

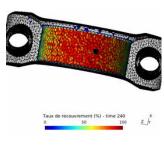
ULTRASONIC SHOT PEENING (USP) ON MOTORSPORT ENGINE

SONATS has developed portable Ultrasonic Shot Peening (USP) solution to increase fatigue strength, strength-to-weight ratio and reduce fretting fatigue on aluminium and other metallic parts.

Ultrasonic shot peening benefit a wide variety of components such as drive shafts, pinions, clutch components, con rods, pistons, crank shafts and casings, among others. SONATS offers USP services performed under controlled conditions with our own USP StressVoyager machine. We offer a variety of parameters to provide fatigue strength, strenght-to-weight ratio. An experienced staff and technician will ensure the treatment to meet customer specifications.

USP benefits:

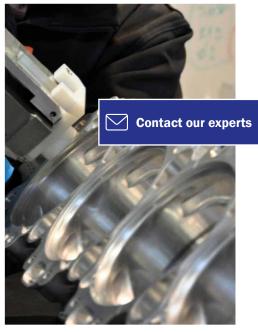
- Introduces beneficial compressive stresses
- Improves fatigue life performance
- Reduces Stress Corrosion Cracking (SCC)
- Specific design of enclosure to contain all media and avoid any pollution
- No media loss during the treatment
- Several racing team trust us



Modeling and simulation of shot peening

Example of shot peening

configuration



Localized shot peening operation

Capabilities:

- Operating Worldwide
- Proven Experience
- Using our own IUT patent STRESSONIC[®]
- Operating on assembled engine at the paddock