

DESCRIPTION

Stoody 308L stainless steel wire is a tubular alloy cored wire than can be used in the GMAW (MIG) or SAW (Submerged Arc) processes. The tubular wire provides deposition rates equal to that of solid wires at lower amperages. This feature allows less heat input into the work piece and therefore causes less distortion. Penetration, however, is still excellent. Stoody 308L can be used to join or clad AISI 301, 302, 304 commonly used in the chemical industry and food processing applications.

GMAW Welding — Stoody “Shielded” stainless steel wires are designed for downhand welding in GMAW (MIG) operation. Electrode positive polarity should be used for maximizing penetration when doing a joining application. For overlay work on a mild steel base metal, electrode negative polarity is recommended to reduce dilution and penetration. Out of position welding is greatly improved with the use of pulsed arc power supplies.

Submerged Arc Welding — Mechanical properties of submerged arc deposits are similar to those of “Standard” coated electrodes. Typically the larger diameter wires (3/32”, 1/8”) are used for submerged arc applications

TYPICAL DEPOSIT CHARACTERISTICS

Tensile Strength 88 KSI
Elongation in 2” 38%

TYPICAL DEPOSIT CHEMISTRY (wt%)

Carbon	0.02
Manganese	1.62
Silicon	0.51
Chromium	20.1
Nickel	10.1
Iron	Balance

OPERATIONAL CHARACTERISTICS / WELDING PARAMETERS

Diameter, In. (mm)	1/16 (1.6)	3/32 (2.4)
Current, Amp. DCEP	200 – 260	250 – 350
Voltage	24 – 26	28 – 30
Wire Extension	1/2” – 3/4”	1 1/4” – 1 1/2”
Flux Type	None	R-20 Flux
Shielding Gas	Argon or 98/2	None

Diameter, In. (mm)	1/8 (3.2)
Current, Amp. DCRP	350 – 450
Voltage	29 – 31
Wire Extension	1 1/4” – 1 1/2”
Flux Type	R-20 Flux
Shielding Gas	None

STANDARD SIZES & PACKAGING

Diameter	Packaging	Part #
1/16” (1.6mm)	10# PS	11468500
1/16” (1.6mm)	33# WB	11067600
1/16” (1.6mm)	50# PP	11066900
3/32” (2.4mm)	33# WB	11403100
3/32” (2.4mm)	50# PP	11838000
3/32” (2.4mm)	60# Coil	11003800
3/32” (2.4mm)	100# Coil	11004000
3/32” (2.4mm)	500# POP	10211700
1/8” (3.2mm)	100# Coil	11003900
1/8” (3.2mm)	500# POP	11812800

Stoody Company

5557 Nashville Road • Bowling Green, KY 42101
1-800-227-9333

PDS-SS-W-0017
Revision 0
08/07/02

Notice: The information contained or otherwise referenced herein is presented only as “typical”, without guarantee or warranty. Stoody expressly disclaims any liability from any reliance thereon. Typical data are those obtained when welded and tested in accordance with Stoody’s internal procedures. Other tests and procedures may produce different results. No data is to be construed as a recommendation for any welding condition or technique not controlled by Stoody.