: in the News

The sealed processing enclosure incorporates twelve adjustable process guns, made from abrasion-resistant polyurethane, mounted on a manipulator unit. This enables the guns to be positioned precisely to suit different blade geometries. The special design of the guns allows the peening media to mix internally with compressed air, atomising the mixture and then propelling it at high velocity onto the component surface to create the peening effect.

Process parameters - turntable rotation, gun manipulator speed and movement, blast pressure and blast duration - are programmed according to the blade type. Monitoring and replenishment of the wet peening media is also automatic. After processing, the blades are rinsed automatically and air dried.

During processing, used media is passed automatically through two cyclone units which separate out fines and debris and recycle usable media to the process guns. Fines and debris are



discharged to a sludge collection skip. For more information, visit www.surfacepreparation.com.



The 13th Annual Shot Peening and Blast Cleaning Workshop will be held in beautiful Scottsdale, Arizona.

For details, visit: www.shotpeener.com

13th Annual Shot Peening and Blast Cleaning Workshop

USF Abrasive Developments

State-of-the-Art Wet Peener for Aero Engine

Blades United Kingdom. USF Abrasive Developments has launched this new Vaqua' wet shot peening machine, which was specifically developed to process turbine blades from most current aeroengines. The state-of-the art programmable machine is designed to enhance the fatigue resistance of blades during their production or to restore fatigue performance during scheduled maintenance in line with engine manufacturers peening specifications. One of the new machines has already been installed by a major aeroengine repair and overhaul specialist and other orders are pending.

The Vaqua machine is largely constructed in heavy-gauge stainless steel for maximum corrosion resistance, and has a 2000mm x 2000mm x 2000mm processing enclosure. The blades are positioned in special polyurethane fixtures located on a 1200mm diameter powered turntable. This rolls in and out of the enclosure on a track to facilitate loading and unloading. The polyurethane fixtures can be tailored to accept virtually any design or type of blade.