



List of Welding gear and hand tools for All welding courses

Students must purchase the following welding gear and hand tools. California Welding Institute does not sell these items and cannot provide an estimate. This applies to all welder training courses, bundles and one day welding classes:

1. ESAB Sentinel or ESAB Savage Welding Helmet
2. Clear Plastic Cover Lens Replacements (both inner and outer replacement)
3. Welding Jacket 100% Cotton, no leather.
4. Cotton Pants
5. Comeaux Brand Cotton Welding Hat with Beak to pull over your ear when welding overhead
6. Safety Toe (steel toe or composite toe) Work Boot (such as: Timberland Pro Men's 26078 " Waterproof Safety-Toe Work Boot)
7. Push-in type earplugs with cord to hang on neck
8. Safety Glasses clear or yellow
9. Safety glasses grey tint
10. Clear Face Shield - Complete with adjustable head gear
11. Work Gloves (recommended: 2-3 pairs of leather palm / cotton back / lined inside)
12. Round/Curved Jaw 10" locking vise grip pliers for grabbing hot metal
13. Small focused beam LED inspection flashlight
14. Bridge Cam Gage Welding Gage (to measure weld undercut & weld bead height)

Additional Welding Gear and Hand Tools for Bundle 10, W101, W103, W109

1. Safety Glasses # 5 Dark Green Tint
2. Arc Welding Gloves (such: Nomex line)
3. Two Slag Hammers with wood handle:
 1. Cone & chisel with chisel "hatchet" type
 2. Cone & chisel with chisel "cross chisel" type
4. 2 vise-grip C Clamps with pads
5. Hand Brush either plain steel or stainless steel and wood handle
6. Chisel for steel (cold chisel 3/4" wide)
7. Ball Peen Hammer - 24 oz. size with wood handle or fiberglass
8. Two grinders:



1. DEWALT 4-1/2 in 11 Amp Paddle Switch Corded Angle Grinder (DEWALT # 402W5) or similar
2. DEWALT 7 in 13-Amp Trigger Corded Angle Grinder (DEWALT # DW840) or similar
9. Grinding wheels (Norton brand preferred)
 1. 4-1/2" x 1/4" (quantity:2)
 2. 4-1/2" x 1/8" (quantity: 2)
 3. 7" x 1/4" (quantity:2)
 4. 7" x 1/8" (quantity:2)
10. Wire Wheels (brush)
 1. 4-1/2" Bead Brush (quantity: 2)
 2. 6" Bead Brush (quantity:1)
11. Striker (to light torch)
12. Torch Tip Cleaner sets - short and long
13. 25ft Stanley tape measure
14. Soapstone (chalk) with holder (flat and/or round)
15. Magnetic 9" Torpedo level
16. "Rod Guard" Standard Size - 10lb capacity (plastic container for storing welding rod)
17. Fillet Weld Gage Set (to measure weld size)
18. Two Helmet bags:
 1. One for welding helmet
 2. One for face shield
19. Two Heavy Duty Canvas Tool Bags:
 1. One Leather Bottom Bucket with Connection Points Klein Tools 5104OCTO
 2. One 24 inch canvas tool bag - leather (such as Klein Tools 5102-16)

Additional Welding Gear and Hand Tools for Bundle 1

1. Safety Glasses # 5 Dark Green Tint
2. Arc Welding Gloves (such: Nomex line)
3. Two Slag Hammers with wood handle:
 1. Cone & chisel with chisel "hatchet" type
 2. Cone & chisel with chisel "cross chisel" type
4. 2 vise-grip C Clamps with pads
5. Hand Brush either plain steel or stainless steel and wood handle
6. Chisel for steel (cold chisel 3/4" wide)
7. Ball Peen Hammer - 24 oz. size with wood handle or fiberglass
8. Two grinders:



