

Vante® RUBY Thermal Forming System



- The Vante® RUBY catheter manufacturing system delivers high reliability, throughput and yields along with an improved control interface for superior automation integration.
- RUBY functions include “Smart Mold,” a patented feature that provides the ability for parametric data to be stored in the mold module for transfer to any RUBY system automatically. This allows for auto configuration of the system.
- The mold assembly is designed for easy installation and removal from the platform.
- Process parameters are loaded quickly and reliably via system configuration sensing and software control.
- Digital pressure regulation provides improved pressure control and alarms when pressure tolerances are not met. Additionally, pre-assigned programs stored externally to the generator can be accessed and loaded via limited modbus capabilities.
- All platforms can be teamed with a variety of tipping, welding, and forming molds for many, including custom, applications.

RF Generator 4300 RUBY

The RUBY Generator can be configured with a RUBY, SAFFIRE, or EMERALD platform, and molds from these legacy platforms can be installed in the “Smart Mold” assembly for use with a RUBY platform.

Forming Platform 4310H

The 4310H platform has a slide insertion force of 9.3lbs @ 30 psi, and can accommodate a variety of molds for many different applications.

Forming Platform 4310L

The 4310L platform has a slide insertion force of 3.2lbs @ 30 psi, and can accommodate a variety of molds for many different applications.

RUBY's numerous applications include:

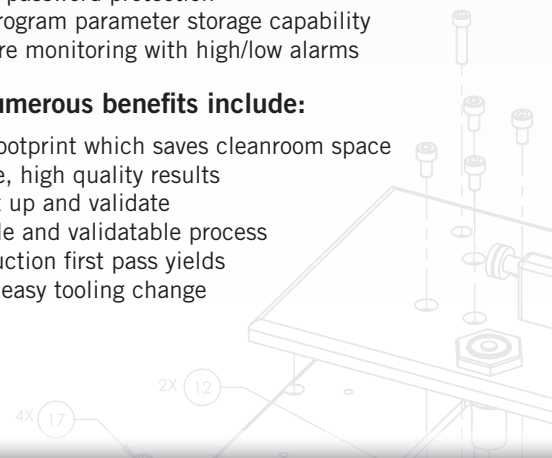
- Taper Tips
- Radius Tips
- Soft Tips
- Closed End Tips
- Dilator Tips
- Flaring
- Neck Downs
- IV Tipping
- Butt Welds
- Overlap Welds
- Braid to Non-Braid Welds
- Single/Multilumen Applications
- Balloon Tips and Welds
- Marker Band Embedding/placement

RUBY's numerous features include:

- Digital Air Pressure Regulation
- Smart Mold
- Air cooled/no water chillers
- Closed loop temperature feedback
- Operator safe so there are no hot spots or pinch points
- Semi-automated
- High and low force platforms
- Easy front panel programming
- Low friction pneumatic air cylinders and slides
- Precise heat placement
- Proprietary low mass mold design
- Solid-state circuitry
- Temperature repeatable to $\pm 1\%$ up to 350°C and $\pm 2\%$ for 350°C to 425°C
- Multi-level password protection
- Multiple program parameter storage capability
- Temperature monitoring with high/low alarms

RUBY's numerous benefits include:

- Compact footprint which saves cleanroom space
- Repeatable, high quality results
- Easy to set up and validate
- Quantifiable and validatable process
- High production first pass yields
- Quick and easy tooling change



Vante® RUBY

MECHANICAL SPECIFICATIONS

	4300	4310H	4310L
Dimensions (W x L x H)	5.3 x 14 x 8.3 in (13.5 x 35.6 x 21.1 cm)	12.5 x 9.0 x 5.4 in (31.8 x 22.9 x 13.7 cm)	12.5 x 9.0 x 5.4 in (31.8 x 22.9 x 13.7 cm)
Operating Weight	14.4 lbs (6.5 kg)	12.2 lbs (5.5 kg)	12.2 lbs (5.5 kg)
Shipping Weight	19.4 lbs (8.8 kg)	17.2 lbs (7.8)	17.2 lbs (7.8)
Maximum Air Supply	—	100 psi	100 psi
Number of Slides	—	Two Slides	Two Slides
Slide Insertion Force	—	9.3 lbs @ 30 psi	3.2 lbs @ 30 psi
Grip Force	—	18 lbs @ 90 psi	18 lbs @ 90 psi

ELECTRICAL SPECIFICATIONS

Certifications	CE,cTUVus & WEEE	—	—
Power Input	100 VAC 50/60 Hz 115 VAC 50/60 Hz 230 VAC 50/60 Hz	— — —	— — —
RF Power Output	185 Watts Minimum	—	—
Radio Frequency Output	6.78 MHz	—	—

PERFORMANCE FACTORS

User Interface	Color Touch Screen	—	—
Process Parameters Storage	10 Parameter Sets and Smart Mold Settings	—	—
Internal Circuit Protection	Yes	—	—

OPERATING CONDITIONS

Use	Indoor use only	Indoor use only	Indoor use only
Temperature	68 - 95°F (20 - 35°C)	68 - 95°F (20 - 35°C)	68 - 95°F (20 - 35°C)
Humidity	70% max. relative humidity Non-Condensing	70% max. relative humidity Non-Condensing	70% max. relative humidity Non-Condensing
Over-voltage Category	II	II	II
Pollution Degree	2	2	2
Altitude	Up to 2000 meters	Up to 2000 meters	Up to 2000 meters

RUBY SERVICE SUITE

Application consultation	included
Precision tooling set fabrication (mold, mandrels and grippers)	included (2)*
Mold design applying Vante's proprietary thermal management concepts	included (2)*
Process parameter development to create a flash free, high yield process	included (2)*
Samples certified by state of the art optical inspection equipment	included
Platform modifications if necessary	included (minor mod)
Factory acceptance test including mini DOE (this may be at extra cost depending on the size of the engagement)	included
Documentation for hardware and software validation	included
On-site installation support and training	additional cost

*A maximum of two (2) applications up to a total value of \$15,000. Must be utilized at time of equipment purchase. May not be used towards spare components.