

# Nitrocell Welding System 6080-CG

The world's most advanced and complete plastic welding kit.

The 6080-CG Nitrocell Welding System combines Polyvance's most advanced plastic welding equipment with a state-of-the-art membrane nitrogen generator. The system includes everything needed to become immediately productive making strong and fast plastic repairs on virtually any type of plastic. Using nitrogen gas to weld plastic creates superior strength bonds by eliminating oxidation while the plastic is heated.

The Nitrocell welding system simplifies nitrogen plastic welding by using a continuous flow of nitrogen gas. Eliminating the compressed air source allows the welder to run on nitrogen 100% of the time and eliminates the need to switch back and forth from air to nitrogen. Using only nitrogen also helps the heating element last longer by reducing oxidation. Plus, the Nitrocell generator system allows the strongest welds to be made without the worry of ever running out of nitrogen.

The 6080 E-Z Weld 4.0 nitrogen welder is a technologically advanced plastic welder capable of welding virtually any type of plastic. The flow gauge, precision regulator, and digitally encoded temperature controls allow for precise and consistent welds. A pressure sensor shuts off the power to the heating element if the nitrogen pressure drops below a safe level, reducing the likelihood of accidentally overheating the element.

The Nitrocell Welding System also includes an integrated airless welder for smoothing welds and repairing thermoset polyurethane. With the Nitro Fuzer, it's never been easier to make high-quality plastic welds.

The system is shipped completely assembled and requires only a few minutes to set up before use. The system comes with a hand seamer, aluminum tape, and the widest selection of plastic welding rod available in the industry.



## Features:

- Integral membrane nitrogen generator
- Dual digital encoders for precisely repeatably controlling the nitrogen temperature.
- Analog flow gauge for repeatable performance every time
- Element protection circuitry to help prevent burning out heating elements
- Precision regulator for fine welding gas control
- Compact, easy-to-handle welding torch gets into tight spots with minimal user fatigue
- Melt-proof silicone & fiberglass braided hot air welder hose
- Easy-to-use, intuitive controls
- Integrated airless welder control to allow for repair of thermoset PUR and smoothing of welds
- Easily replaceable heating elements
- Heavy-duty, made-in-USA welding cart with built-in holders for heating elements, tools, and supplies
- Air manifold with auxiliary outlet for attachment of air tools

***Full TWO year Warranty!***



**Customer Support:**  
**Toll Free: 800-633-3047**  
**Phone: 256-638-4103**  
**www.polyvance.com**



## Benefits of Nitrogen Welding:

- **Strength:** Stronger than any 2-part adhesive or hot air weld. Plastics are melted together with no oxidation to form a permanent weld.
- **Speed:** Complete repairs in a fraction of the time of 2-part adhesives. Can weld 4 inches to 6 inches per minute. Then finish, prime, and paint.
- **Versatility:** Do repairs that are not possible with adhesives. Mounting tabs (thick or thin), grille bars, high-stress areas, flexible tabs, and fender liners. Not just for automobile plastics.
- **Cost Savings:** An average 6 inch repair costs less than \$2.00 when welded. With a 2-part adhesive, you pay more than that just for the mixing tip! The total cost of the same size adhesive repair can be over \$40.00!
- **Ease:** Repairs are simple to do. Your technicians already have the skill set, with this they have the tools.
- **Keep Profits in Your Shop:** No need to replace bumpers, headlights, and other plastic parts. Keep the labor dollars in-house.
- **Insurance Relations:** Show you are on the side of cost savings while increasing your profits at the same time. Do a **QUALITY** repair, become an ally of the adjuster, lower cycle times, and help drive additional work to your shop.



### Contents Summary:

6080	E-Z Weld 4.0 Nitrogen Welder
6066	Nitrocell Nitrogen Generator
6056-08	Heavy Duty Welding Cart
6075	Bumper Mate 2 Workstation
6145	Hand Seamer
6146	Bumper Pliers
5003-03	Welding rod organizer boxes with welding rod
6066-TA	Tire adapter
6482	2 in. wide x 30 foot long Roll of Aluminum Tape
6124WB	Stainless Steel Tip Cleaning Brush
6061-1	Welder Cover
6012	200 Watt Ceramic Airless Welding Element
	Welding Tips for the Air and Airless Welders

### Specifications:

Electrical:	120V/60Hz - 750 Watts (Max)
Shipping Weight:	One Skid: 90 lbs. (31.8 Kg)
Shipping Dimensions:	36.5 in. (L) x 18.75 in. (W) x 40.5 in. (H)
Air Requirements:	

Liters per Minute (lpm) of N2 Flow at Welder	Minimum Required Inlet Pressure (PSI)	Minimum Required Inlet Flow (lpm, cu ft/min)
10.0	60.0	47.5 lpm, 1.7 cfm
12.5	70.0	54.5 lpm, 1.9 cfm
15.0	82.0	64.5 lpm, 2.8 cfm
17.5	91.0	71.5 lpm, 2.5 cfm
20.0	105.0	86 lpm, 3.0 cfm

- Maximum inlet air Pressure - 130 psi.
- Increasing the air pressure over the minimum pressure improves the purity of nitrogen. Minimum pressures and flow produce 97% pure nitrogen. 99+% pure nitrogen is possible.
- **CLEAN, DRY, OIL FREE AIR IS MANDATORY!** Irreparable damage to the nitrogen membrane will occur if contaminated air is used and will void the warranty.
- Inspect the filters inside the 6066 Nitrocell daily. Drain, clean and/or replace as needed if contaminants are present.



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