

Figure S1 (supplementary file). Impact of melting particles on the substrate through the plasma arc created a multi-coating layer's structure.

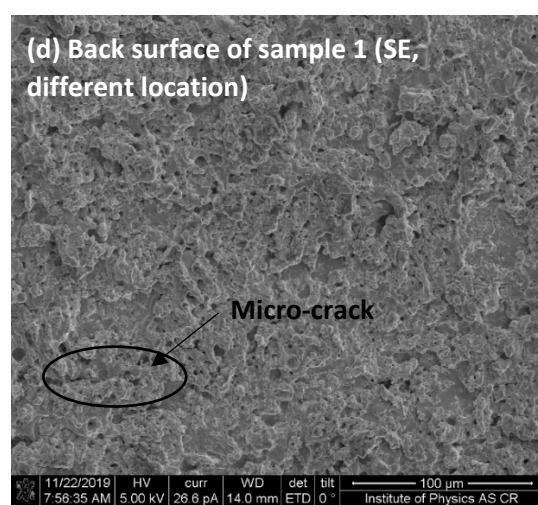
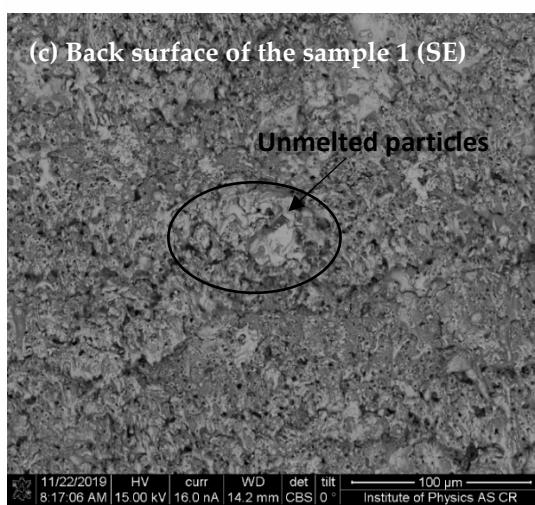
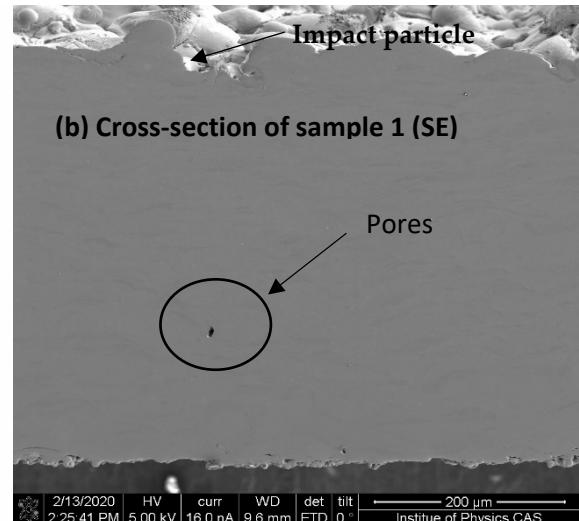
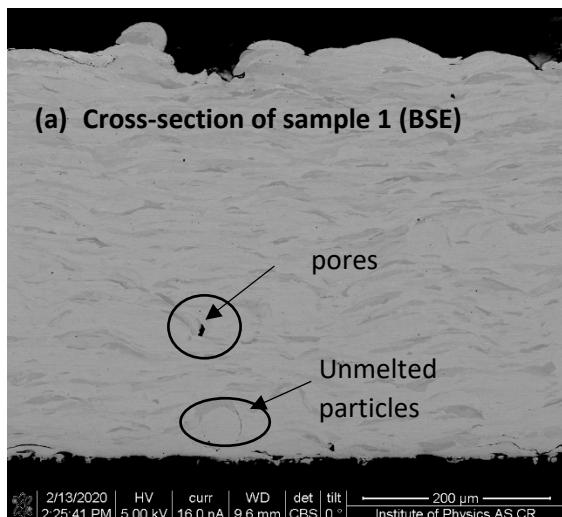


Figure S2 (a-b) Cross-section surface of sample 1 in BSE and SE mode (c-d) Back surface of sample 1.

