

Plastics Joining Seminar

DATES:

April 3 - 4 • October 2 - 3

LOCATION:

Branson's Danbury CT Headquarters Facility
41 Eagle Rd., Danbury CT 06810

COST: \$695 per person

Includes: Course material, continental breakfast, lunch and dinner on the first evening

REGISTRATION:

Fill out the registration form:
e-mail - Regina.Watson@Emerson.com or
fax to 203-796-0363

Other 2018 seminar dates for USA and Mexico:

One-day seminars are also available at various locations. These seminars cover the same topics listed above, in a condensed version. Please call the corresponding office to inquire about pricing and registration.

Branson's Regional Technical centers also provide in-house customized engineering seminars upon request. Call one of our offices to set up an appointment today.

- Billerica, MA / 978-262-9040
- Buffalo Grove, IL / 847-229-0800
- Detroit, MI / 586-276-0150
- Atlanta, GA / 770-962-2111
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**Plastics Joining
Seminars 2018**
April 3-4 • October 2-3

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JOIN US FOR OUR PLASTIC JOINING SEMINAR!

Branson's Plastics Joining seminar is a great opportunity for anyone to acquire in-depth knowledge from the experts in the plastics joining industry regarding part design, material selection and determining the best process and equipment for your application.

It is a comprehensive two-day seminar focused on theory and design for assembling thermoplastic materials with ultrasonics. It involves classroom and hands-on training. Our experts in the applications, equipment and acoustic tooling design present sessions covering ultrasonics:

Session 1: Basic Theory and Equipment

- Fundamentals of the ultrasonics process
- Equipment configurations
- Advantages and limitation
- 15, 20, 30 and 40kHz

Session 2: Acoustic and Fixture Technology

- Acoustic theory and material
- Coatings
- Finite element analysis
- Specialized design concept
- Fixture types and function



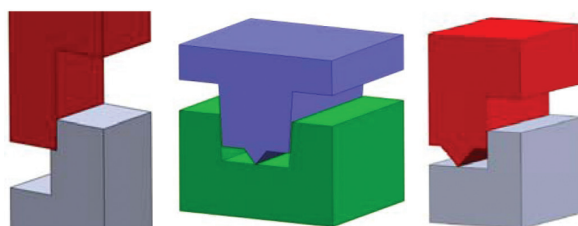
Tooling

Session 3: Thermoplastic Materials

- Fundamental of polymer science
- Material compatibility
- Factors affecting weldability

Session 4: Part Designs

- Joint design concepts
- Problematic part features (size/geometry)
- Common design issues



Joint Design

Session 5: Other Ultrasonic Assembly Techniques

- Staking, swaging, spot welding
- Insertion, degating

Session 6: Textile and Film Processing

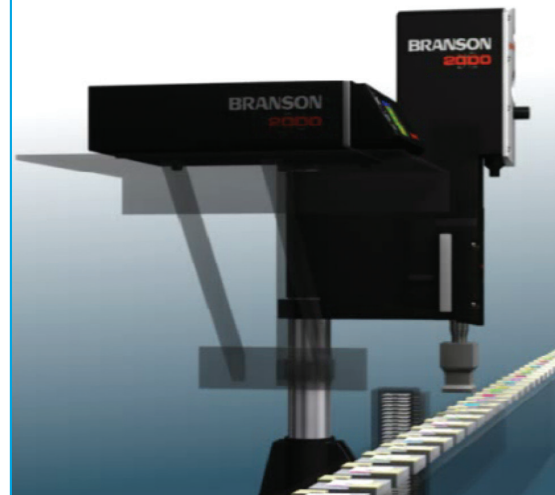
- Types of materials
- Welding techniques and equipment



Textiles

Session 7: Equipment Setup

- Overview of process parameters
- Optimization of process parameters
- Tooling setup and equipment features



Equipment

Session 8: Non-Ultrasonic Welding Processes

- Vibration welding, hot plate welding
- Spin welding, thermal welding
- Laser welding

Lab Session (hands-on):

- Equipment and tooling setup
- Process parameters for ultrasonic welding, staking, insertion
- Troubleshooting

Special consultations can be arranged to discuss your application challenges with our experts. Bring them with you!