

## RF WELDERS FOR MEDICAL & AUTOMOTIVE APPLICATIONS



**ONEX RF**

- EXPECT
- ONLY
- EXCELLENCE

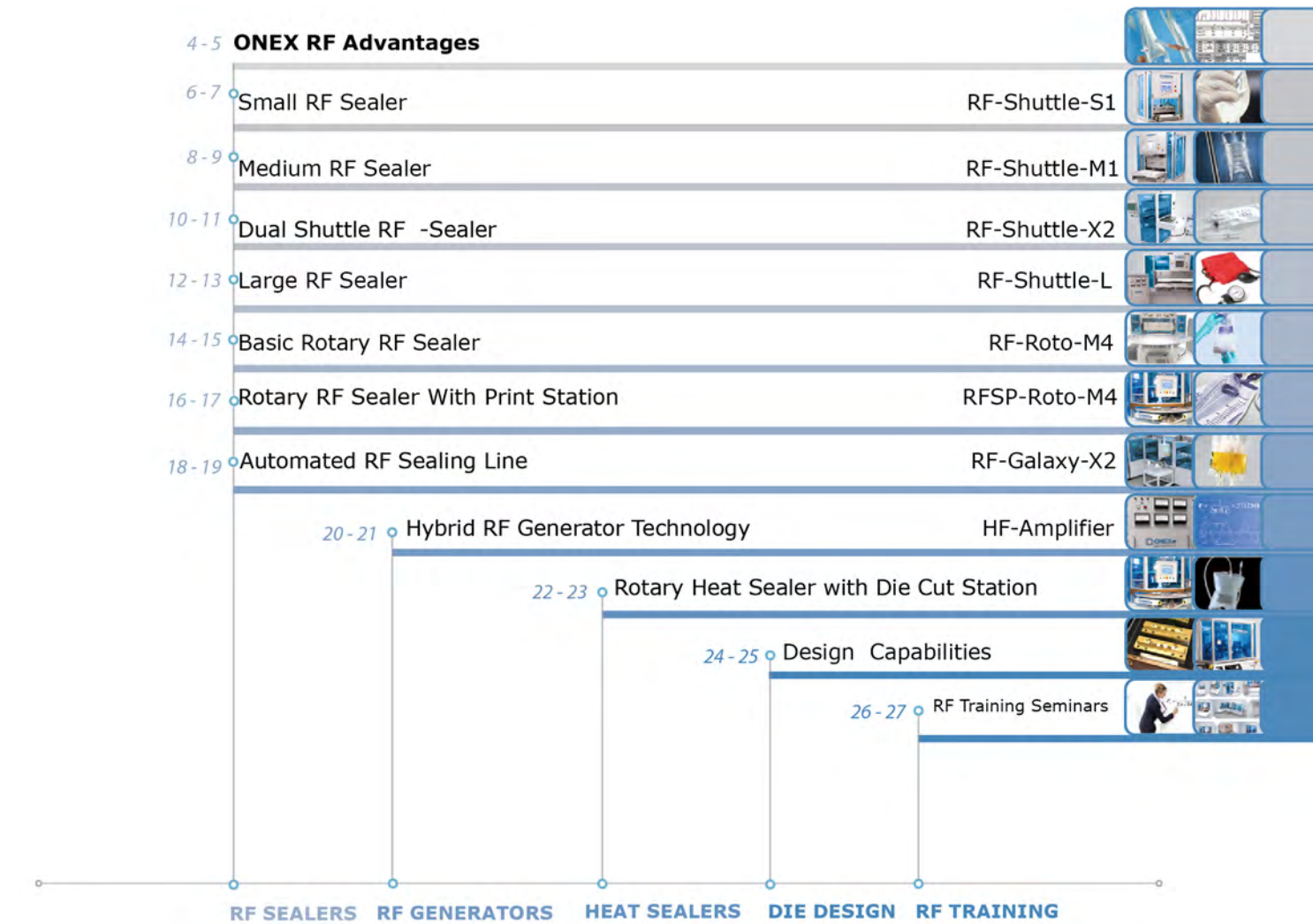


WE DESIGN RF WELDERS FOR MEDICAL & AUTOMOTIVE APPLICATIONS

EXPECT ONLY EXCELLENCE FROM **ONEX RF**

"Excellence is an art won by training and habituation. We do not act rightly because we have virtue or excellence, but we rather have those because we have acted rightly. We are what we repeatedly do. Excellence, then, is not an act but a habit."

