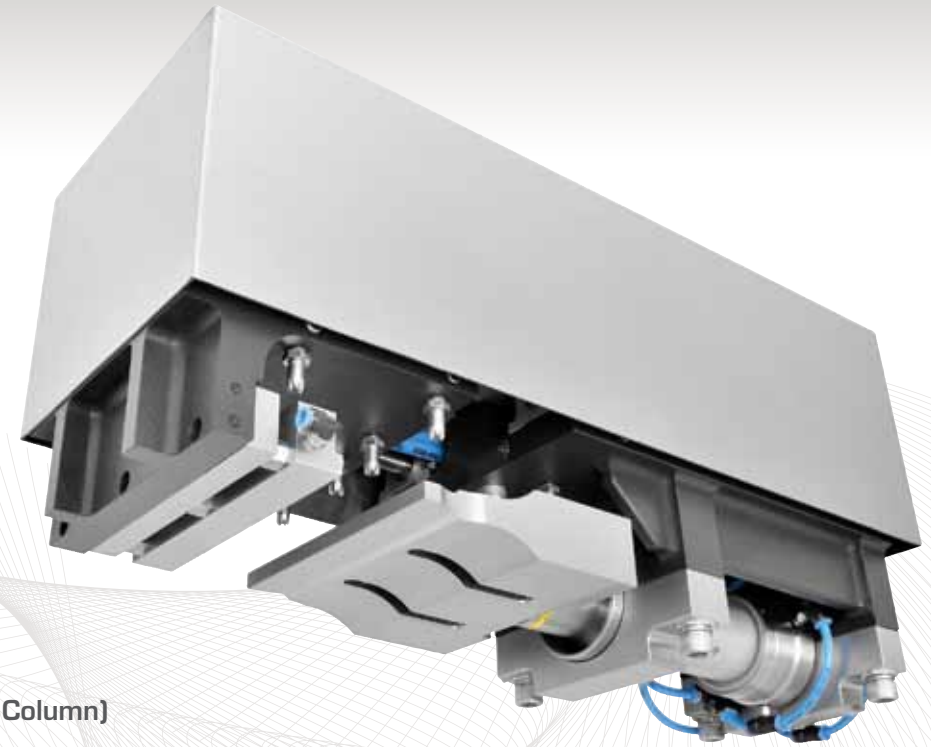
rinco® ultrasonics

# FPA 4500-T



**PNEUMATICS:**
80mm Bore

**AIR SUPPLY NEEDED:**
6 Bar Normal
8 Bar High Force

**MAXIMUM FORCE:**
2500 N at 8 bar / 565 lbs at 116 psi

**MAXIMUM STROKE:**
50mm / 1.968”

**THROAT DEPTH:**
Horizontal Mounted Units
203mm / 8.0” to 406mm / 16.0”

Vertically Mounted Units
64mm / 2.5” to 254mm / 10.0”
(Center Line of Pouch to Inside Edge of Column)

**DIMENSIONS:**
564mm/ 22.20” x 196mm/ 7.73” x 267mm/10.52”

**WEIGHT:**
Actuator only 80lbs (356N)
Actuator, Cradle, Column 130lbs (578N)

**COMPATIBLE GENERATOR:**
AGM-20-3000

# FPA SERIES PACKAGING SYSTEMS

## Complete Product Line

1. Designed and built to meet the extreme duty cycles of the packaging industry and the tough applications demands of sealing thin films.
2. Standard retrofit kits are available to simplify upgrading from heat to ultrasonic technology.
3. Multiple models offered to suit any pouch size on any type of FFS machine.

## Ultra Rigid Actuators

1. Robust castings minimize deflection, delivering consistent weld uniformity.
2. Oversized slide mechanism provide smooth movement and a consistent sealing process.
3. Convenient access to internal components makes the FPA series of equipment easy to maintain.

## High-force, Gripper Style Pneumatic Cylinder

1. Rapidly develops high forces for fast cycle times.
2. Long stroke, dual acting seal jaw movement reduces pouch feeding issues.

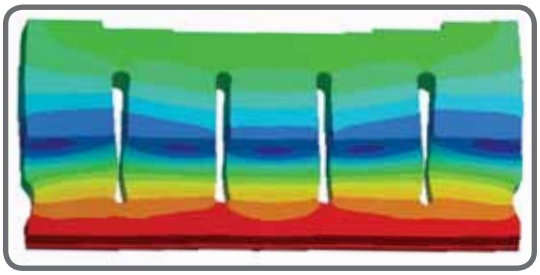
## Integrated Air Cooling

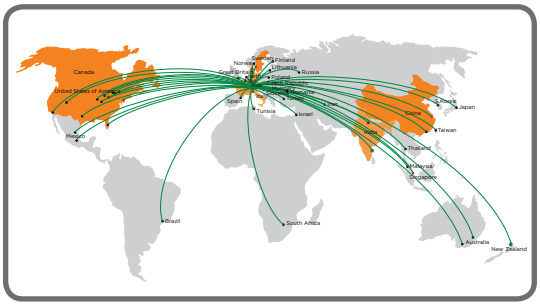
1. Adequate cooling applied to key locations maximizes ultrasonic component life.
2. Maintaining consistent component temperatures improves process stability.

