



## Welding-Norfolk

### Tools Required First Day of Classes

Estimated Cost: \$900-\$1,200

The following is equipment and supplies required for training. Please note that there are choices on supplies- lift front helmets, auto darkening helmets, gloves, etc. You may have some of the items listed already. The instructor will advise you if they meet program requirements. Safety equipment is mandatory for all classes because of the nature of the trade. Items need to be ordered in advance (mid-June) so that you have them on first day of class. Most items can be purchased from a welding supply store. Hand tools may be more affordable at other stores. A more professional and safe atmosphere is present when everyone wears the proper attire. Please advise if you have questions. John Knapp 402-844-7201, Norfolk, or Michael McCarthy 402-844-7200, Norfolk.

Quantity	Description
Program Required Tools	
1	Auto darkening welding helmet (recommended) with extra cover lenses for inside and front of helmet.
2	Welding Cap 100% cotton
4 pr	Safety Glasses (clear) or prescription safety glasses
24 pr	Ear Plugs/pre-shaped foam type
1	Stainless Steel Wire Brush
1	Stainless Steel Toothbrush
1	Carbon Steel Wire Brush
1	Chipping Slag Hammer
1	Locking C-Clamp plier type. Vice-Grip or Economy brand.
1	Half Round File, Bastard Cut to 14"
1	12" Adjustable Wrench (crescent or like brand)
1	Ball Peen hammer 24 oz. or 16 oz.
1	Pocket flashlight battery or chargeable
1	Straight screwdriver 3" or 4" long
1	Phillip screwdriver 3" or 4" long
1	Cold chisel for steel 4" or 6" long -1/2" diameter
1	Combination Lock
1	Cape Sleeves cowhide with 20" Bib (for out position SMAW and FCAW welding) or Full Leather Jacket
1	Tillman Jacket with Leather Sleeves pt#9360
1	Welding and Cutting Goggles shade 4 or 5 or shaded face shield
1	Clear face shield
1	Flint Striker-extra flint
1	Tip Cleaners
3 pr	SMAW Stick glove. Thicker cut.

2 or	GMAW Mig glove. Medium thickness.
2 pr	GTAW Tig glove. Thin cut.
2 pr	Drivers/work glove. Medium thickness for moving and cutting metal
1	Linesman Cutting Pliers-for cutting 1/8" TIG wire
1	Needle Nose Pliers or Mig Welding Pliers
1	Soap Stone & Holder-flat or round with extra soap
2	Silver-streak welders pencil or like brand
2 grinders	4 ½" Grinder 10 Amp with extra (6) 1/8" and (8)¼" grinding wheels, (5) Stringer Bead Twist Wheel Brush and (8) 60 Grit Flap Disc. Cord or Cordless
10	3/32" x 7" 2% Thoriated or 2% Lanthanated Tungsten 1 pack
1 roll	Vinyl electrical tape
3	Alumina Nozzle 10N47 #7
2	Alumina Nozzle 10N46 #8
2	Alumina Nozzle 10N45 #10
2	Collet 10N24 3/32-GTAW Parts
2	Collet Body 10N32 3/32-GTAW Parts
2	Back caps Long 57Y02-GTAW Parts
1	Gas Lens 45V26 3/32-GTAW Parts
2	Gas Lens Nozzle 54N14-GTAW Parts
1	25' Measuring Tape
1	9" Torpedo Level
1	12" Combination Square
1	Center Punch for metal – 1/4" or 3/8 "
2	Sharpie black extra fine point markers
1	5-gallon bucket or bag to carry tools in. No toolboxes left in lab.
1	Lens/Glass Cleaner
1	Protractor
1	Locking Compass
1	Fillet Weld Gages-Set
1	Standard Pliers

**Students must also supply:**

**Not included in estimated cost of supplies listed above.**

\*Leather Steel Toed Work Boots

2 pr \*100% cotton Carhartt or Wrangler or other brand work shirt with flaps on pockets and recommend snaps over buttons. No flannel. **Washed** regularly.

\*100% cotton tee shirt to be worn under work shirt.

\*Normal fitting blue or black jeans. Straight leg. No holes or frays.

\*Old 100% cotton t-shirt cut up for cleaning lenses.

**Please mark your name on all tools and supplies!**