



Dane Wash Automatic Inline Screen-Washing/Reclaiming Systems from Interchange Equipment

Automation has become commonplace throughout the prepress and production stages of screen printing. It's employed in stencilmaking machines, printing presses, and finishing equipment. But in many shops, automation is taken no further, and the area with most to gain from automation—screen cleaning and reclaiming—continues to rely on cumbersome, slow, wasteful, and potentially hazardous manual procedures.

Automatic screen-cleaning and reclaiming machines have emerged as an alternative to manual methods, and they promise enhanced productivity, consistency, and safety. However, implementing these systems often leads to many new problems, such as complicated and awkward screenroom layout, unacceptable noise levels, high energy usage, increased chemical consumption, and unreliable cleaning results due to clogged nozzles.

The Dane Wash automatic inline screen-cleaning and reclaiming units, available from Interchange Equipment, are designed to address these issues. The DW 125, DW 250, and DW 380 are compact machines that use vertically

oriented double-sided rotating brushes, dosed with solvents and/or other chemicals, to remove ink and emulsion. This ensures that the cleaning solvents and stencil-removing agents are thoroughly worked into the mesh and guarantees complete penetration and cleaning action. This stage of the screen-cleaning process is accomplished without the use of high-pressure nozzles, which are prone to clogging. Such nozzles also are capable of vaporizing the cleaning solvents or chemicals, which translates into high chemical consumption.

The DW 125, DW 250, and DW 380 provide processing speeds of up to 5, 10, and 15 in./min, respectively. Each unit supports screen frames of virtually any length with an outer height dimension of 30-98 in. (762-2489 mm). Infeed and outfeed sections are built to support the customers' frame lengths. Units to accommodate other dimensions can be custom ordered. Each of the models offers large reservoirs for the ink-remover tank (solvents), stencil-remover tank, high-pressure-pump tank, and stencil-stripper-concentrate tank. The Dane Wash systems also feature a total-frame counter and a resettable frame counter

to track throughput between chemical refills. Each machine has an intermittent water-consumption rate of 1.8 gal/min and a 170-700-cfm exhaust volume.

The Dane Wash machines are controlled by a centrally located touch screen, where all relevant data, including current washer operations, settings, and the exact size and position of each frame inside the unit, are displayed. The systems employ a unique frame-holding system that secures frames without the need for external inlet or outlet side-frame supports, and the machines operate as closed-loop systems, where the solvent and stencil chemicals are recirculated to further minimize consumption and prevent the chemicals from being released into the drain. Dane Wash systems carry out the screen-reclaiming process in four steps:

1. Ink removal The vertical, double-sided, counter-rotating brushes are gently dosed with recirculating solvent, which is then evenly worked into the mesh. A pair of soft drying brushes then removes any excess solvent from the screen before it enters the next stage.

2. Stencil stripping Separate vertical, double-sided, counter-rotating brushes are gently dosed with stencil-removing chemicals, which again are evenly worked into the mesh to ensure thorough stencil stripping.

3. High-pressure washout Two high-pressure nozzles move up and down each side of the screen, removing any residues.

4. Dry brushing A final pair of soft rotating brushes removes excess water and water droplets, leaving the mesh moist, but not wet, and enabling it to air dry in a few minutes.

Customers are responsible for installing ventilation, water, electricity, and drainsage. For more information, contact Sylve Ericsson, Interchange Equipment Inc., 90 Dayton Ave., Passaic, NJ 07055, 973-473-5005, fax: 973-473-4485, e-mail: sylve@interchangequip.com, Web: www.interchangequip.com.