE INNER SHELL PLATE, FLOOR AND THE INNER ROOF
10. DETERMINE WHETHER FLOOR IS EPOXY COATED OR NOT
11. IF COATED, THEN PROCEED TO VACCUUM TESTING OF ALL THE FLOOR WELD SEAMS
12. IF NOT, SKIP VACCUUM TESTING
13. CHECK FOR PLANAR TILT
14. CHECK FOR FLOOR BULGES OR DEPRESSION
15. GENERATE RESULT OF INSPECTION

15. RESULT AUTHORIZED BY CERTIFIED NDT PERSONNEL
16. IF NO DEFECT WAS FOUND
17. END THE JOB
18. IF DEFECT FOUND
19. SEEK APPROVAL FROM AUTHORIZED ENGINEER ON SITE TO BEFORE PROCEEDING TO REPAIR
20. AUTHORIZATION NOT GRANTED
21. END THE JOB
22. AUTHORIZATION GRANTED
23. PERFORM SAFETY PROCEDURE BEFORE WELDING COMMENCES
24. TOOLS MOUNTED ON THE ROBOT BY HUMAN
25. CLEANING OF SURFACE WITH DEFECT
26. WELDING OF DEFECTED AREA
27. CLEAN UP WELDED AREA
28. INSPECTION BY HUMAN FOR SMOOTHNESS AND QUALITY
29. NOT APPROVED
30. REDO WELDING
31. APPROVED
32. PAINT WELDED AREA
33. END JOB