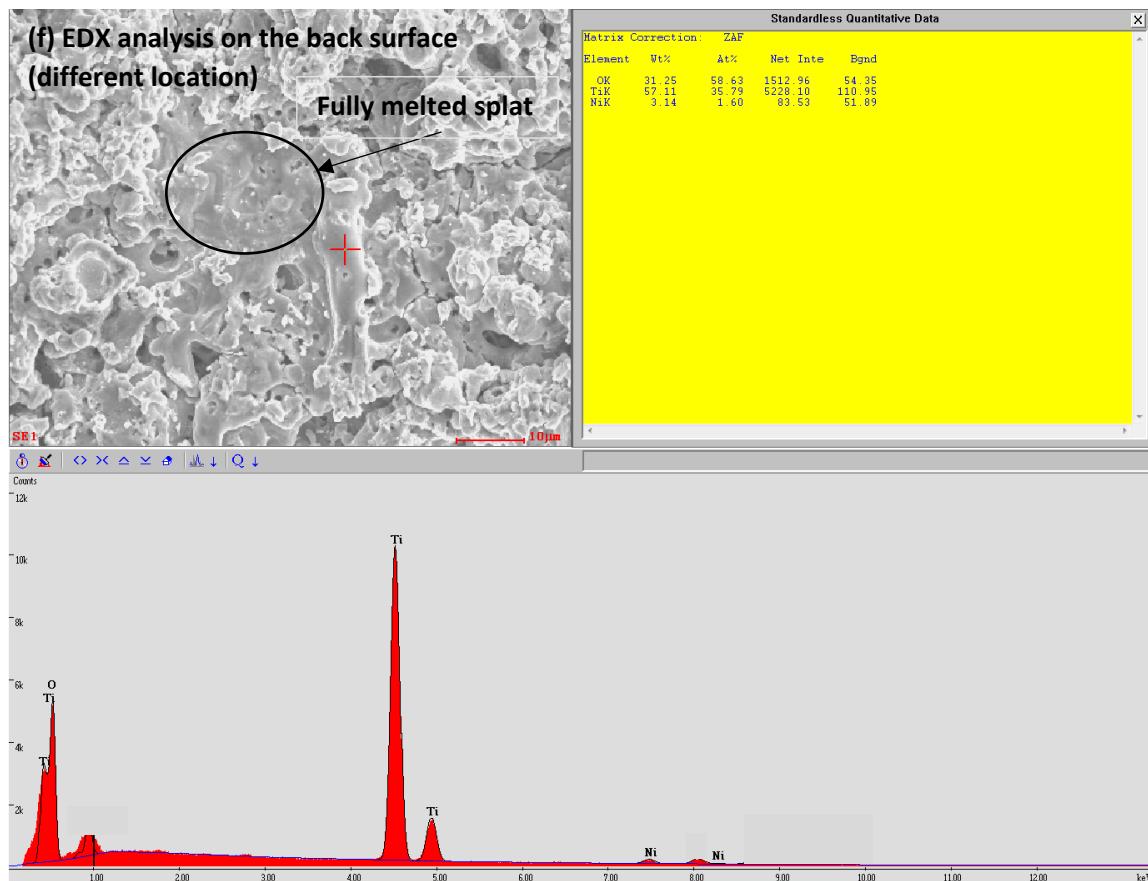
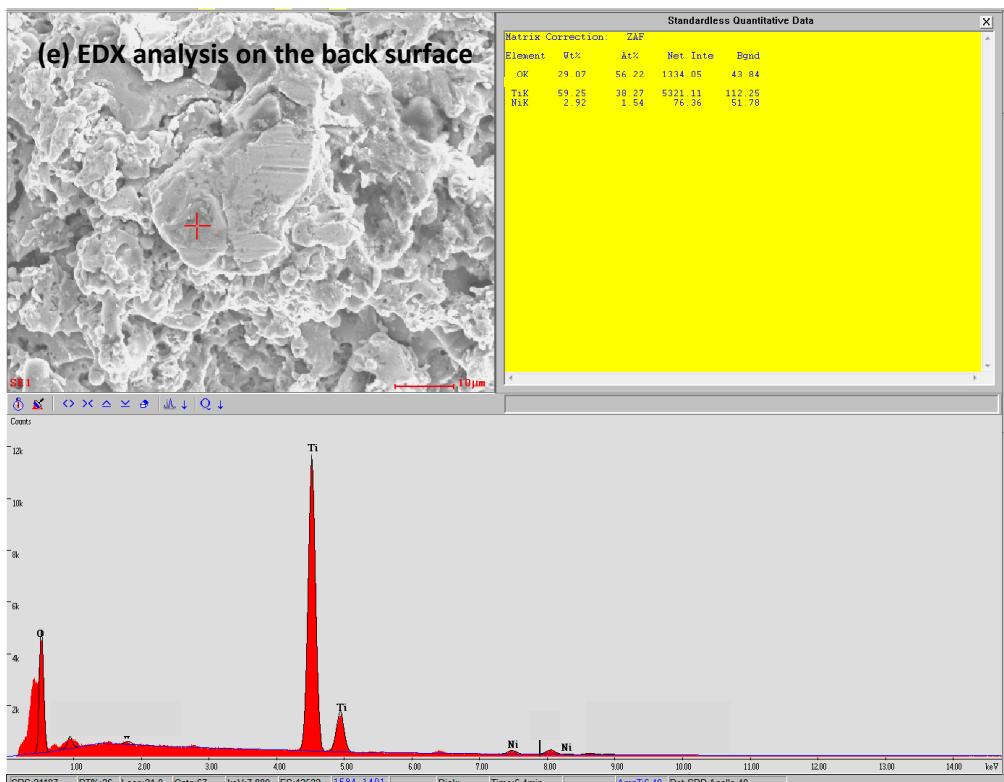


