

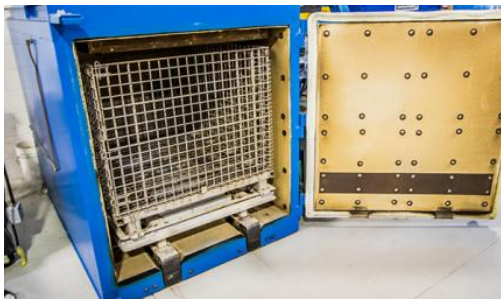
Rochester Institute of Technology Cleaning Technologies Facility

The RIT Cleaning Technologies Facility provides a wide variety of medium scale commercial cleaning technologies, with flexibility to evaluate wide ranges of media and cleaning chemistries, as well as modifying equipment parameters. This Facility is available for process development for new cleaning challenges, or to evaluate process changes (or compound processes) that yield more effective, and more cost and energy efficient processes.



High Pressure Spray Cabinet

Cleaning is a critical process in remanufacturing (cleaning core components) and the current capabilities include processes typically used in remanufacturing. However cleaning may also be required for direct material reuse within a Manufacturing Operation, or as part of a recycling process chain, and some of the current process capabilities could be applicable to both



GUSPRO Thermal Oven

Manufacturing and Recycling. Cleaning is also a high energy intensity process within remanufacturing, and development of unit process models might be part of a Systems Analysis project. Further, due to the criticality of cleaning within remanufacturing, companies are increasingly considering cleaning during the design process. The Cleaning Facility could be used to develop data to support improving "Design for Cleaning" design considerations.

Processes and equipment that are currently available include: high temperature baking, ultrasonic and high-pressure washing, and various blasting and vibratory cleaning technologies. The processes available are applicable to cleaning of a wide variety of base materials, including metals, plastics, and electronics, as well as fiber based composites. The cleaning equipment capabilities are supported by a complete materials lab with a wide range of analytical and materials analysis equipment to evaluate contaminant composition as well as cleaning effectiveness.



100lb Load Ultrasonic Cleaner

RIT Cleaning Technologies Facility Equipment List

High Temperature Baking:

- Thermal Cleaning Oven, GUSPRO, Front Door Roll-In

High Pressure Liquid:

- High Pressure Power Washer, Mart Cyclone, 30hp Tornado

Abrasive:

- Baking Soda Blaster, Armex, Accustrip System
- Multi-media Blaster, Clemco, Pulsar V1
- Steel Shot Blaster, Viking 9DC
- Airless Shot Blaster, Viking, Model 317
- Vibratory Finisher, Viking 4S

Ultrasonic:

- Ultrasonic, Blackstone-Ney Grease Monkey, GMP-3527, 110 Gallons
- Ultrasonic, Blackstone-Ney Grease Monkey Classic, GMC-3523, 35 Gallons
- Ultrasonic, CAE Blackstone, HT-1812-40KHZ, 11 Gallon
- Ultrasonic, Crest Ultrasonics, 4HT-1014.6ST, 5 Gallon
- Ultrasonic, CAE Blackstone, HT-1812-40KHZ, 5 Gallon
- Ultrasonic, CAE Ultrasonics, PROT-0512H, 5 Gallon

Specialty / Cavitation based

- Aqueous, Vacuum Cycle Nucleation Cleaner, VPS 2000