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List of Abbreviations and Symbols

DSS	Duplex Stainless Steel
WM	Weld metal
HAZ	Heat Affected Zone
BM	Base Metal
PREN	Pitting Resistance Equivalent Number
TEM	Transmission Electron Microscope
EDX	Energy Dispersive X-Ray Analysis
α	Ferrite Phase
γ	Austenite Phase
σ	Sigma Phase
δ	Delta Ferrite
Cr_2N,CrN	Chromium Nitrides
χ	Chi- Phase (Cr-Mo-Fe rich phase)
γ_2	Secondary Austenite
$M_{23}C_6$	Chromium Carbides
R	Precipitation of R-Phase (Si-Mo rich phase)
л	Precipitation of л-Phase
ε	Precipitation of ε-Phase (Epsilon phase)
G	Precipitation of G-Phase (Secondary phase)
ζ	Precipitation of Laves-Phase
ά	Secondary Phase (Alpha Prime)
Fe	Ferrite Content
SMAW	Shielded Metal Arc Welding
TIG (GTAW)	Gas Tungsten Arc Welding
MIG (GMAW)	Gas Metal Arc Welding
FCW	Flux-Cored Arc Welding
PAW	Plasma Arc Welding
PWR	Pressurized Water Reactor
ppm	Part Per Million
SCE	Saturated Calomel Electrode
LBW	Leaser Beam Welding
PAW	Plasma Arc Welding
SCC	Stress Corrosion Cracking
PWSCC	Primary Water Stress Corrosion Cracking
VHN	Vickers Hardness Number