- ARISTOTLE





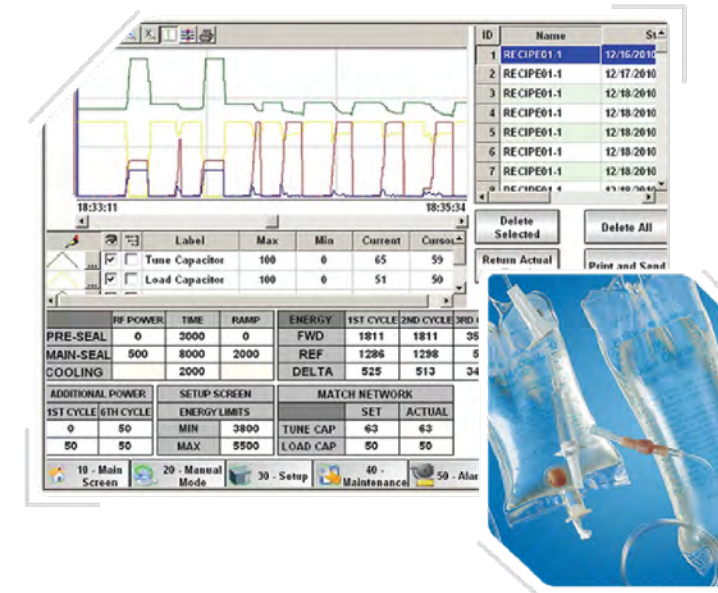
**ONEX RF** SEALERS USE BETTER CONCEPT TO CONTROL RF SEALING PROCESS WE OFFER WIDE RANGE OF RF SEALING SYSTEMS FOR MEDICAL AND AUTOMOTIVE APPLICATIONS.

We are Turnkey Solution provider for your RF welding manufacturing needs. We provide various levels of support including, product design RF sealing Die design and fabrication, including testing and process development using ONEX RF Sealers.

**ONEX RF** combines the expertise in RF sealer manufacturing and process automation enabling us to be your unmatched RF Sealing Partner of Choice.

THE **ONEX RF** ADVANTAGES

- Solid Design
- Superior Process Control



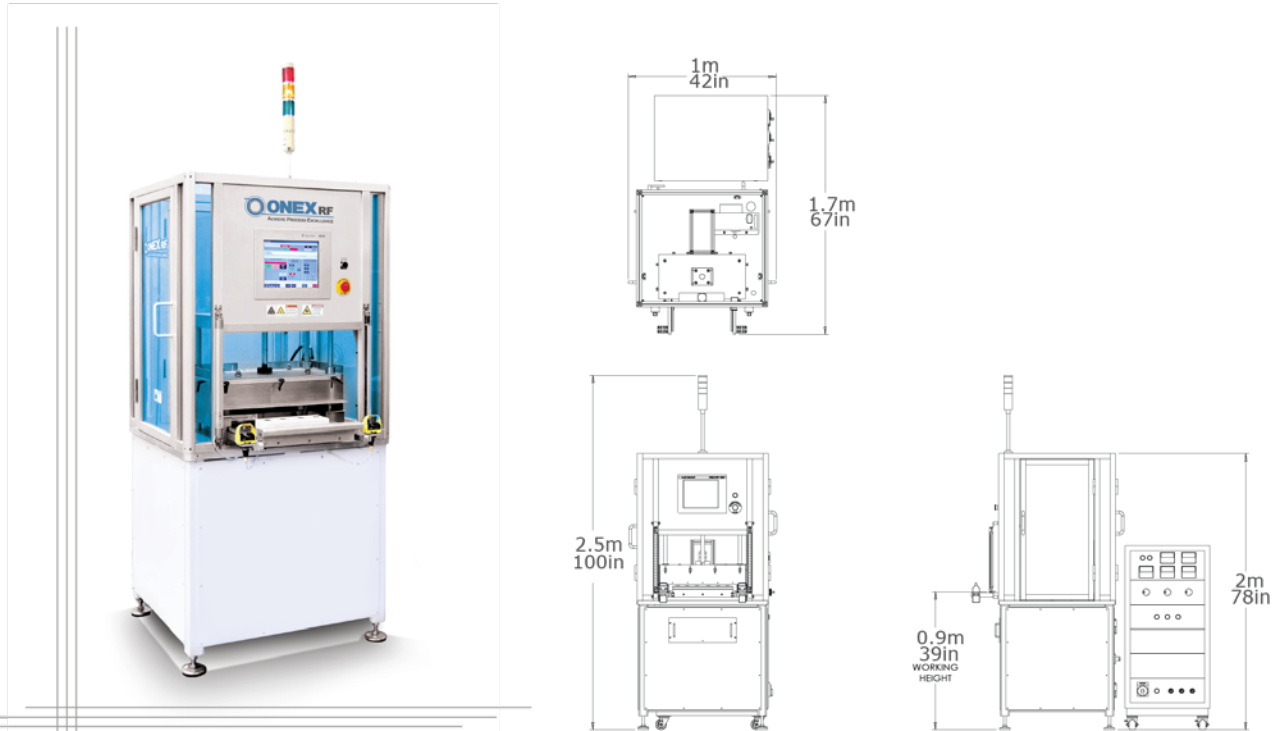
ONEX RF systems use Closed-Loop Process Control to monitor and tune the applied RF power, while sealing the product. The system is capable of achieving 95% energy efficiency during the RF sealing cycle and maintain optimal process consistency. The graphing software is a great process monitoring and optimization tool that helps users to improve system performance by relying on recorded process data versus "Tribal Knowledge" or "Trial and Error".

