News Releases

1999085

THERMOMECHANICAL SURFACE HARDENING RAISES SPRING LIFE

A thermomechanical surface hardening process that is said to provide an 80% increase in the durability of leaf springs over conventional stress peened components, has been developed by Krupp Hoesch Federn GmbH, Germany. The new process combines shot peening and thermal treatment, which improves the surface characteristics of spring steels. This is significant because the loads to which a spring is subjected are exerted most strongly on the surface of spring leaves. In many cases, the increased strength means that one less leaf is needed in a three- or four-leaf assembly, resulting in savings much greater than the cost of the process.

In the Mercedes Actros truck, for example, the original three-leaf spring was replaced with an improved two-leaf spring. Despite a considerable reduction in cost and weight, the new spring has the same fatigue strength.

Depending on the specific method, the fatigue life of a coil spring can also be increased by simple shot peening. Stress peening takes this process one stage further by prestressing the spring prior to blasting. The advantage of this method is that even greater residual compressive stresses are developed when the prestressing on the spring is relieved after peening. The result is often up to a four-fold increase in fatigue life, or weight reductions of up to 25%.

For more information, contact Krupp Hoesch Federn GmbH in Germany at +49 23 92 56 0 or visit www.krupp.com.

1999086

NEW COMPACT VACU-BLAST CLOSED-CIRCUIT MACHINE FOR MARINE AND CONSTRUCTION APPLICATIONS

Vacu-Blast, part of the USF Surface Preparation Group, has introduced a new, economically-priced Closed-Circuit mobile, dust-free abrasive blasting machine, specifically for in situ applications in the marine, construction and civil engineering sectors.

The PBA06-3 Compact machine has been custom-designed to provide a compact and powerful mobile blaster for rust and corrosion removal, paint stripping, weld preparation and cleaning, and the preparation and cleaning of concrete surfaces - enabling these tasks to be carried out on-site without hindering other nearby operations and without the need for special protective clothing.

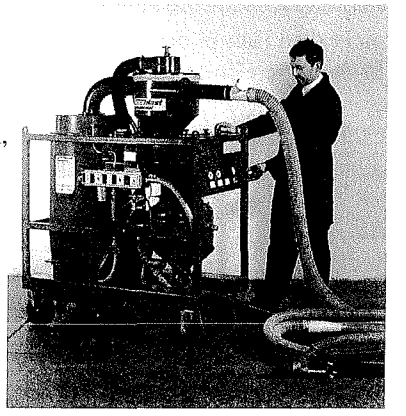
Invented by Vacu-Blast, the environmentally-friendly Closed-Circuit abrasive blasting operating system employs a special brush-enclosed blast gun with a 'deadman' control trigger, which both delivers the abrasive blast media and recovers it simultaneously by vacuum, together with resultant dust and debris - thus ensuring that the immediate area remains free of potentially harmful dust.

The low-profile design of the PBA06-3 Compact machine allows it to be used in areas with restricted headroom or limited access, adding to its versatility. Pressure-fed, the machine offers a high work rate and a continuous blast cycle of up to 10 minutes. It uses all common types and grades of blast media.

An integral power-pack then automatically separates out good, reusable media through a special filtration and separation system and recycles it to the gun. This continuous regrading and recycling process ensures a consistent surface finish and minimizes operating costs. Degraded media, dust and debris are directed into a dust collector for safe disposal. The PBA06-3 Compact incorporates an easily detachable wheeled dust container to facilitate its removal to a suitable disposal site. This is a particularly valuable benefit for applications generating large quantities of dust—concrete preparation, for example.

A range of Closed-Circuit machines is offered by Vacu-Blast. These are available in pressure-fed and suction-fed versions, with capacities to suit low and high work rate applications; extending from the highly manoeuvrable 'Midget' machine for general workshop use, to the very powerful PB-14 series for cleaning large surfaces. Application-specific blast guns are also available for processing angular and profiled faces, edges and for cleaning hot welds. Wheeled 'deck guns' guns are offered for flat surfaces.

Further information, contact Roger Brickwood, Vacu-Blast Ltd, Woodson House, Ajax Avenue, Slough, Berkshire, SL1 4DJ, UK. Tel: +44 (0)1753 526511. Fax: +44 (0)1753 538093.



The PBA06-3 is a compact and powerful unit designed for applications in the marine, construction and civil engineering sectors.

1999087

SAWTEC™ INTRODUCES THE TILE-VAC WORK SHOE

USF Surface Preparation announced that its Sawtec Products division recently added the Tile-Vac Work Shoe to its product line. The Work Shoe, which was featured at World of Concrete '99 in January in Las Vegas, Nevada, is attached to Sawtec's Tile-Vac system and is used for applications such as decorative concrete.

The Tile-Vac Work Shoe has a push handle with a wide base that provides accuracy when making straight cuts. It serves as a guide for straight edge alignment. The Work Shoe supports the Tile-Vac in an upright position that is square to the cut and features height adjustment for different cutting depths.

The Tile-Vac Work Shoe enables mortar or grout joints to be cut dust free by utilizing the patented vacuum housing and reusable dust collection bag. The system uses a five inch Metabo grinder and can accommodate several different width blades for tile, grout joint or mortar joint applications.

Sawtec offers an extensive line of grinding and cutting equipment and accessories for dust-free concrete and asphalt repair.

For more information, call Bruce Root of SawTec Products at (714)754-5740.