WASP takes the sting out of wheel stripping

Major commercial airlines and the RAF were represented at a recently UK seminar outlining Vapormatt’s water assisted stripping process, known as WASP.

The RAF, the United States Air Force, and the Danish Air Force are already using the process to strip aircraft wheels; South African Airways are using the WASP to clean undercarriage components as well as wheels; and Monarch Airlines have ordered a system.

The principle of the system, which was developed to overcome environmental and other problems associated with dry stripping, is to direct a jet of hot water, mixed with detergent and minute plastic particles, or media, at the component to be cleaned. The scrubbing effect can access even the most difficult crevices.

It is of particular interest to airlines, who are required to clean and degrease aircraft wheels each time they change a tire and, in addition, completely strip the paint to examine the wheel for faults or stress after every five tire changes. The process used to degrease the wheel must not damage the paint and the paint removal must not damage anodised surfaces underneath.

Currently many airlines are employing teams of people who hand clean wheels with scrubbing brushes and are subsequently using toxic paint stripper to remove the paint.

The control associated with the WASP user is so precise that either the baked-on brake dust or a single layer of paint may be stripped, leaving the layer below intact. Using fully automatic equipment an aircraft wheel can be entirely cleaned and stripped within eight minutes, highlighting surface defects or cracks.

The process, enclosed within a cabinet, generates no dust and eliminates the potential for explosions, which are possible with a dry blast system. It can degrease and clean simultaneously or in two distinct operations and it requires no special dry or clean air line and uses no solvent or strong toxic chemicals. A buffer of water prevents the impregnation of dust or media into the surface of the component and the cushioning effect reduces stress and peening.

From an environmental standpoint, WASP enables users to comply with COSHH (Control of Substance Hazards to Health) regulations and the Montreal Protocol on solvents, while many other processes do not.

The company produces manually operated machines, mid-range semi-automatic machines which reduce labor intensity and fully automatic machines, as well as walk-in cabinets or booths which enable the operator to go inside to work, using a hand nozzle and wearing a protective suit.

Among the guests at the UK seminar were representatives of a major European airline who brought with them an aircraft wheel coated with a five-year-old epoxy polyurethane bond which had proved unstrippable. This was successfully stripped within minutes during a demonstration session.

Vapormatt welcomes visitors to their factory and are pleased to demonstrate the WASP process on potential customers’ own industrial components.

Director Robin Ashworth says; “It is particularly gratifying to see the process working for people, on their own components, where all other efforts to find a satisfactory solution have failed. The WASP process is increasingly appreciated by the users who have discovered it and it is gaining more interest from leading potential users daily.”

Vapormatt will hold a further seminar in Brussels in April, 1995.

For further information contact:
Roger Ashworth, Director
Vapormatt Limited
Tel: 44 1481 53195  Fax: 44 1481 52369