1. DEWALT 4-1/2 in 11 Amp Paddle Switch Corded Angle Grinder (DEWALT # 402W5) or similar
2. DEWALT 7 in 13-Amp Trigger Corded Angle Grinder (DEWALT # DW840) or similar
9. Grinding wheels (Norton Brand Preferred)
 1. 4-1/2" x 1/4" (quantity:2)
 2. 4-1/2" x 1/8" (quantity: 1)
 3. 7" x 1/4" (quantity:2)
 4. 7" x 1/8" (quantity:1)
10. Wire Wheels (brush)
 1. 4-1/2" Bead Brush (quantity: 2)
 2. 6" Bead Brush (quantity:1)
11. Striker (to light torch)
12. Torch Tip Cleaner sets - short and long
13. 25ft Stanley tape measure
14. Soapstone (chalk) with holder (flat and/or round)
15. Magnetic 9" Torpedo level
16. "Rod Guard" Standard Size - 10lb capacity (plastic container for storing welding rod)
17. Fillet Weld Gage Set (to measure weld size)
18. MIG pliers
19. Two Helmet bags:
 1. One for welding helmet
 2. One for face shield
20. Two Heavy Duty Canvas Tool Bags:
 1. One Leather Bottom Bucket with Connection Points Klein Tools 5104OCTO
 2. One 24 inch canvas tool bag - leather (such as Klein Tools 5102-16)
21. Innershield Goose Necks (Gun Tube Assembly):
 - 90 Degree, 6 inch Lincoln Part # KP1920-1 (quantity:1)
 - 30 Degree, 6 Inch Lincoln Part # KP1914-2 (quantity:1)
22. Innershield Thread protector/insulator Profax Part # PX T12313 (quantity: 1)
23. 0.068"/0.072" Innershield Contact tips Lincoln Part # KP2100-1B1 or compatible)(quantity:1 package of 10 units)
24. Innershield Heat Shield Assembly, Lincoln Part # S13037
25. Parts for Outershield Gun (gas shielded)
 - Gas Diffuser Thread-on Lincoln Part # KP2746-1 (quantity: 1)
 - Gas tube insulator Lincoln Part # KP2773-2 (quantity: 1)
 - Gas nozzle, Standard 0.5, 1/8" Stickout, Lincoln Part #KP2742-1-50S (quantity:1)



- Gas nozzle Standard 0.625, Flush, Lincoln Part # KP2742-1-62S (quantity: 1)
- 0.045" Contact tips, Lincoln Part # KP2744-045 (quantity:1 bag of 10 units)
- 26. Chain locking pliers: chain needs to be 24" long (quantity:1) (Strong Hand Tools Part # PFC1024)
- 27. Nicholson 14" Half Round Pipeliner file - Manufacturer Part # 05190N (quantity: 1)
- 28. Telescoping Inspection Mirror 2-1/4", 30" Retractable Handle
- 29. Small Spacing Wedge 3 1/2" X 1 1/2" X 1/4" (quantity:1) (Mathey Dearman Part #D272)
- 30. 1/8" pipeliner wheels for 7 inch grinder

Additional Welding Gear and Hand Tools for Bundle 2, W102, W104, W105

1. Safety Glasses # 5 Dark Green Tint
2. Arc Welding Gloves (such: Nomex line)
3. Two Slag Hammers with wood handle:
 1. Cone & chisel with chisel "hatchet" type
 2. Cone & chisel with chisel "cross chisel" type
4. 2 vise-grip C Clamps with pads
5. Hand Brush either plain steel or stainless steel and wood handle
6. Chisel for steel (cold chisel 3/4" wide)
7. Ball Peen Hammer - 24 oz. size with wood handle or fiberglass
8. MIG pliers
9. Two grinders:
 1. DEWALT 4-1/2 in 11 Amp Paddle Switch Corded Angle Grinder (DEWALT # 402W5) or similar
 2. DEWALT 7 in 13-Amp Trigger Corded Angle Grinder (DEWALT # DW840) or similar
10. Grinding wheels (Norton Brand Preferred)
 1. 4-1/2" x 1/4" (quantity:2)
 2. 4-1/2" x 1/8" (quantity: 1)
 3. 7" x 1/4" (quantity:2)
 4. 7" x 1/8" (quantity:1)
11. Wire Wheels (brush)
 1. 4-1/2" Bead Brush (quantity: 2)
 2. 6" Bead Brush (quantity:1)
12. Striker (to light torch)
13. Torch Tip Cleaner sets - short and long
14. 25ft Stanley tape measure
15. Soapstone (chalk) with holder (flat and/or round)
16. Magnetic 9" Torpedo level



