

## Compact Cleanroom Ready Remote Sealing System

Engineered for uncompromising performance in tissue banks, labs, and other space-constrained environments.

PackworldUSA designed the **PW4214** to be a compact, remote impulse heat sealing system to deliver repeatable, high-integrity seals within space-constrained, controlled environments such as biological safety cabinets and laminar flow hoods, commonly used in tissue banking and regenerative medicine workflows. The **PW4214** helps maximize valuable workspace without compromising aseptic technique or process safety. Featuring a lightweight, low-profile remote sealing head that integrates easily into existing containment equipment and fixtures, the modular **PW4214** system allows technicians to seal flexible sterile barrier systems within confined spaces.



PW4214 integrated with Biological Safety Cabinet

## BENEFITS OF MODULAR CONFIGURATION

By minimizing the machine footprint within the workstation, operators gain improved access and maneuverability of the workpiece, helping support precise handling of human tissues and other biological materials. The remote head design also facilitates ergonomic positioning, reducing reaching and repositioning that can slow procedures or increase the risk of contamination. Relocating the controls outside the cabinet removes unnecessary equipment bulk and electronics from the critical workspace, supporting airflow integrity and simplifying sterilization protocols.

## USER-FRIENDLY INTERFACE BUILT FOR VALIDATION

An intuitive pressure activated touchscreen user interface allows for easy menu navigation and quick recipe selection for gloved operators. Real-time displays of critical parameters and machine status ensure proper function of the sealing process. Optional user specific configurable security provisions and data logging allow for 21 CFR Part 11 compliance. The **PW4214** is fully validatable conforming to ISO 11607 and comes equipped with test ports to verify process parameters with external calibrated devices ensuring the heat seals produced meet the highest standards every time.

## ADVANCED IMPULSE TECHNOLOGY AND VERSATILITY

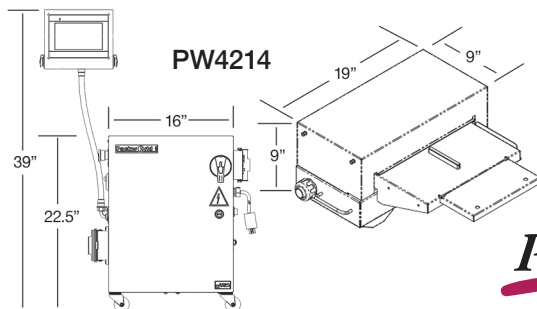
**TOSS PIREG® Technology** offers advanced impulse heat seal controls by monitoring the resistance of the **TOSS Alloy-20®** heating element itself without the trouble of slow response thermocouples which can be misaligned or degrade causing temperature variation. This engineered system enables instant heat times assuring the set temperature is applied for the full duration providing consistency in quality and shorter cycle times. The cooling cycle allows for the ultimate film compatibility from Polyethylene, Tyvek®, laminated foil and Nylon to high temperature specialty films such as FEP or PFA.

## EFFICIENCY AND SAFETY

With features like quick detachable seal head cover, quick disconnect seal bars and electrical connections, the **PW4214** is designed to maximize efficiency and minimize downtime when maintenance is needed, or sterilization protocols are in place. An interlock depowers the machine if the seal head cover is removed and the emergency stop button adds an extra layer of safety, giving operators peace of mind.

## BACKED BY EXCELLENCE

**PackworldUSA** stands behind its products with a **30-Month Warranty** on all parts (excluding consumables). Each machine is proudly built in the USA to exacting standards, meeting the rigorous demands of packaging professionals across industries.



## FEATURES

- Small Footprint for Confined Spaces
- Easy to Use Touch Screen Interface
- Easy Maintenance and Cleanability
- Cleanroom Ready
- **TOSS PIREG** heat seal technology
- High performance **Alloy-20®** heat seal bands
- Validatable and Compliant with ISO 11607, 21 CFR Part 11, RoHS
- Configurable for °C or °F
- On Board Thermocouple for:
  - Redundant Temperature Monitoring
  - Easy Temperature Verification and Calibration

## OPTIONS

- Dual Bands: Heat from Both Sides of the Film
- Multiple HMI Mounting Options
- High Temperature Configuration
- Product Support Table
- NIST Traceable Certification
- NIST Instrument Kit
- Validation Package
- CE Compliance
- 115VAC or 230VAC for Domestic and International Markets

## PW4214 SPECIFICATIONS

<b>Seal length:</b>	13"
<b>Seal width:</b>	8mm (or custom width)
<b>Temp Range:</b>	up to 275°C
<b>High Temp Range:</b>	up to 450°C (if configured)
<b>Timers:</b>	0.1 to 99.9 seconds
<b>Seal Pressure:</b>	up to 100 PSI
<b>Power:</b>	115VAC or 230VAC single phase 20A
<b>Air Requirements:</b>	110 PSI max or 10 PSI above set seal pressure value
<b>Seal Head Weight:</b>	35 lbs
<b>Seal Head Size:</b>	19" W x 9" T x 9" D

*Perfect Seals... Every Time*