ACHIEVE HIGHER EFFICIENCY WITH ONEX RF SEALERS



ONEX RF Sealers use Hybrid RF Generator Technology. The ONEX RF generator brings new level of consistency and control in RF processes vital in the medical device manufacturing industry.





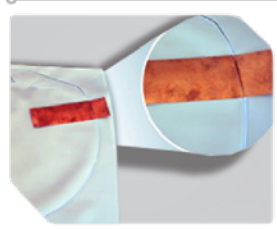
**LEAK PROOF RF SEALING**

**RF-Shuttle-S1**  
Small, Single Shuttle RF Sealer

**Equipment Features**

<b>RF Seal Station</b>	
Seal Area	10" x 20"
RF Energy	1- 4kW / 27.12 MHz
Electrical	230VAC / 1Ph / 50 - 60 Hz
Safety	ISO 13849 -1 / OSHA Class IV
RF Safety	OSHA and VDE 0848
Required Air Pressure	80 PSI
Air Volume @10 c/m	14SCFM
Pressing Force	1,000Lbs
Shipping Weight	1,600Lbs
Surface Finish	RAL-7035
Certification	UL or CE (Per Request)

**Can your RF Welder work without Arcs like ONEX RF Sealers?**



ONEX RF Sealer will seal your product around copper foil without any arc or die damage.

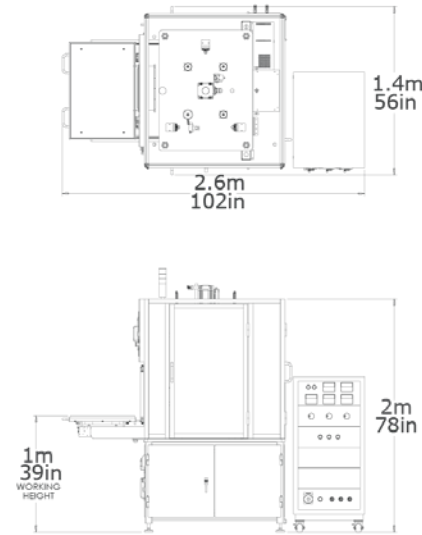
**Its a fact!**

- Designed for sealing small medical products: ports and flanges onto pressure cuffs, solution bags, safety vests and orthopedic products.
- Seal your ports or Freezing Bags on a small RF Sealer with precise process control
- For R&D and Lab applications the RF Sealer comes with optional Heat Sealing controls.

## MEDIUM SHUTTLE 20"X30"

## RF SEALER SEAL AREA

RF-SHUTTLE-M1



RF-Shuttle-M1  
Medium, Single Shuttle RF Sealer

### Equipment Features

<b>RF Seal Station</b>	
Seal Area	20" x 30"
RF Energy	4 -12kW / 27.12 MHz
Electrical	220-480VAC / 3Ph / 50 - 60Hz
Safety	ISO 13849 / Class IV
RF Safety	OSHA and VDE 0848
Required Air Pressure	80PSI
Air Volume @10 c/m	26 SCFM
Pressing Force	2,000Lbs
Shipping Weight	3,000Lbs
Surface Finish	RAL-7035
Certification	UL or CE (Per Request)

**ONEXRF** SEALERS STOP ARC QUICKLY & ELIMINATE THE NEED FOR EXPENSIVE DIE REPAIR

*The hybrid generator technology, combined with PC based closed loop process control, helps define process parameters in minutes vs hours.*

**ONEX RF** sealers never require sealing die replacement due to severe arc damage.

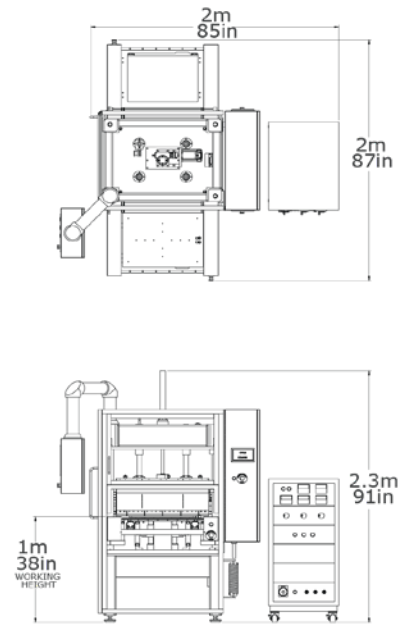
Reduce Operating Costs Increase Productivity



WE ALSO MANUFACTURE RF SEALERS FOR AUTOMOTIVE & COMMERCIAL APPLICATIONS

- Energy efficient Closed-Loop Process Control
- Highest EMI/RFI safety standards with 50% less RF emission.