Figure S3: EDX analysis of back surface of sample 1 (two different location).

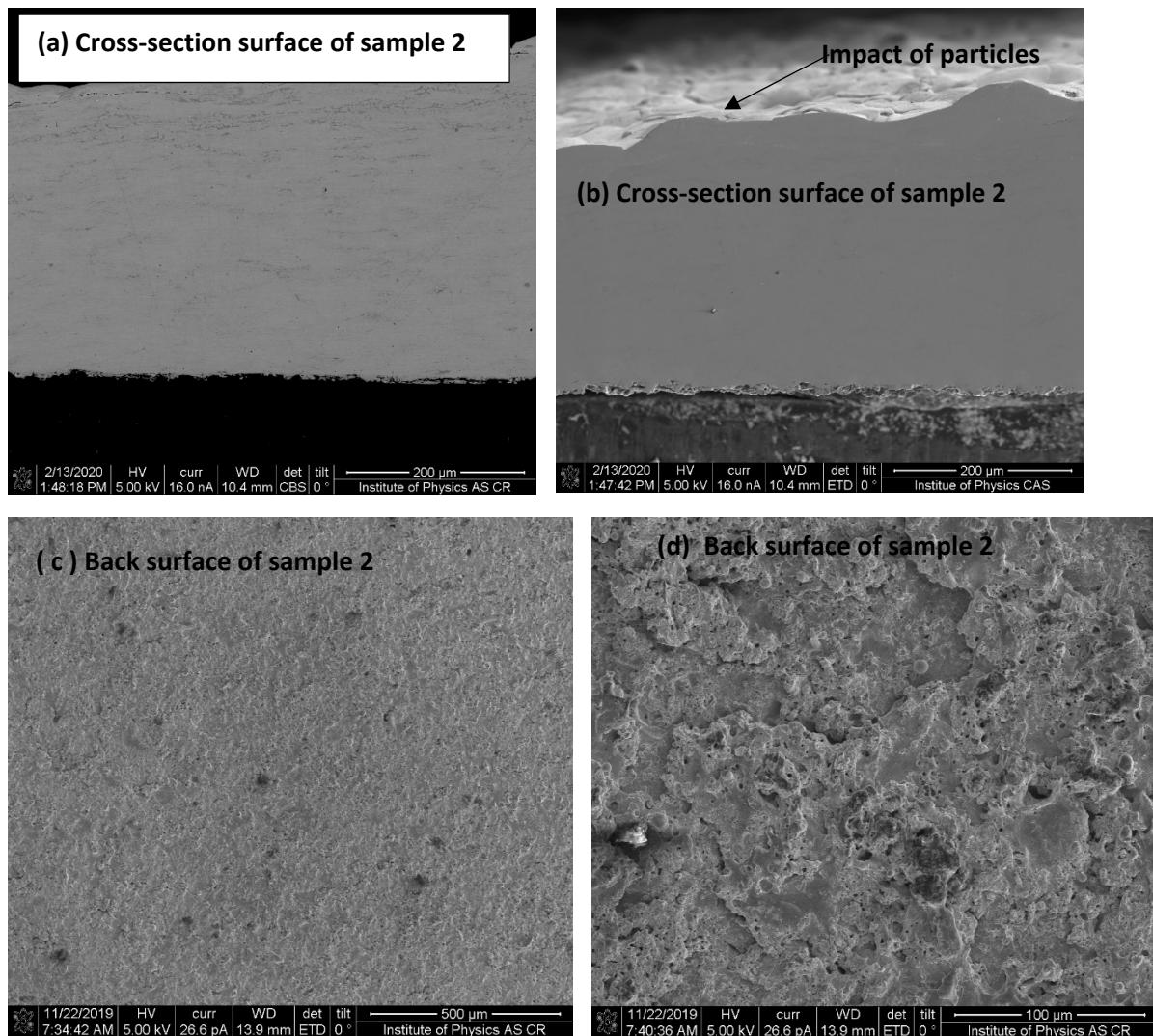


Figure S4 : (a-b) Cross-section surface of sample 2 in BSE and SE mode (c-d) Back surface of sample 2 at different location.