17. "Rod Guard" Standard Size - 10lb capacity (plastic container for storing welding rod)
18. Fillet Weld Gage Set (to measure weld size)
19. Two Helmet bags:
 1. One for welding helmet
 2. One for face shield
20. Leather Bottom Bucket with Connection Points Klein Tools 5104OCTO (quantity:1)
21. 24 inch canvas tool bag - leather (such as Klein Tools 5102-16) (quantity:1)
21. Innershield Goose Necks (Gun Tube Assembly):
 - 90 Degree, 6 inch Lincoln Part # KP1920-1 (quantity:1)
 - 30 Degree, 6 Inch Lincoln Part # KP1914-2 (quantity:1)
22. Innershield Thread protector/insulator Profax Part # PX T12313 (quantity: 1)
23. 0.068"/0.072" Innershield Contact tips Lincoln Part # KP2100-1B1 or compatible)(quantity:1 package of 10 units)
24. Innershield Heat Shield Assembly, Lincoln Part # S13037
25. Parts for Outershield Gun (gas shielded)
 - Gas Diffuser Thread-on Lincoln Part # KP2746-1 (quantity: 1)
 - Gas tube insulator Lincoln Part # KP2773-2 (quantity: 1)
 - Gas nozzle, Standard 0.5, 1/8" Stickout, Lincoln Part #KP2742-1-50S (quantity:1)
 - Gas nozzle Standard 0.625, Flush, Lincoln Part # KP2742-1-62S (quantity: 1)
 - 0.045" Contact tips, Lincoln Part # KP2744-045 (quantity:1 bag of 10 units)
26. Pneumatic needle scaler / air chisel combo (- quantity: 1)
27. 1/4 carbon arc gouging rod (quantity: 1 box)
28. 1/4" air hose with industrial type quick coupler fittings, 15 ft long minimum, rubber material (quantity: 1)

Additional Welding Gear and Hand Tools for Bundle 3, Bundle 4, W201 through W206, W211, W212:

1. Safety Glasses # 5 Dark Green Tint
2. Arc Welding Gloves (such as: 750 or 850 Nomex line from Black Stallion or Tilman)
3. Ball Peen Hammer - 24 oz. size with wood handle or fiberglass
4. Two grinders:
 1. DEWALT 4-1/2 in 11 Amp Paddle Switch Corded Angle Grinder (DEWALT # 402W5) or similar
 2. DEWALT 7 in 13-Amp Trigger Corded Angle Grinder (DEWALT # DW840) or similar
5. Grinding wheels (Norton Brand Preferred)
 1. 4-1/2" x 1/4" (quantity:1)
 2. 4-1/2" x 1/8" (quantity: 2)



3. 7" x 1/4" (quantity:1)
4. 7" x 1/8" (quantity:2)
6. Wire Wheels (brush)
 1. 4-1/2" Bead Brush (quantity: 1)
 2. 7" Bead Brush (quantity:1)
7. Striker (to light torch)
8. Torch Tip Cleaner sets - short and long
9. 25ft Stanley tape measure
10. Soapstone (chalk) with holder (round)
11. Magnetic 9" Torpedo level
12. Two Helmet bags:
 1. One for welding helmet
 2. One for face shield
13. Small Spacing Wedge 3 1/2" X 1 1/2" X 1/4"(quantity:1) (Mathey Dearman Part #D272)
14. Chain locking pliers: chain needs to be 24" long (quantity:1) (Strong Hand Tools Part # PFC1024)
15. Nicholson 14" Half Round Pipeliner file - Manufacturer Part # 05190N (quantity: 1)
16. Telescoping Inspection Mirror 2-1/4", 30" Retractable Handle
17. 1/8" pipeliner wheels for 7 inch grinder

Additional Welding Gear and Hand Tools for Bundle 5, Bundle 6, Bundle 8, Bundle 9, and W301 series courses, W302 and W303 series courses:

