



Daily Schedule: Advanced Training for Welding Aluminum Alloys

HOSTED BY THE LINCOLN ELECTRIC COMPANY

DAY 1

- Introduction
- Aluminum Alloys Designation and Temper System
- Aluminum Physical Properties
- Metal Preparation for Welding

Lab: Gas Metal Arc Welding

- Power Wave® 455M/Power Feed® 25M/Magnum® PRO AL Push-Pull Guns/SuperGlaze® 4043 3/64 in. (1.2 mm) - *Pulse, Pulse-on-Pulse®, Power Mode® and CV*
 - Power Wave S350/Power Feed 10M/Magnum PRO AL Push-Pull Guns/SuperGlaze 5356 3/64 in. (1.2 mm) - *Pulse, Pulse-on-Pulse, Power Mode and CV - 2 stations*
 - Power Wave C300/Magnum PRO AL Push-Pull Guns and SuperGlaze 4043 0.035 in. (0.9 mm) - *CV, Pulse, Pulse-on-Pulse and Power Mode*
 - Flextec™ 450/Magnum PRO Push Gun - SuperGlaze 4043 3/64 in. (1.2 mm) - *CV*
-

DAY 2

- Filler Alloy Selection
- Gas Tungsten Arc Welding
- Gas Metal Arc Welding

Lab 1: Gas Tungsten Arc Welding

- Precision TIG® 375 DCEN - 100% Helium (He)
- Precision TIG 375 AC
- Invertec® V311 AC

Lab 2: Gas Metal Arc Welding

- Power Wave S350/Power Feed 10M/Magnum PRO AL Push-Pull Guns/SuperGlaze 5356 3/64 in. (1.2 mm) - *Pulse, Pulse-on-Pulse, Power Mode and CV - 2 stations*
 - Power Wave C300/Magnum PRO AL Push-Pull Guns/SuperGlaze 4043 0.035 in. (0.9 mm) - *Pulse, Pulse-on-Pulse, Power Mode and CV*
 - Flextec 650 w/ push gun - SuperGlaze 4043 3/64 in. (1.2 mm)
-

DAY 3

- Design for Welding Aluminum Alloys
- Discontinuities - Causes and Cures
- Troubleshooting Porosity
- Troubleshooting Cracking and Feedability
- Waveforms in the Arc Welding of Aluminum

Lab: Gas Tungsten Arc Welding

- Precision TIG 375 DCEN - 100% Helium (He)
- Precision TIG 375 AC