Surface Engineering on Austenitic Stainless steel by Nitrogen/Carbon Stabilized Expanded Austenite

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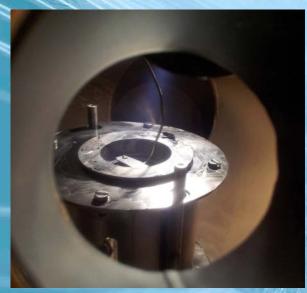
Funding: Graduate School of Materials Science

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Advisor: Prof. Lars Nyborg and Dr. Yu Cao

Research Scope:

- Preparation, optimization and microstructural characterization of expanded austenite on different alloys
- Clarification of the influence of low temperature nitriding/carburising process parameters, elemental composition and surface finishing.
- Preparation with plasma ion beam
- Characterization of microstructural evolution, bonding characteristics, residual stresses, texturing of the surface with a number of imaging, diffraction and spectroscopic techniques (OM, SEM, XRD, EBSD, AES, XPS).



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