



Excel Craft Private Limited

WELDING DIVISION

CASE STUDY OF ENGINE CASTING REPAIR

CUSTOMER	: ACCU PRECISION
COMPONENT	: Bottom Casing of Turbine.
MATERIAL	: CI-FG 300.
WEIGHT	: 2286 Kgs
PERSON INVOLVED	: Mr. Samir Rahate & Syed Zabiulla



PHOTO- A

PROBLEM STATEMENT – Casting defect with pin holes, overcut while machining. As shown in Photo B



PHOTO- B



Excel Craft Private Limited

WELDING DIVISION

PROCEDURE FOLLOWED TO CARRY OUT THE JOB BY EXCEL CRAFT TECHNICIANS:

PRODUCTS USED: EXCEL CRC, EXCEL CAST 422.

PROCEDURE:

1. **Welding:** Welding was carried out on the overcut keeping a machining allowance of 1-2 mm. After completion of the welding, GRINDING was done for surface match and colour match. Then DP test was carried out to find out any cracks or defect in the weld.

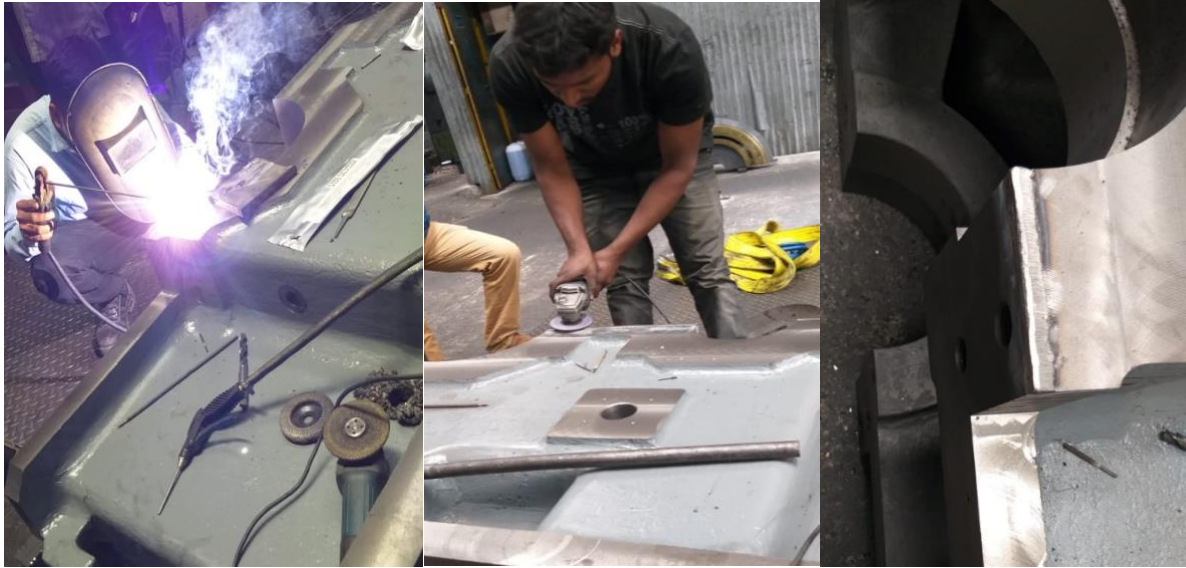
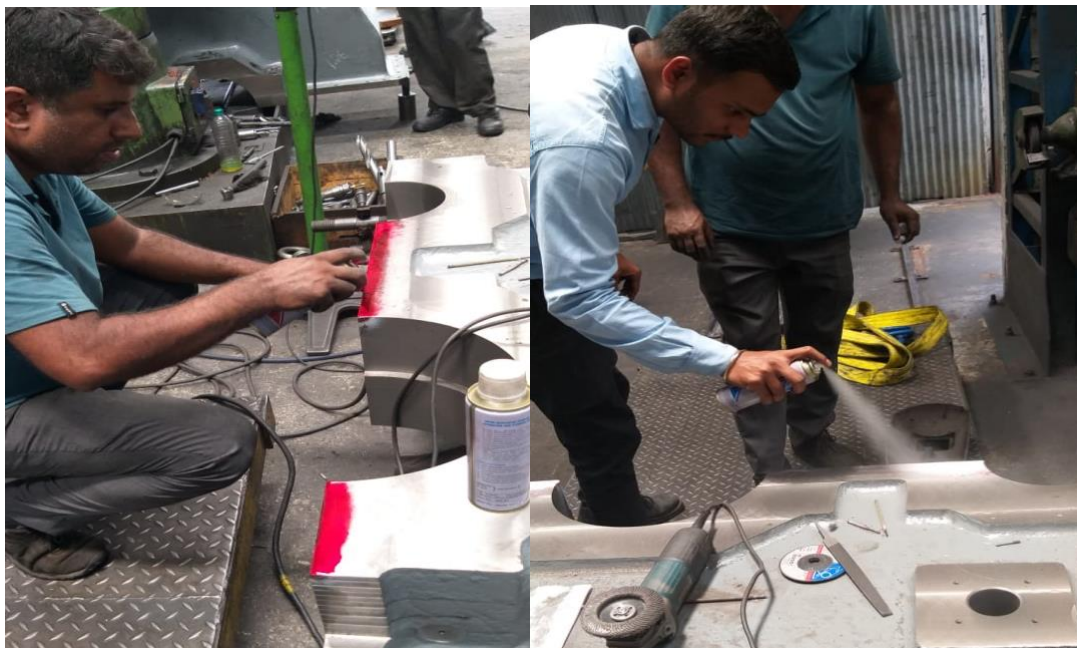


PHOTO- C

2. **DYE PENETRATION TEST:** is applied and low-cost inspection method used to check surface-breaking defects.



3. **MACHINING:** After the job was done, it was sent for machining as per drawing.