

## ULTRASONIC IMPACT TREATMENT (UIT- HFMI) OIL AND GAS



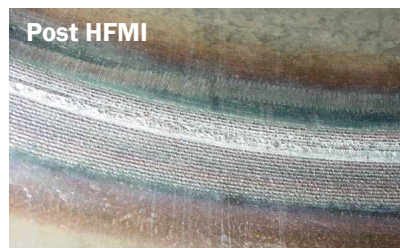
SONATS is specialized in the increase of the fatigue life and the Stress Corrosion Cracking (SCC) resistance on welded structures for the oil and gas thanks to our patented Stressonic® process.



Recommandations :

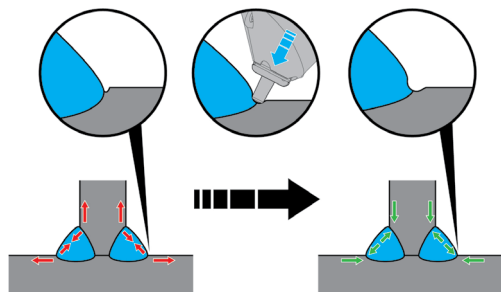


HFMI on oil and gas frame



Effect of the UIT on the weld – Modification of the weld toe geometry (beneficial for the fatigue life)

SONATS is in position to provide a wide range of portable HFMI device **capability worldwide** that can be applied in the field to introduce **beneficial compressive stresses** to the weld toes and affected zone. Thus the risk of stress corrosion cracking is **minimized and the fatigue life is increased**.



The following Universities or Researches Centers have published on the HFMI:

University of Purdue, University of Chalmers, University of West, University of Waterloo, Fraunhofer, CETIM, Institut de Soudure

More examples of applications: Life Extension of Welded Structures Using HFMI Techniques – Potential application to offshore structures, Fikri Bashar Yalchiner, Zuheir Barsoum.