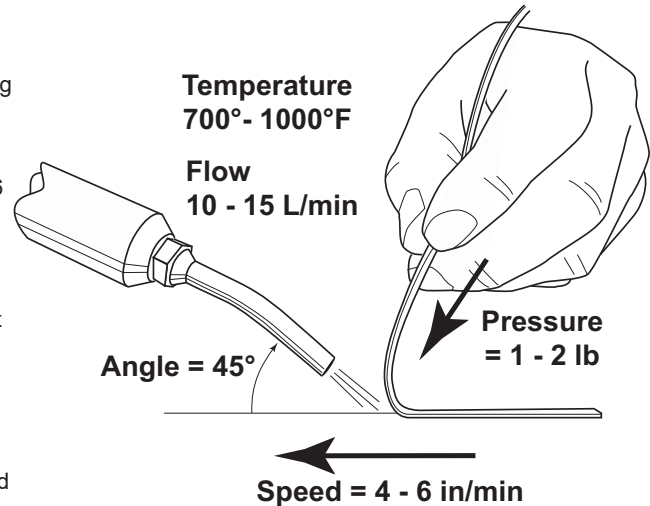


Basic nitrogen welding process

Welding with nitrogen involves the coordination of both hands, one controlling the torch and the other feeding the rod. When you weld, you just want to melt the bottom surface of the rod and the top of the bumper. You don't "puddle" the rod like you do in metal welding. This makes for a stronger repair because it leaves the basic structure of the rod intact. When you're making your weld, make sure you melt both the bumper and the rod at the same time and fuse them together with the downward pressure on the rod. Remember the five important factors for plastic welding: "T.F.A.P.S.", an acronym for Temperature, Flow, Angle, Pressure, and Speed.

- For **temperature**, set the temperature on the nitrogen welder's dial to the proper setting. For example, the PP/TPO setting will generate an air flow of about 700°-800°F.
- The **flow** should be set between 10 to 15 liters per minute depending on the plastic's thickness; less for thinner plastics, more for thicker.
- An **angle** of 45° between the torch and the bumper is optimum. Aim the stream of hot air a little in front of the rod; for thick rod like the 06 profile, focus a little more heat on the rod.
- Put as much downward **pressure** on the rod as possible to help the rod fuse with the bumper. Keep a steady downward pressure on the rod and keep the rod moving slowly. Don't overheat the rod and let it fold over backwards.
- The **speed** of your weld should be about 4 to 6 inches per minute. With thin rod like the 03 profile, it's difficult to go this slow. With thick rod like the 06 profile, it may go even slower. The important thing is to move steadily while keeping proper downward pressure on the rod while making sure the bumper and the bottom surface of the rod are both melted before they come together.



Welding Rod Part Numbering System

R02

Material

01

Rod Profile[§]
03

Package Size/Qty

BK

Color

R01	Urethane
R02	Polypropylene
R03	ABS
R04	Polyethylene
R05	TPO
R06	Nylon
R07	Polycarbonate
R08	PPE+PS
R09	PVC
R10	FiberFlex®
R11	PBT
R12	HDPE
R13	PET
R14	ASA
R15	PA+PPE (GTX)
R16	POM
R17	Acrylic/PVC
R18	PP+GF15
R19	HDPE+GF15
R20	PC+ABS

01		1/8"
02		3/16"
03		7/16" x 1/16"
04		3/8" x 1/16"
05		5/8" x 1/16"
06		1/2" x 3/32"
07		13/64" x 1/16"
08		1/4" x 1/4"

[§] Not all rod profiles are available in all plastic types

01	5 ft.
03	30 ft.
04	1 lb.
05	Small spool
08	Bulk*

* Sold by the pound.
(10 lb min.)

BK	Black
BL	Blue
GN	Green
GY	Gray
NT	Natural*
OR	Orange
RD	Red
TN	Tan
WH	White
YL	Yellow

* No pigment added.