MEDIUM RF SEALER



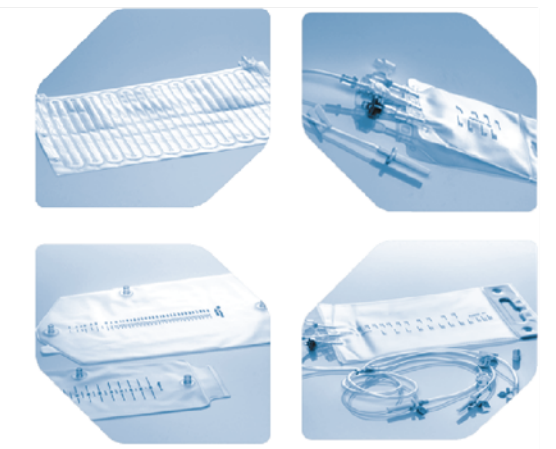
**RF-Shuttle-M2**  
Medium, Dual Shuttle RF Sealer

**Equipment Features**

<b>RF Seal Station</b>	
Seal Area	20" x 30"
RF Energy	4 - 15kW / 27.12 MHz
Electrical	220-480VAC / 3Ph / 50 - 60Hz
Safety	ISO 13849 / Class IV
RF Safety	OSHA and VDE 0848
Air Pressure	80 PSI
Air Use @10 c/m	30 SCFM
Pressing Force	2,000Lbs
Shipping Weight	4,500Lbs
Surface Finish	RAL-7035
Certification	UL or CE (Per Request)

**Higher Yield Dual Shuttle RF Sealers**

**No Channel Leaks:** the unique design combination of a floating nest and a toggle mechanism prevents die misalignment, effectively eliminating waste due to port leaks.



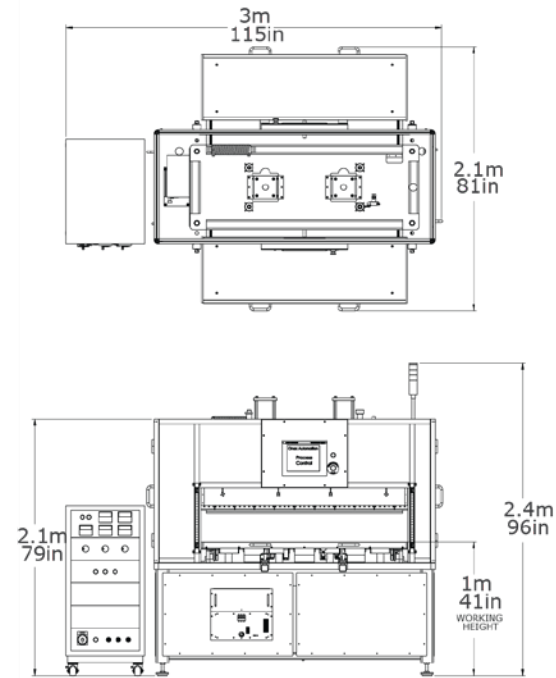
ONEX RF Sealers are ideally suited for the medical device industry because of their exceptional reliability, quality, and process repeatability.

- Occupies 50-70% less floor space than rotary RF sealers.
- Ideal for large or uniquely shaped product sealing that require greater precision.
- Once optimized, the process settings can be easily saved and reloaded for future runs to consistently produce high quality bags.
- The easy setup with the ability to recall parameters from previously optimized runs make ONEX RF systems ideal for short production runs.

## LARGE SHUTTLE 20"X60"

## RF SEALER SEAL AREA

RF-SHUTTLE-L1/L2



LARGE RF SEALER

RF-Shuttle-L1 / L2  
Large, Single or Dual Shuttle RF Sealer

### Equipment Features

RF Seal Station	
Seal Area	16" x 60"
RF Energy	10-20kW/27.12 MHz
Electrical	220VAC/480VAC/3Ph/50-60Hz
Safety	ISO 13849 / Class IV
RF Safety	OSHA and VDE 0848
Required Air Pressure	80 PSI
Air Volume @10 c/m	56 SCFM
Press Force Bore	4000Lbs
Shipping Weight	6000Lbs
Surface Finish	RAL-7035
Certification	UL or CE (Per Request)

### Efficiency By Design

Complete **CHANGE OVERS** in less 15 minutes.  
Input parameters through the touch screen HMI,  
or load the recipe to start production.

