

# MAINTENANCE TECHNOLOGY PREMIUM STOCK AWS ALLOY

WELTEC	STAINLESS STEEL ELECTRODES	PROPERTIES
PS308 *	PS 308 electrodes are used to weld unstabilized 18-8 stainless steels such as Types 301,302, 304, 305 and 308. PS 308 electrodes provide corrosion resistance and physical properties equal to or greater than the steels for which they are recommended. Typical applications include dairy, distillery and restaurant equipment, and chemical tanks.	Tensile 87,500 PSI 38% Elongation
PS308L *	PS 308L is an extra low carbon electrode used to weld Types 304L and 347. The weld deposit contains a maximum of .04% carbon, which minimizes the formation of chromium carbides, and consequent susceptibility to intergranular corrosion. The weld deposit, with controlled ferrite, gives excellent notch toughness at -320F (-196C).	Tensile 84,500 PSI 40% Elongation
PS309 *	PS 309 electrodes are used for the welding of similar alloys in wrought and cast form, as well as for dissimilar metals such as stainless steels to carbon or low alloy steels. They also can be used for a barrier layer before cladding. Welding of Types 405 and 430 can be accomplished without pre-heat, while Types 410,442, and 446 may call for preheating of a minimum of 300° F (150°C).	Tensile 87,500 PSI 35% Elongation
PS309L *	PS 309L gives a weld deposit similar to 309, with reduced carbon levels (.04% maximum) that offer increased resistance to intergranular corrosion. Type 309L is ideal for joining stainless steels to themselves or to carbon or low alloy steels. PS 309L is preferred to PS 309 for cladding over carbon or low alloy steels, as well as dissimilar joints which undergo heat treatment.	Tensile 88,500 PSI 36% Elongation
PS310 *	PS 310 electrodes are used to weld stainless steels of similar composition in wrought and cast form. The weld deposit is fully austenitic, and as such calls for minimum heat input during welding.	Tensile 90,500 PSI 34% Elongation
PS316 *	PS 316 electrodes are designed for welding wrought and cast forms of similar composition. The presence of molybdenum increases the creep resistance at elevated temperatures and offers good resistance to pitting corrosion. Applications include welding of equipment for chemical and process industries.	Tensile 87,500 PSI 36% Elongation
PS316L *	PS 316L electrode deposits are similar to that of Type 316, except the carbon is limited to a maximum of 0.04%. Precise control of the carbon content in PS 316L electrodes provides a weld deposit matching the corrosion resistant qualities of Type 316L stainless steel. The extra low carbon content reduces the possibility of carbide precipitation and consequent intergranular corrosion.	Tensile 85,800 PSI 36% Elongation
PS317 *	PS 317 electrodes are designed for welding of alloys of similar composition. The weld deposit has more molybdenum compared to that of Types 316, and offers good resistance to crevice and pitting corrosion.	Tensile 86,500 PSI 34% Elongation
PS317L *	PS 317L electrode deposits are similar to that of Type 317, except the carbon is limited to a maximum of 0.04%. In addition to the resistance to pitting and crevice corrosion, this consumable offers good resistance to intergranular corrosion.	Tensile 82,500 PSI 38% Elongation
PS330 *	PS 330 electrodes are used to weld wrought and cast forms of stainless steels of similar chemical composition, which offer good heat and scale resistance above 1800° F (980° C). However, high sulfur environments adversely affect the high temperature performance. The heat input has to be kept to a minimum during welding to avoid the possibility of microfissuring.	Tensile 84,500 PSI 26% Elongation
PS347 *	PS 347 electrodes are columbium stabilized stainless steel electrodes used for the welding of Types 347 and 321 stainless clad steels. The columbium content is approximately ten times the carbon content, and when this product is used to weld stabilized Type 347 or 321 parent metal, it precludes intergranular corrosion under severe operating conditions.	Tensile 86,000 PSI 35% Elongation