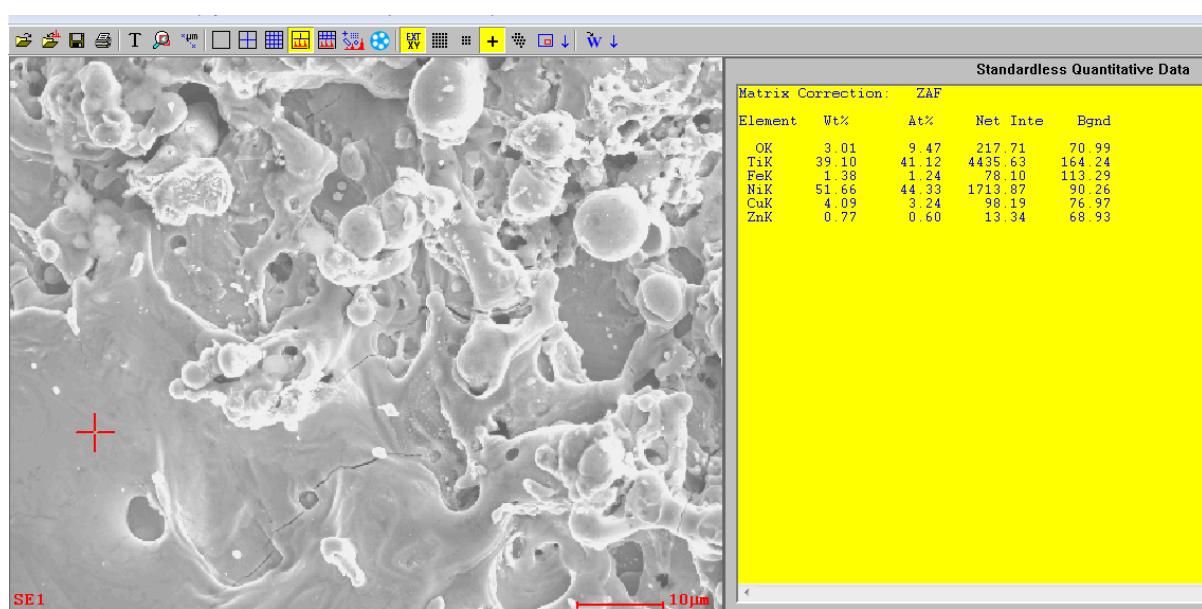


Figure S5 : EDX analysis of the back surface

The elemental mapping for the above figure (1) is displayed in the supplementary file (Fig. S) with Ti and Ni elements by Electron Distribution Spectra (EDS) analysis.