### WE GUARANTEE CONSISTENCY

### BUILT WITH CONFIDENCE

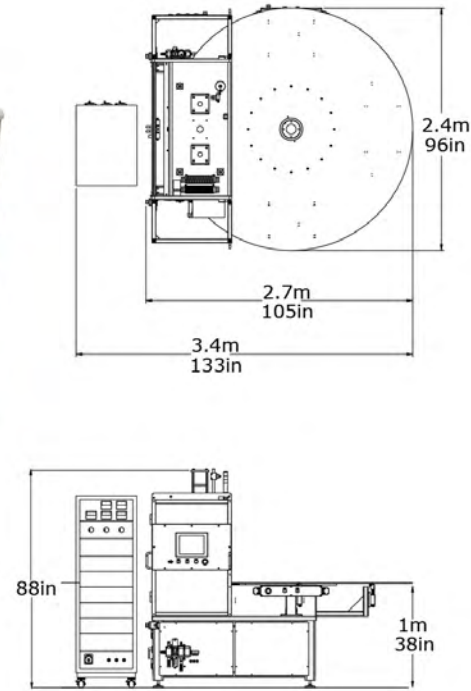
- It's very easy to validate ONEX RF Sealer.
- This equipment is ideal for pressure cuffs, pouches, safety vests, orthopedic products.
- PC based process control and Hybrid RF generator technology.
- ONEX RF provides fully functional solutions and process development for customers new to the RF sealing technology.

## ROTARY RF SEALER 20"X30" OR 20"X40"

## HYBRID RF GENERATOR SEAL AREA

RF-ROTO-M4

BASIC ROTARY RF SEALER



QUALITY IS NEVER A QUESTION

RF- Roto - L4-10kw  
Basic Rotary RF Sealer

### Equipment Features

<b>RF Seal Station</b>	
Available Dial Sizes	72" 96" 96-108"
Available Nest options	4 4-6-8
Seal Area	15" x 20" 20" x 30" 20" x 40"
RF Power	8 - 20KW
RF Frequency	27.12 MHz
Electrical	230VAC / 3Ph / 50 - 60Hz
Safety	ISO 13849 / Class IV
RF Safety	OSHA and VDE 0848
Required Air Pressure	80 PSI
Air Use @10 c/m	60 SCFM
Press force Bore	2,000Lbs
Shipping Weight	4000Lbs

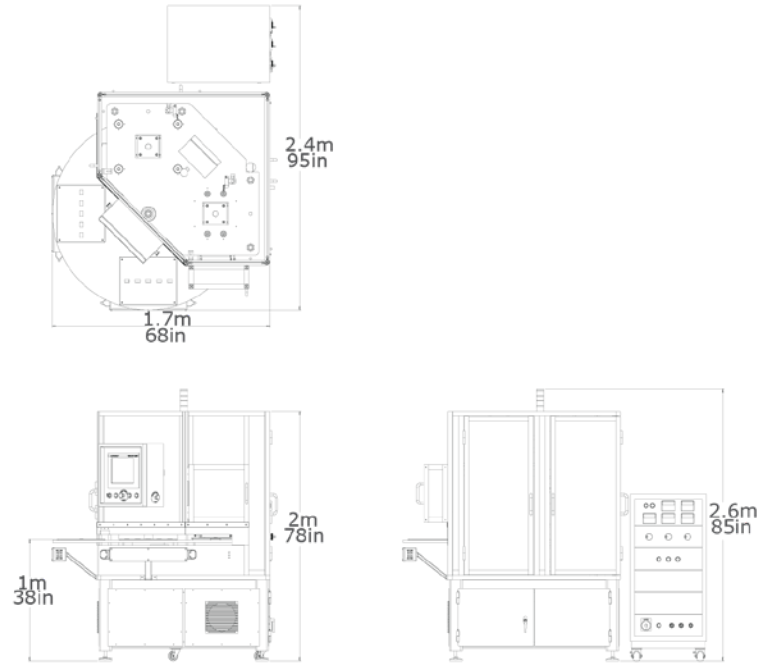
<b>Optional Stations</b>	
RF Switch	2 or 3 cycle RF Port Sealing
Second RF Seal Station	Perimeter Sealing
Certification	UL or CE (Per Request)

ONEX RF sealers are very Energy Efficient. They require up to 50% less RF power to seal customer products with consistency and repeatability.

Optimize the sealing parameters and validate the the RF Sealing process in 50% less time. We guarantee it!

- The ONEX Rotary RF sealer is ideal for producing medical products with greater precision and repeatability.
- Using the PC based HMI, operators set process parameters in minutes and start the production with confidence.
- Perfect for sealing thin film products where proper construction practices are most critical.