## Optional Accessories Available

1. Standard components simplify integrating FPA systems onto any FFS machine.
2. Adjustable round and rectangular pedestal mounts available for use with rotary systems, or back plane mount castings for in-line horizontal applications.
3. Fully configured NEMA enclosures available for easy, turnkey installations.
4. Custom Pouch Guides Available

# FPA SERIES PACKAGING SYSTEMS



## New Rinco Seal Technology Patented PPS0145

1. Create seals with greater surface area than competitive ultrasonic seals.
2. Create better looking bonds than typical narrow bead type ultrasonic seals.
3. Produce contour shaped seals, unlike the straight line seals offered by competitive ultrasonic equipment.
4. More forgiving mechanical setup due to the patented interlocking tooling design.
5. Enable a wider processing window than heat sealing or competitive ultrasonic sealing technologies.

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## Experienced Technical Support

1. Applications review team can provide seal design geometry assistance to ensure a consistent process.
2. Applications lab services available to provide sealing feasibility studies with various film structures and/or internal product contaminants.
3. Pre-sale technical support personnel available to review integration and installation requirements.
4. Post- sale technical support can provide product and process training as well as installation.

## Superior Tooling Technology

1. Extensive computer modeling techniques performed on every packaging horn to ensure optimal amplitude distribution which is required for consistent weld quality.
2. Integrated leveling feature available on Rinco sealing anvils makes setup easy.
3. Integrated liquid cooling ports facilitate anvil cooling which enhances cycle time and process consistency.

## Certified Ingress Protection

Our Complete Line of FPA Actuators are IP65, IP67 Certified

## Global Presence

For over 35 years Rinco Ultrasonics, a Crest Group company has been manufacturing the world's finest ultrasonic bonding and cutting equipment. The company operates internationally employing over 100 people worldwide. With 8 wholly owned subsidiaries, this global presence allows for wide reaching technical support wherever your facility may be located.

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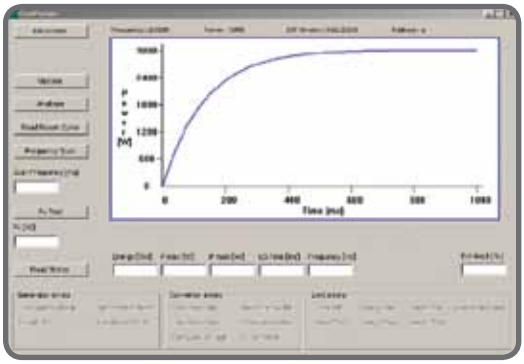
# AUTOMATION SYSTEMS

## 100% Digital Circuitry

1. Line regulation – Amplitude remains constant regardless of the input voltage being applied to the generator, unlike competitive equipment. Constant amplitude is absolutely necessary for a consistent and predictable process.
2. Load regulation – Amplitude remains constant regardless of the load being drawn by the application, unlike competitive equipment. Constant amplitude is absolutely necessary for a consistent and predictable process.
3. The same compact dimensional footprint regardless of frequency (20kHz, 30kHz, 35kHz, 40kHz, 70kHz) or rated power output (100W to 3000W).
4. Integrated 24VDC power supply @ 1.25 amps can be used for triggering digital inputs and outputs.

## GenParam Software

1. Included with every AGM at no cost.
2. Allows for communication between the AGM and a PC.
3. Ideal for setting up the AGM prior to PLC power up.
4. All information on GenParam can be programmed to a PLC / MMI via RS485 or CANopen.



## Generator Features

1. Standard welding modes include Weld By Time, Weld By Energy, Weld By Time And Energy, and Continuous Ultrasonics.
2. Amplitude is fully programmable from 40% to 100% and can be changed on the fly, enabling advanced process profiling.
3. Simple programming for multiple cable lengths-up to 50'.
4. Programmable upper and lower limits can be engaged around critical weld parameters such as Time, Energy and Power.
5. Power over time graph aids in application troubleshooting by visually displaying the power over time curve after each weld cycle.
6. Programmable soft start allows simple adjustment to the vibrating component's ramp up to full amplitude. Programmable from 5ms to 200ms.
7. Programmable soft stop allows simple adjustment to the vibrating component's ramp down to zero amplitude at the end of each weld cycle. This feature aids in reducing stress in large multi-element horns.
8. Multiple error code outputs help identify faults within the generator, stack assembly or the weld parameters.
9. Programmable run frequency limits can be set to assist in identifying heat build-up and tooling wear before problems arise.