1. TIG Welding Gloves
2. Sharpie Tungsten Electrode Grinder
3. Tungsten Electrodes: 3/32" diameter 2% Seriated
4. 90° Angle Mini Pneumatic (Air) Grinder with 3" Pad (quantity: 1)
5. 2" Scotch-brite buffing disc pads for cleaning aluminum (quantity: 5)
6. Small stainless steel brush (quantity: 1)
7. Medium stainless steel brush (quantity: 1)
8. Small regular steel brush (quantity:1)
9. Medium regular steel brush (quantity:1)
10. Roll of blue masking tape 2" wide (qntity:1)
11. Small container for Acetone (a can, no plastic) (quantity: 1)
12. Bottle of Heet (quantity:1)
13. 14" (8 Tooth per inch) Flat Body File (quantity: 1)
14. MIG Pliers
15. 12 Oz ball peen hammer
17. Shop rags
18. Lint free cloth



19. Stainless steel wool (quantity: 1)
20. Aluminum etching solution bottle(only for Bundle 5) (quantity:1)
21. Solar flux can (quantity: 1)
22. DEWALT 4-1/2 in 11 Amp Paddle Switch Corded Angle Grinder (DEWALT # 402W5) or similar
23. 1/4" air hose with industrial type quick coupler fittings, 15 ft long minimum, rubber material (quantity: 1)
24. For 20 size TIG torch:
 1. Standard Collet Body for 3/32" diameter electrode (quantity: 1)
 2. Standard Collet for 3/32" diameter electrode (quantity:3)
 3. Standard Collet Body for 1/16" diameter electrode (quantity: 1)
 4. Standard Collet for 1/16" diameter electrode (quantity:3)
 5. Gas Cups sizes #5, #6, #7 and #8 for Standard collet (quantity: 2 of each size)
 6. TIG Cup Insulator for Standard Collet (quantity: 2)
 7. Gas Lens Collet body 3/32" diameter electrode (quantity: 1)
 8. Gas Lens Collet 3/32" diameter electrode (quantity: 3)
 9. Gas Lens Collet body 1/16" diameter electrode (quantity: 1)
 10. Gas Lens Collet 1/16" diameter electrode (quantity: 3)
 11. Gas Cups sizes #5, #6, #7 and #8 for Gas Lens Collet (quantity: 2 of each size)
 12. TIG Cup insulator for Gas Lens Collet (quantity:2)
25. For 17 size TIG torch:
 1. Standard Collet Body for 3/32" diameter electrode (quantity: 1)
 2. Standard Collet for 3/32" diameter electrode (quantity:3)
 3. Standard Collet Body for 1/16" diameter electrode (quantity: 1)
 4. Standard Collet for 1/16" diameter electrode (quantity:3)
 5. Gas Cups sizes #5, #6, #7 and #8 for Standard collet (quantity: 2 of each size)
 6. TIG Cup Insulator for Standard Collet (quantity: 2)

Additional Welding Gear and Hand Tools for Bundle 7, Bundle 8, Bundle 9, W106 series, W304 series, W305, W306:

1. 2 vise-grip C Clamps with pads
2. MIG pliers
3. MIG welding gloves
4. Ball Peen Hammer - 12 oz. size wood (for light gage sheet metal)
5. Full size carbon steel hand brush (if course material is carbon steel)
6. Full size stainless steel brush (if course material is stainless steel or aluminum)
7. DEWALT 4-1/2 in 11 Amp Paddle Switch Corded Angle Grinder (DEWALT # 402W5) or similar
8. Wire Wheels (brush): 4-1/2" Bead Brush (quantity: 1)
9. Solar Flux can (quantity:1)
10. Shop rags
11. Lint free cloth
12. 14" (8 Tooth per inch) Flat Body File (quantity: 1)
13. Small container for Acetone (a can, no plastic) (quantity: 1)
14. Bottle of Heet (quantity:1)
15. Contact Tips for Milleromatic 0.035" dia. wire (quantity: 1 pack of 10)
16. Contact Tips Milleromatic for 0.030" dia. Wire (quantity: 1 pack of 10)