**RFSP - Rotary - M4  
RF Sealer With Print Station**

**Equipment Features**

<b>RF Seal Station</b>	
Available Dial Sizes	60"
Available Nest options	4
Standards Seal Area	15" x 20" / 20" x 30"
RF Energy	4 - 15KW / 27.12 MHz
Electrical	230VAC / 3Ph / 50 - 60Hz
Safety	ISO 13849 / Class IV
RF Safety	OSHA and VDE 0848
Required Air Pressure	80 PSI
Air Use @10 c/m	60 SCFM
Press force Bore	2,000Lbs
Shipping Weight	5000Lbs
Surface Finish	RAL-7035

<b>Optional Stations</b>	
Ribbon Printing	12" x 18"
Die Cutting	10-20T Press Station
Certification	UL or CE (Per Request)

**We can help you save time and money.**

Use our Dual Function RF Seal & Print machine to RF Seal your printed medical bags with greater efficiency and quality.

**CONSISTENT RESULTS**

- The ONEX Rotary RF sealer is ideal for producing medical solution bags with great precision and repeatability.
- Operators can quickly set process parameters and start the sealing cycle without any variation in the process.
- Perfect for sealing thin film products where proper construction practices are most critical.
- ONEX RF Seal station comes with toggle mechanism to align the indexing nests
- Seal your solution bags with 99.9% OEE with zero leaks, guaranteed.



**RF - Galaxy - XML  
Modular Automated RF Sealing Line**

- Produce up to 3600 articles/hr.
- Fully Automated
- Modular Design
- System OEE- 90-95%
- Made in USA

**Choose and Build Your Modular RF Sealing Line**

- RF-Galaxy Line
- Film Feed Station
- Print Station
- Hole Punch Station
- Component Feed and Load
- Tubing Cut and Mandrel Indexing Station
- Port RF Seal Station
- Perimeter RF Seal Station
- Bag Separation Station
- Final Packing Station



**WE CAN MAKE YOU SMILE**

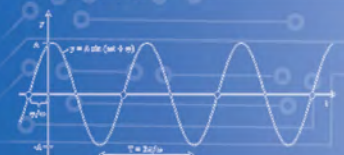


**RF Sealing Automation**

- The RF-Galaxy can be put together just 3-4 weeks.
- ONEX RF Sealers produce Medical bags with great consistency using Closed-Loop Process Control.
- Perfect for manufacturing Blood, IV, Urinary, and Enteral Feeding Bags.



$$F = \frac{1}{2\pi\sqrt{LC}} = 27.12\text{MHz}$$



**ONEX RF's Advantage is**  
The Hybrid Generator Technology

Achieve unmatched performance compared with oscillator tube and solid state generators.

Process Monitoring

- Input Voltage
- RF Forward Power
- RF Reflect Power
- Grid Current
- Plate Current
- Plate Voltage

**ONEX RF Generator Advantages**

- **ONEX RF** sealers powered by the hybrid generator are very durable and power efficient.
- Powered by Hybrid Generator Technology, **ONEX RF** sets a new standard for reliability. Spikes in Power and high reflected power are no longer a threat to internal components. Rated at 100% duty cycle
- The **ONEX RF** generators combine the durability of vacuum tubes and the precise process control of Solid State technology. Just set 0-10vdc to get 0-10KW linear power output consistently
- The new **ONEX** fast arc detect circuit can detect the slightest arc and shut down the RF output in milliseconds. Save sealing dies, eliminate down time

**Generator Specs**

Standard Power Options	2KW-4KW 6KW-10KW 15KW-20KW 30KW-40KW
Standard Frequency	27.12MHz
Vacuum Tue Amplifier	Yes
Output Connector	N 7/16 LC 1 5/8
Power Options 3Phase	220VAC 480VAC
RF Safety	OSHA and VDE0848
Input output power ratio	65-75%
VSWR	10-20% factory set
Duty Cycle	100% at full power
Generator Cooling	Air blower Water
Frequency Options	13.56MHz & 40MHz

**ONEX RF** Process Tuner is designed to monitor the FWD & REF powers and adjust the internal Capacitors to achieve high energy efficiency during the RF Sealing cycle

