

PENETRANT LINES



Baugh & Weedon penetrant lines are designed with a working height of 900mm above floor level, ensuring a sleek and visually appealing setup. Our modular units align perfectly, regardless of size, allowing you to choose between straight, “L”-shaped, or “U”-shaped configurations.

Crafted entirely from stainless steel, both the tanks and frames are corrosion-resistant, ensuring long-lasting durability without the use of coated steel. This commitment to quality has made our penetrant lines the trusted choice for aerospace leaders and top-tier motorsport teams.

Baugh & Weedon can provide all or part of the complete process line including Penetrant Tanks, Wash Stations, Drying Ovens (front loading and top opening), Dust Storm Cabinets, Viewing Booths (with UV and/or white light sources), all associated accessories such as hand held inspection lamps, overhead UV lights.

Dye Penetrant Application/Dip Tanks

Our dye penetrant application tanks are available in manual, semi-automated, and fully automated options. Designed for convenience, they feature a folding lid for easy lifting and a detachable side splash guard for effortless cleaning.

Built-in shelves, typically positioned at the base and midway up the tank, provide additional storage. For easy maintenance, a drain tap—usually located at the front—allows for quick cleaning and ink replacement. We also offer spray and electrostatic options.

Post Emulsification System

The emulsifier tank is offered with similar options as the penetrant tank which can be manually, semi or automatic system.

To stop emulsification, we offer a “kill tank” which is filled with water and can operate with a weir system, ensuring that only clean water is used. The tanks benefit from a drain plug at the base for tank cleaning.

Wash Stations

Our wash stations feature a high-quality, adjustable air and water wash gun with a pressure manifold for precise cleaning. Designed for efficiency, they include a rear and top splash guard with an IP-rated background fluorescent UV light. Retractable side splash guards open to allow penetrant covered components to be moved from the drainage shelf to the wash station directly, eliminating penetrant spillage. Additionally, a temperature control and monitoring system ensures the water remains at the optimal temperature for your needs.



Dip Tank, Wash Station & Post Emulsifier Tank



Dip Tanks, Wash Station, Wash Gun



Front Loading Oven

Ovens

Baugh & Weedon drying ovens are designed to meet the demands of the dye penetrant testing process and are available in three configurations: Tunnel, Front-opening, and Top-opening. Each model features precise digital temperature controls for accurate heat regulation, along with an independent over-temperature safety system to prevent overheating. To ensure optimal performance and compliance with industry standards, every oven is supplied with a comprehensive temperature survey, verifying uniform heat distribution for consistent and reliable drying results

Dust Storm Cabinets/Developer Tanks

Our top-opening Dust Storm Cabinets feature a rear-hinged lid with a counterbalance and gas springs for effortless opening. A convenient viewing window with internal LED lighting allows for easy monitoring during operation.

The key advantage of this system is the elimination of daily powder checks, as fresh powder is used for each cycle. Operating on a fully automated, preset sequence, it includes safety interlocks to prevent opening during use, as well as an integrated powder injection and dust extraction system via a proprietary DCE unit.

The cycle begins with an air blast that disperses the existing developer powder into a fine cloud. Simultaneously, a new charge of developer powder is injected from a separate reservoir. After the preset contact time, the DCE unit activates, extracting excess powder and trapping it in the filter. Once the cycle is complete, the safety interlocks release, allowing the lid to be opened and the processed component to be removed.”



Top Loading Oven & Dust Storm Cabinet



Dust Storm Cabinet





Advantages of the PFINDER 900 Series* include:

- Readily biodegradable
- Water rinsing waste can be drained directly into sewage system without pre-treatment (post authority approval)
- Free of aromatics and hydrocarbons
- Low viscosity, reduced consumption
- Easy rinsability
- Low residual background
- Bright, sharp indications, high contrast.

**Almost 80 percent of PFINDER products are now solvent-free.*

TAM Panels

TAM Panels are precision-engineered reference standards used in dye penetrant testing to evaluate the performance and sensitivity of penetrant inspection systems. These panels consist of a metallic plate with a series of fine cracks or controlled defects, designed to simulate real-world flaws in materials. By applying penetrant to the panel and observing the indication response, inspectors can verify system reliability, compare different penetrant materials, and ensure compliance with industry standards. TAM Panels play a crucial role in quality control, providing a consistent and repeatable method for assessing penetrant effectiveness and overall system integrity.

TAM panel degradation monitoring can be conducted with the Vista Eye.

UV Lamps

UV Inspection Lights are used in Non-Destructive Testing (NDT) for fluorescing fluorescent magnetic inks and fluorescent dye penetrants. UV lighting enhances visibility to inspected areas, where otherwise, defect visibility is low. Magnetic particles or penetrants are applied to the surface area of inspection so it becomes fluorescent, in combination with the UV Lamps the minutest of cracks, damage and flaws are revealed.

LumaCheck

The LumaCheck Dual UV and White Light Meter has been designed to offer the operator the most accurate results and versatile calibration options available on the market.

Advantages include:

- Dual Sensor
- Hot swappable Sensor and Cable

