THE HARRIS PRODUCTS GROUP
A LINCOLN ELECTRIC COMPANY
4501 Quality Place • Mason, OH 45040 U.S.A Tel: 513-754-2000 Fax: 513-754-6015

TECHNICAL SPECIFICATION SHEET

Perfect Circle® Welding Wire TEN GAUGE™ (brand)

STATEMENT OF LIABILITY- DISCLAIMER

Any suggestion of product applications or results is given without representation or warranty, either expressed or implied. Without exception or limitation, there are no warranties of merchantability or of fitness for particular purpose or application. The user must fully evaluate every process and application in all aspects, including suitability, compliance with applicable law and non-infringement of the rights of others. The Harris Products Group and its affiliates shall have no liability in respect thereof.

FEATURES

FLUX CORED SMALL DIAMETER WIRE FOR WELDING FOR PLAIN AND GALVANIZED STEEL.
SELF-SHIELDING SO NO EXTERNAL SHIELDING GAS IS REQUIRED.
WELDS CLEAN, DIRTY, OILY, RUSTED, OR GALVANIZED STEEL.
SLAG IS EASILY REMOVED.
WELDING POSITIONS – FLAT, HORIZONTAL, OR VERTICAL DOWN.

Description

Ten Gauge is a self-shielded carbon steel wire for single pass fillet and lap welds in mild and low carbon steel. It is an excellent welding wire for home, workshop, and auto body repair! Ten Gauge's innovative composition provides the following welding features:

- DC straight polarity is recommended
- Minimizes burn through on thin sheet metal
- Excellent for plain and galvanized steels.
- A good choice for 110 volt welding machines – no gas bottle required.
- Wide weld range of steel thickness, 18 gauge, (0.048") to ¼" (0.125).
- All position capability – excellent on vertical down welding.
- No shielding gas means reduced welding costs and the ability to weld in windy conditions.
- Easily removed slag.

Typical Single Pass Weld Deposit Chemistry (%)

Carbon	.15	Phosphorus	.011
Manganese	.55	Sulfur	.007
Silicon	.45	Iron	Remainder

Typical Weld Metal Mechanical Properties

Transverse Tensile Test: 80,100 psi, base metal Fracture.

Specification Conformance

AWS A5.20, ASME Section II Part C SFA 5.20 Classification E71T-GS

Suggested Welding Settings [DC straight , (electrode negative), polarity.]

Suggested Weld Settings - .030 DIAMETER

Metal Thickness	Joint Type	Wire Feed Speed	Amperage	Voltage	Stick Out
18GA	Fillet (lap-tee)	125	40-60	12-14	½"
16GA	Fillet (lap-tee)	128-200	80-110	13-17	½"
10GA	Fillet (lap-tee)	200-350	125-160	15-21	½"
10GA	Square Groove	400	145	21-23	5/8"
¼"	Fillet (lap-tee)	500-600	180-195	22-24	5/8"

Suggested Weld Settings - .035 DIAMETER

Metal Thickness	Joint Type	Wire Feed Speed	Amperage	Voltage	Stick Out
16GA	Fillet (lap-tee)	60-100	50-90	14-16	½"
10GA	Fillet (lap-tee)	125-200	100-125	17-22	½"
10GA	Square Groove	125-200	100-125	19-22	½"
¼"	Fillet (lap-tee)	400-500	220-245	22-26	½"
¼"	Square Groove	500-700	180-215	24-28	3/4"

Sizes and packages

.030", 0.035", & 0.045" diameter x 2 lb. spool
.030", 0.035", & 0.045" diameter x 10 lb. spool
.030", 0.035", & 0.045" diameter x 33 lb spool

WARNING: PROTECT yourself and others. Read and understand this information.
FUMES AND GASES can be hazardous to your health.
ARC RAYS can injure eyes and burn skin.
ELECTRIC SHOCK can KILL.

- Before use, read and understand the manufacturer's instructions, Material Safety Data Sheets (MSDS), and your employer's safety practices.
- Keep your head out of fumes.
- Use enough ventilation, exhaust at the arc, or both, to keep fumes and gases from your breathing zone and the general area.
- Wear correct eye, ear, and body protection.
- Do not touch live electrical parts.
- See American National Standard Z49.1, *Safety in Welding, Cutting, and Allied Processes,* published by the American Welding Society, 550 N.W. LeJeune Road, Miami, Florida 33126; OSHA Safety and Health Standards, available from the U.S. Government Office, Washington, DC 20402.