WELTEC	MILD & LOW ALLOY ELECTRODES	PROPERTIES
PS70S-6	PS 70S-6 is a mild steel welding wire with higher levels of deoxidizers (Mn & Si) compared to other mild steel welding wires. This wire is exceptionally suitable for welding of mild steels with moderate amounts of scale or rust. For MIG welding, argon-oxygen or argon-CO may be used as shielding gasses. For TIG welding, 100% argon is recommended as the shielding gas.	Tensile 78,000 PSI 24% Elongation
PS4130 *	PS 4130 is a high strength, low alloy welding electrode for joining steels of similar chemical composition, as well as for overlays where moderate hardness is required. This wire can be used for TIG, MIG, and submerged arc welding applications. A pre-heat and interpass temperature of not less than 400°F is required during welding.	Tensile 145,000 PSI 11% Elongation
PS6011 ARC	PS 6011 is a steel electrode offering excellent mechanical properties in the welding of mild steels, galvanized and some low alloy steels. The coating produces a forceful, spray-type arc, resulting in deeply penetrating welds in all positions. The slag is thin and readily removable. PS 6011 operates on AC or DCEP.	Tensile 72,000 PSI 30% Elongation
PS6013 ARC	PS 6013 establishes a smooth, quiet, medium penetrating arc that is readily maintained with minimal spatter loss. The slag lifts easily, revealing a finely rippled bead contour. This quick freezing slag gives optimum performance in vertical-down welding. PS 6013 is ideally suited for general purpose welding, even with small AC power sources having low open-circuit voltage. PS 6013 operates on AC, DCEN or DCEP.	Tensile 67,700 PSI 26% Elongation
PS7014 ARC	PS 7014 has an iron powder covering. The iron powder content yields a high deposition rate in all positions. The welds reflect smooth beads with fine ripples. PS 7014 is particularly advantageous when poor fit-up exists. The slag is easily removed, often self-lifting. PS 7014 operates on AC, DCEN or DCEP.	Tensile 79,900 PSI 30% Elongation
PS7018 ARC	PS 7018 is an all-position, iron-powder, low-hydrogen electrode which is widely used throughout the metal-working industry. It is used to weld carbon steels, free-machining steels, and the low alloy trade name steels of 50,000 psi minimum yield strength. The x-ray sound welds are smooth and uniform, with practically no spatter. Slag removal is easy, with no secondary slag. Special moisture resistant flux coating.	Tensile 78,000 PSI 32% Elongation



# PREMIUM STOCK STAINLESS STEEL

Highest quality maintenance and repair stainless electrodes at production rod prices. Coated with a unique flux containing new stabilizers to eliminate stub loss. Burn the entire electrode without stopping. Does not become red-hot and overheat. Easy to use in all positions. Will not stick. Excellent on thin gauge. Strikes and restrikes easily. Does not spatter and feathers in without under-cutting. Color match of the flat weld beads is excellent. A full range of sizes and grades is readily available. AC/DC+.

## UNIQUE STAINLESS STEELS

DIAMETERS:    3/32    1/8    5/32    3/16  
AMPERAGES:   40-90   70-120   90-150   120-210

All Maintenance Technology stainless steel electrodes conform to AWS A 5.4-78. Tensile and other physical and chemical properties per AWS requirements. Other certifications available.

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- **New stabilizers permit usage of the whole electrode without stopping the arc and eliminate stub loss.**
  - **Easiest of all stainless electrodes to use.**
  - **Superb quality for out of position welding.**
  - **Puddle freezes almost instantly.**
  - **Excellent striking and restriking properties.**
  - **Does not stick.**
  - **Spatter free operation eliminates usage of anti-spatter compounds.**
  - **Smooth deposits feather into base metal.**
  - **No undercutting.**
  - **Welds thin gauge without burning through.**
  - **Improved weldability for thick to thin and poor fitted joints.**
  - **Excellent color match.**
  - **Smooth and steady arc action.**
  - **Deposited weld is flat which practically eliminates grinding on flat welds.**

308    308L    316    316L    309    310    317    347    330    320

Note: A special flux-coated 1/16 diameter stainless electrode for stainless sheet metal is available to eliminate burn through.