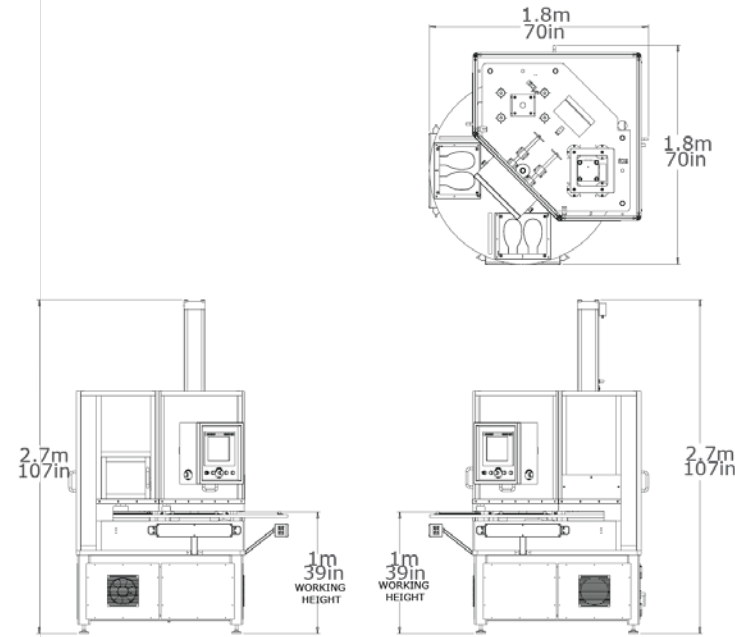
**ONEX RF** Arc-Safe System eliminates the possibility of severe die damage during RF sealing

## ROTARY HEAT SEALER 15"X18"

## WITH DIE CUT STATION SEAL AREA

HS-ROTO-X4

ROTARY HEAT SEAL-DIE CUT



HSDC-Rotary - M4  
Rotary Heat Seal & Die Cutting System

### Equipment Features

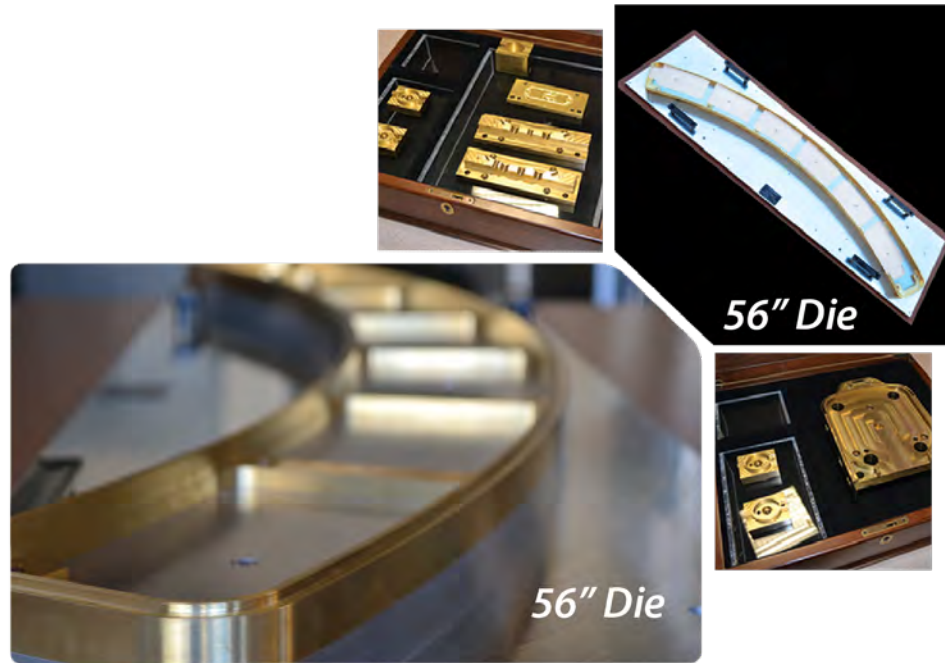
<b>Heat Seal Station</b>	
Rotary Dial Diameter	60"
Available Nest options	4
Seal Area	15" x 20"
Heat Seal Temperature	250-450° F
Electrical	220VAC / 30 Amp / 3Ph / 50 - 60Hz
Safety	ISO 13849 / Class IV
Required Air Pressure	80 PSI
Air Use @10 c/m	28 SCFM
Shipping Weight	4,600Lbs
Surface	RAL-7035
<b>Optional Die Cut Station</b>	
Die Cut Station	10-20T Air over Hydraulic Press
Certification	UL or CE Available Per Request

*Designed to heat Seal multilayer polyolefin materials. The perimeter excess material can be cut after the heat seal cycle at the die cut station.*

*The system comes with superior process control and precise cutting registration.*



- ONEX RF reliably achieves perfect seals on ultra-thin multilayer ostomy bags with precise heat control on various layers.
- The Die Cutting station is the ideal solution to produce, exact-cut, heat sealed products with no additional material handling needs.
- ONEX RF Heat Seal Die Cutting machine is designed for biotech material sealing applications.

