

HARDNESS AND DELTA-FERRITE PERCENTAGE

Report Type: Weld

Department: R&D

Analysis Type: One weldment is submitted to determine delta-ferrite variation across a weld compared to hardness of the material.

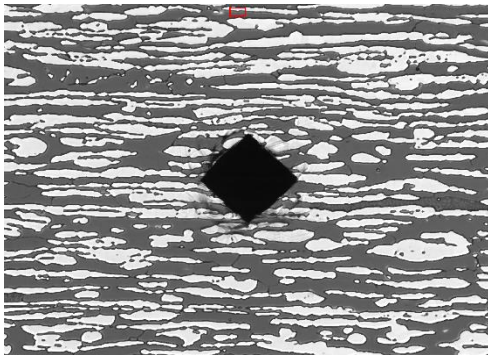


Figure 1: Original image after indentation.

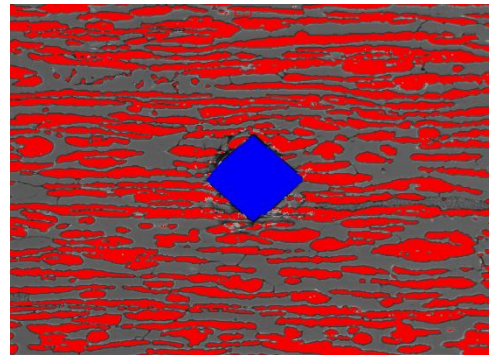
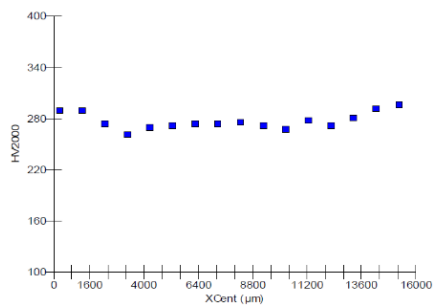


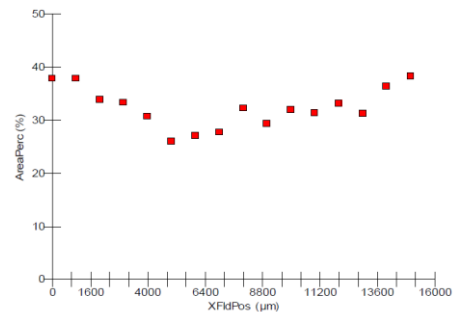
Figure 2: The indent is measured by blue bitplane. Delta-ferrite is detected and assigned into red bitplane.

Results:



Min: 261 HV
Max: 296 HV
Avg: 277 HV
STD: 9.8 HV

Figure 3: Vickers hardness measurements.



Min: 25.99 %
Max: 38.28 %
Avg: 32.41 %
STD: 3.83 %

Figure 4: Delta-ferrite variation across the weld compared to the hardness.

Comments:

PASS