

Nitrogen Welder Temperature Setting Chart

Typical Applications	Description / How to Identify	Plastic Symbol	Welding Rod Profiles & Part Numbers	Suggested Temperature Settings
Bumper covers, headlight housings, inner fender liners, splash shields, fan shrouds, gas tanks, underhood parts, interior parts, snowmobile cowls. Glass fiber-reinforced PP parts: Radiator supports, underhood plastics, UTV bodies, Sea Doo hulls	Usually black, sometimes gray; semi-flexible. 98% of late-model bumper covers are made of PP. Slightly waxy appearance. Glass fiber-reinforced PP parts: Rigid, usually black with dull, fibrous surface appearance	PP, TPO, TEO, PP/ EPDM, PP + EP, TSOP (polypropylene) PP+GF (glass- reinforced PP)	R02-01	Digital Welders 52-64 Analog Welders 7
Grilles, instrument panels, consoles, armrest supports, street bike fairings, RV body panels and storage tanks	Rigid, usually shiny in appearance if smooth. May be molded in any color, but usually white or black.	ABS	R03-01 1/8" dia 3 mm R03-04 3/8" x 1/16" 9.5 x 1.6 mm	Digital 44-56 Analog 5
Windshield washer bot- tles, radiator overflow bottles, inner fender liners, ATV fenders, RV water storage tanks, gas tanks, kayaks, canoes, trash cans Glass fiber-reinforced HDPE: Agricultural plastics, shipping crates, pallets	Usually translucent white (natural), but often molded in color. Waxy in appearance, semi-flexi- ble. Never painted. Glass fiber-reinforced HDPE: Rigid, usually natural but may be any color, dull, fibrous surface appearance	PE, LDPE, HDPE (polyethylene) HDPE+GF (glass-reinforced HDPE)	R04-01	Digital Welders 48-60 Analog Welders 6
Bumper covers, headlight housings, inner fender liners. Esp. light gray headlight housings.	Light gray, sometimes black. Same as PP but has a bit of synthetic rub- ber for flexibility.	PP, TPO, TEO, PP/ EPDM, PP + EP (Thermoplastic olefin)	R05-01 1/8" dia (TPO) 3 mm R05-04 3/16" dia (TPO) 4.7 mm R05-05 3/8" x 0.05" (TPO) 9.5 x 1.2 mm	Digital Welders 52-64 Analog Welders 7

Typical Applications	Description / How to Identify	Plastic Symbol	Welding Rod Profiles & Part Numbers	Suggested Temperature Settings
Radiator tanks, oil pans, valve covers, exterior trim parts, mirrors, fenders	Radiator tanks, oil pans, valve covers, exterior trim parts, mirrors, fenders	PA (nylon) PA+GF (glass-reinforced nylon)	R06-01 1/8" dia 3 mm R06-04 3/8" x 1/16" 9.5 x 1.6 mm R21-04 (PA+GF15) 9.5 x 1.6 mm	Digital Welders 64-72 Analog Welders 8
Bumper covers (old Ford, some M-B), door skins (Saturn), street bike fairings, instrument panels	Rigid, usually black or dark color, bumpers usually have rebar molded with fascia. Trade name: Lexan	PC, PC + ABS, PC + PBT (polycarbonate & blends)	R07-01 1/8" dia 3 mm R07-04 3/8" x 1/16" 9.5 x 1.6 mm	Digital 52-64 Analog 7
Flexible bumper covers, filler panels, rocker panel covers, snowmobile cowls	Usually flexible, usually yellow in color (but can be gray), bubbles and smokes when melted	PUR, RIM, RRIM (polyurethane)	R01-01 1/8" dia 3 mm (NOTE: This is a Thermoset plastic and CANNOT be welded with nitrogen/hot air. Must be repaired with airless plastic welder)	(Airless Welder) Digital 44-52 Analog 5
Bumpers, exterior body parts	Semi-flexible	PPE+PS	R08-01 1/8" dia 3 mm	Digital: 48-60 Analog: 6
Pipes, hard plastics, usually not used on vehicles	Hard, usually dull in appearance	PVC	R09-01 1/8" dia 3 mm	Digital: 44-52 Analog: 5
Hard plastic parts	Hard and shiny, may be molded in any color.	PBT	R11-01 1/8" dia 3 mm	Digital: 48-60 Analog: 6
Hard plastic parts	Hard and shiny, may be molded in any color.	PET	R13-01 1/8" dia 3 mm	Digital: 44-52 Analog: 5
Hard plastic parts, taillight housings	Hard and shiny, may be molded in any color.	ASA	R14-01 1/8" dia 3 mm	Digital: 44-52 Analog: 5
Fenders, body panels	Fairly flexible, usually off- white, dull appearance on backside	PA + PPE (GTX)	R15-01 1/8" dia 3 mm R15-04 3/8" x 1/16" 9.5 x 1.6 mm	Digital: 64-72 Analog: 8
Hard plastic parts	Hard and shiny, may be molded in any color	POM	R16-01 1/8" dia 3 mm	Digital: 44-52 Analog: 5
Aircraft interior parts (trade names: Kydex, Boltaron)	Flame resistant material, usually thermoformed sheet	Acrylic/PVC	R17-04 3/8" x 1/16" 9.5 x 1.6 mm	Digital: 44-52 Analog: 5
Hard plastic parts	Rigid exterior parts, Saturn door panels	PC+ABS	R20-01 1/8" dia 3 mm	Digital: 52-64 Analog: 7
Hard plastic parts	Rigid, usually black or dark color	PPX (PPE+PP+GF30)	R22-01 1/8" dia 3 mm	Digital: 60-68 Analog: 8

Note: Suggested temperature settings are for the baseline flow setting about 12 LPM. Increase temperature setting for higher flow; reduce temperature setting for lower flow.