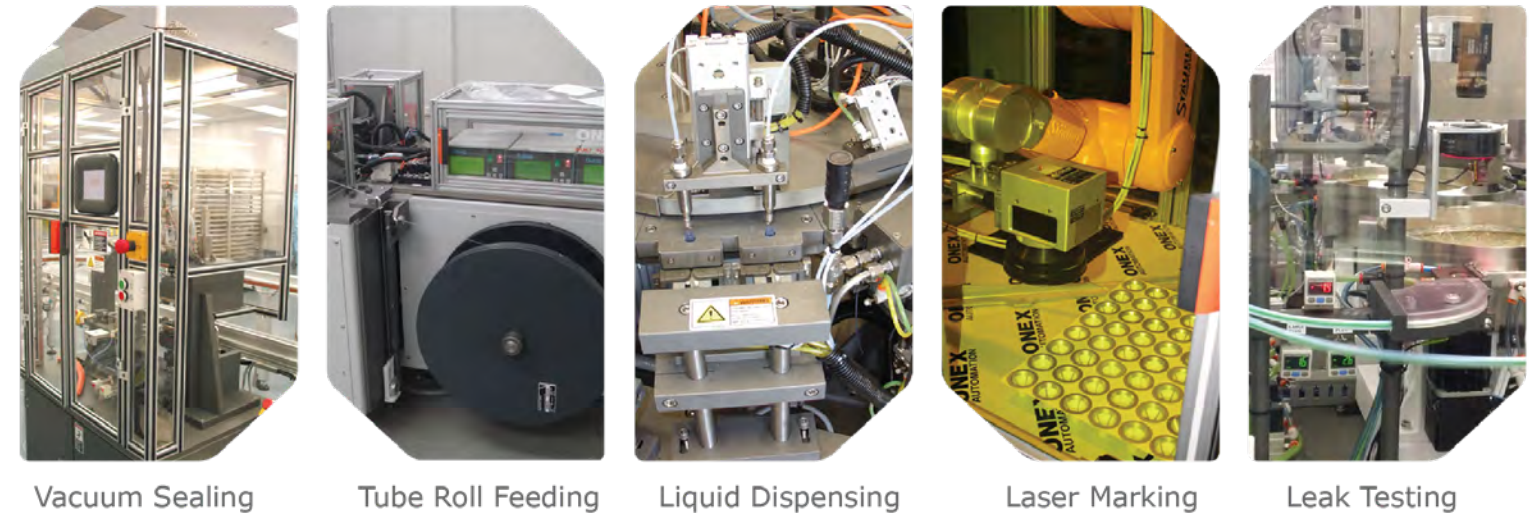


**We Design and Manufacture:**

- RF Sealing Dies

**We Develop RF Sealing Processes and Provide Turnkey Solutions:**

- Including the RF Sealing System and Automation
- Validation Support (IQ and OQ)



**Assembly Automation Experience**

Since 1992

- High speed assembly automation
- Pressure Decay and Leak Testing
- Liquid dispensing systems
- Robotic assembly systems
- Vision inspection systems



Automated Film Feeder with Punch & Cut Station.



**RELY ON REAL RF TRAINING**

**OPTIMIZE YOUR OPERATION**

**ONEX RF** Advanced RF Training Seminars  
We offer training seminars at customer site or at **ONEX RF** Duarte, CA.

The training will help you better understand RF theory combined with Sealing process. The aquired knowledge should help you optimize your sealers using the right approach rather the "tribal knowledge" with trial and errors.

Contact ONEX RF **1(626) 358-6639** or visit us online **www.onexrf.com** to request two day training seminar.

**SEMINAR TOPICS:**

- RF Sealing Technology and Operating Principles
- RF Safety Requirements and Implementation
- RF Power Distribution and Die Design Principles



Small RF Sealer  
RF-Shuttle-S1

Medium RF Sealer  
RF-Shuttle-M1

Dual Shuttle RF Sealer  
RF-Shuttle-M2

Large RF Sealer  
RF-Shuttle-L1

Rotary RF Sealer & Print Station  
RFSP-Roto-M4-60

Rotary RF Sealer Basic  
RF-Roto-M4-96

Hybrid RF Generators  
HF-Amplifier

Rotary Heat Seal & Die Cut System  
HSDC-Roto-M4

Automated RF Sealing Line  
RF-Galaxy-X2

General Automation  
Modular Solutions



ONEX RF Sealers Designed to Produce Quality Product with Maximum Efficiency and Yield

EXPECT **ONLY**  
**EX** EXCELLENCE

**ONEX RF, Inc.,**  
1824 Flower Ave., Duarte, California  
91010 USA  
[www.onexrf.com](http://www.onexrf.com)

1 (626) 358-6639

© 2023 **ONEX RF, Inc.,** All Rights Reserved.  
Any redistribution or reproduction of any materials herein is strictly prohibited.