

Learn what makes Freitag's welding capabilities unique — and how these standards guide your growth as a welder.



EVERY DETAIL **ENSURES** CONSISTENCY

At Freitag, welding isn't just about joining metals. Every weld is guided by a **Weld Procedure Specification (WPS)** — a detailed "recipe" that ensures consistency, safety and compliance. Freitag's skilled labor force gains hands-on training with these specifications, welding across a wide range of materials used in energy, defense and industrial projects.



WHAT IS A **WPS?** (SIMPLIFIED)

A **Weld Procedure Specification (WPS)** is a step-by-step plan that details:

- 1** THE TYPE OF METAL AND ITS THICKNESS
- 2** THE FILLER MATERIAL USED
- 3** THE GASES AND PRESSURES APPLIED
- 4** PRE-HEAT AND POST-HEAT REQUIREMENTS
- 5** TEMPERATURE CONTROLS FOR SAFE, STRONG WELDS

WHY **DOES** THIS MATTER?

- Ensures **safety** in critical builds (energy plants, defense equipment).
- Provides **consistency** across welders and projects.
- Allows employees to **practice welding the right way**, from the start.

RECIPE FOR A STRONG WELD

ALUMINUM : MIG WELDING



GAS

100% Argon.
Argon/Helium
mix for thicker
material.



FILLER

ER4043 or ER5356
wire.

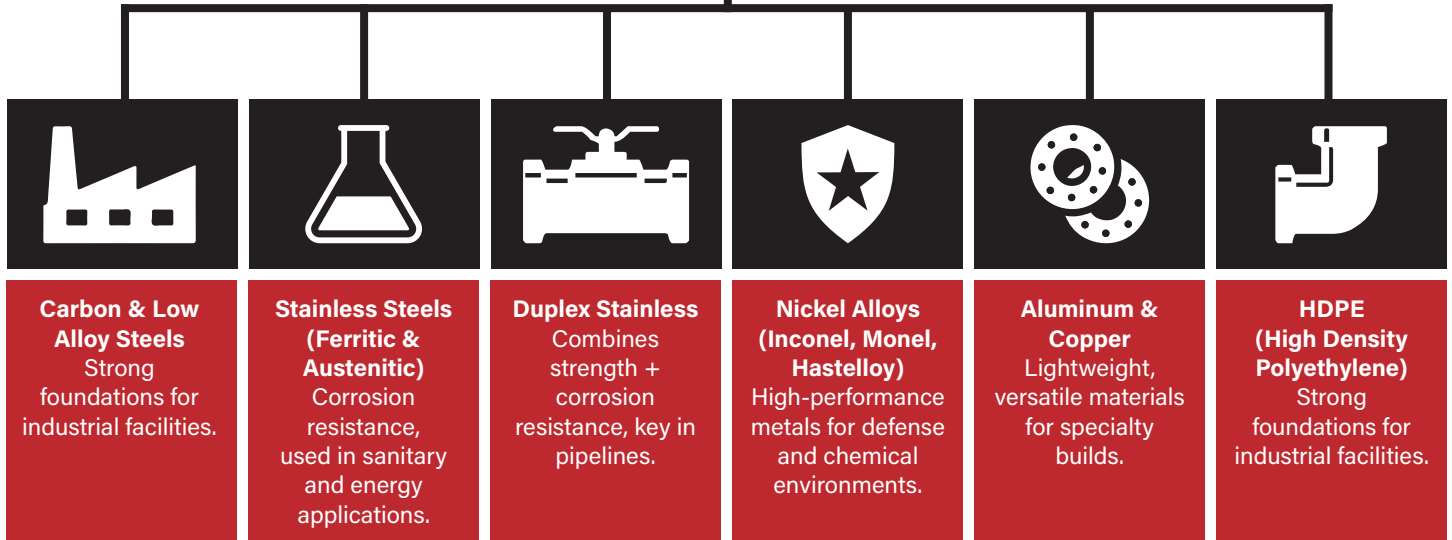


HEAT

~ 1 amp per
0.001" of material
thickness.

METALS YOU'LL WORK WITH

Freitag specializes in welding a wide variety of metals and alloys, each with its own purpose:



HOW APPRENTICES BENEFIT



"Every weld has a purpose. At Freitag, we understand how different alloys power different industries – and how skilled labor contributes to building Indiana's future."

Join the Freitag team to gain hands-on experience with multiple WPS procedures, master advanced alloys, and see firsthand why Freitag is trusted for complex, high-stakes projects across Indiana and beyond.



QUALITY MECHANICAL CONSTRUCTORS SINCE 1883

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