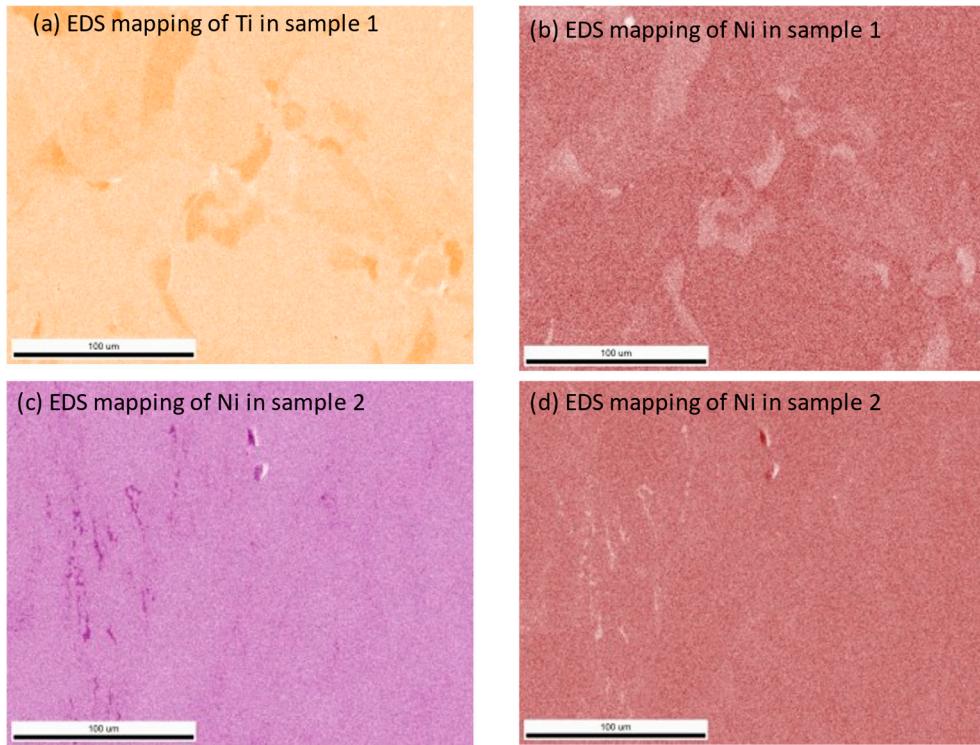


Figure S6 : Elemental mapping for Ni and Ti in sample 1 and 2 , that corresponds to figure 1 (a and c)

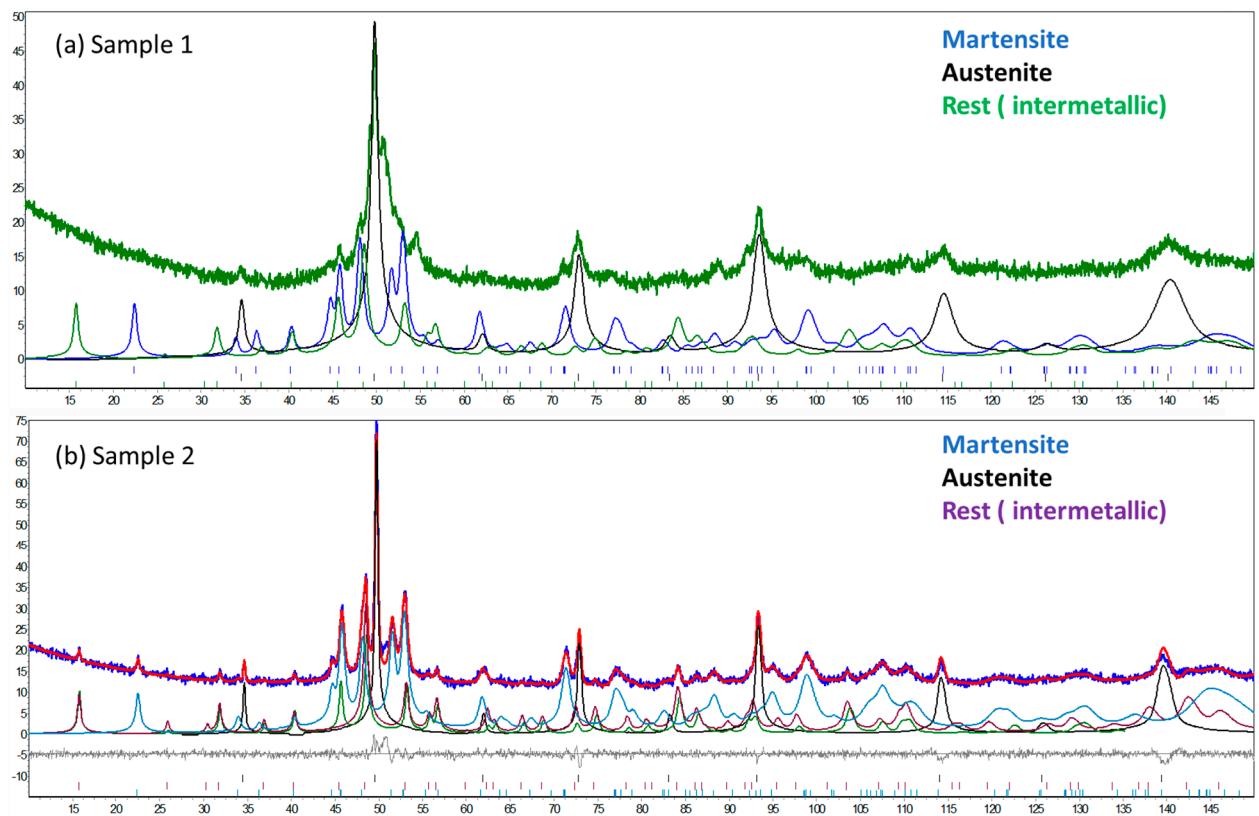


Figure S7: XRD spectrum for sample 1 and 2 with martensite, austenite and intermetallic peaks.