New abrasive blast cleaning system

Goodchild Marine Services of the UK is now operating the Sponge-jet dry abrasive blast cleaning system, which it says eliminates most of the drawbacks found in conventional blast cleaning. The Sponge-jet system uses small abrasive particles contained in a composition of sponge granules. These granules are fed into a pressure vessel and fired at high velocity at the surface to be cleaned, in similar fashion to other blast cleaning systems. However, in the case of the Sponge-Jet system, when the abrasive within the sponge hits the target surface and removes the paint coating or corrosion product, the collision pushes much of the residue into the sponge. The sponge material used is of open cell structure and flattens out as it collides with the substrate, holding a large portion of dust and debris into its cell structure.

Because of the sponge material properties the rebound velocity is far lower than with other systems. If a very small amount of water is added to the sponge dust is virtually eliminated. These properties mean that operators' visibility is improved and they need less special protection or breathing equipment. Work can more safely be carried out in confined spaces or in close proximity to other work, usually the only area protection required being light plastic curtain screens to contain the sponge particles. Unlike wet or chemical systems, there is minimal risk of pollution from water chemical run off and waste products are safely and economically disposed of.

The system can be used for removal of paint, varnish, corrosion residue, oil and grease, scale, epoxy and smoke damage. It is also suitable for surface preparation prior to further finishing or polishing. Fifteen different configurations of blasting media can be used containing: plastic chip; DuPont Starblast saturate; garnet; aluminium oxide; and steel grit, which can all be impregnated into the sponge media, depending on the type of material to be removed and the properties of the substrate. A further grade of sponge contains no abrasive and can be used for general light cleaning tasks.

After blasting, the sponge particles are collected by sweeping or vacuuming. The sponge is then put through a classifier to remove rust, dust and contaminants, after which the sponge can be re-used up to ten times. Sponge-Jet systems are in broad use in the offshore rig maintenance business and quite recently have been applied to yacht and workboat applications.

Goodchild Marine operates the Sponge-jet cleaning system, which can be taken to site and offers an environmentally-friendly alternative to conventional blast cleaning.

New Italian boat lift for UK yard

Holyhead Marine Services, situated on the island of Anglesey off the north west coast of Wales, is about to commission a new 100tonne boat lift as part of its expansion programme. The yard says that the new hydraulic mover, ordered from Alto Services in Italy, will be capable of remote operation and offer high manoeuvrability, to enable boats to be moved around the expanding facility which at present includes three large boat sheds.

Finland captures important welding contract

According to Kemppi, the PRO4000 is suitable for MIG, pulsed MIG, TIG, MMA and carbon arc gouging. It is rated 400A at 60% duty cycle with an open circuit voltage of 65V.

The Devonport units will be controlled by a Kemppi PX panel, which will adjust the welding current and MMA dynamics, providing a visual display of the welding parameters. Operators on site will be able to adjust the amperage up to 100m from the power source using the C100T remote controls, providing enhanced flexibility for the naval dockyard.