RIVA™

RIVA is a fully automated IV compounding system designed to address the issues of patient and pharmacy technician safety, overall efficiency and the challenges of an ever-changing regulatory environment.

Revolutionary Technology

RIVA has numerous features that provide safety, efficiency and productivity benefits:

- Unidirectional sweeping airflow
- Touch-screen operation
- Gravimetric verification of every dose
- Ability to make drug source (intermediary) bags
- True walk-away capability

The technology provides the safest and most flexible means of delivering fully labeled syringes and bags (batch or patient-specific) and requires no operator intervention during the compounding process.

Safety

Eliminates errors and contamination associated with manual compounding. The system features a fully-enclosed compounding chamber with HEPA-filtered unidirectional airflow and continuous particle monitoring that meets or exceeds ISO Class 5 and PIC/S Grade A requirements. RIVA also uses patented high-intensity pulsed UV light for disinfection of all vial and bag ports prior to compounding.

Cost Savings

Lowers cost-per-dose of medication, reduces need for medication outsourcing and decreases pharmacy waste. RIVA uses only off-the-shelf consumables and handles large multi-dose vials. Hospital installations have reported an ROI of less than three years.

Efficiency

Prepares up to 55 doses per hour with walk-away capability and eliminates manual processes and the need for in-process inspections. RIVA also provides a complete electronic audit trail and automatic barcode labeling of every dispensed product.

RIVA uses patented high-intensity pulsed UV light for disinfection of all vial and bag ports prior to compounding.

ARxIUM
Innovative Pharmacy Solutions

RIVA technology can be configured for specific patient populations and institutional needs. ARxIUM offers RIVA products for different institutional segments:

RIVA General/Adult	RIVA Chemo	RIVA Pediatric	RIVA GMP
PHARMACY NEED High quantities of syringe and bag doses with low-to-medium variability	**PHARMACY NEED** Patient-specific bag output with staff exposure safeguards	**PHARMACY NEED** Highly precise syringe doses with high patient-specific variability	**PHARMACY NEED** Health System centralized sterile compounding services and 503B Outsourcing Facilities

RIVA SOLUTION

- Reduces reliance on outsourcing medications
- High productivity and efficiency with walk-away capability and high inventory capacity
- Handles liquid or powder vials, syringes 1 mL - 60 mL and bags 25 mL - 1,000 mL
- Complete product labeling within RIVA
- Prepares both defined-concentration and defined-volume IV bags

RIVA SOLUTION

- USP <800> compliant negative pressure helps protect pharmacy staff from cytotoxic preparations
- Multiple technologies to reduce surface contamination:
  - Robot paths and product motion do not pass over unused inventory
  - Drip mitigation logic and pressure management algorithms prevent drips and vial venting
  - Drip and spill containment to protect other products in the compounding area
- Ability to pre-install ChemoClave™ or ChemoLock™ bag spikes (depending on bag type)
- Fill queues allow loading of inventory in anticipation of preparing patient doses

RIVA SOLUTION

- Multiple technologies ensure dose safety for vulnerable pediatric patients
- USP <797> compliant aseptic processing and preparation
- High accuracy and dose repeatability
- Syringe dose volumes down to 0.3 mL.
- Prepares low-concentration intermediary bags which RIVA can then use as a drug source

RIVA SOLUTION

- Integrated continuous particle counting at critical sites
- Integrated viable particle impact sampling at critical sites
- Integrated continuous temperature and relative humidity monitoring in drug storage areas
- Ability to Alert, Alarm, and/or Halt when Environmental Monitoring (EM) conditions are out of specifications
- Enhanced documentation and reporting of EM and door opening events
- Real-time Cleaning Mode documentation
- Can be expanded to the entire pharmacy facility to have a single EM solution