

WHAT'S THE BEST PROCESS FOR YOUR REQUIREMENTS?

This chart is to assist selection of the process that matches the metals you want to cut or weld.

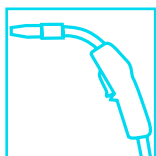
METAL TYPE	MMAW	GMAW	FCAW	SAW	AC-GTAW	DC-GTAW	Plasma Cutting
Aluminium		●			●		●
Magnesium Alloys					●		●
Titanium						●	●
Copper, Brass	●	●				●	●
Steel	●	●	●	●		●	●
Stainless Steel	●	●	●	●		●	●
Cast Iron	●	●	●			●	●
All Metal							●
Skill Level	Moderate	Low	Moderate	Moderate	High	High	Low

Key: ● Recommended

INDIVIDUAL PROCESS ADVANTAGES AND BENEFITS:

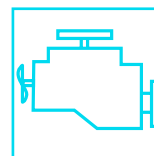
Review the panel below and match the graphic icon with the welding or cutting process suitable for your required application. There is no single process suitable for all applications. Many factors need to be taken into account. This information serves as a basic reference where one can consider the advantages of one process over another.

WELDING AND CUTTING



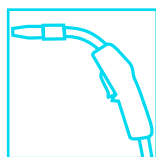
GMAW (MIG)

- ▲ Simple welding process to learn
- ▲ Fast welding speeds possible
- ▲ Cleaner welds with no slag to clean
- ▲ Same equipment is used for Flux cored welding
- ▲ All positional capabilities
- ▲ Provides greater control on thinner metals



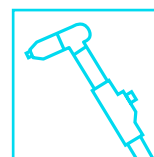
ENGINE DRIVES

- ▲ For locations where mains power is not available
- ▲ Petrol or diesel welding power supply or auxiliary power 415 Volt or 240 Volts



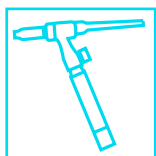
FCAW (Flux Cored Arc Welding)

- ▲ Works as well as MMAW on rusty or mill scale surface
- ▲ Out-of-position welding capabilities
- ▲ Deep penetration for welding thick sections
- ▲ Improved metal deposition rate
- ▲ Gas or gasless capabilities



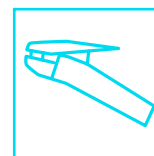
PAC (Plasma Arc Cutting and Gouging)

- ▲ Used to cut any metal
- ▲ Small and precise cut
- ▲ Small heat-affected zone which minimises warping or paint damage



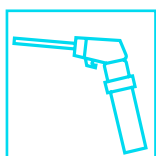
GTAW (TIG)

- ▲ Provides highest quality and most precise welds
- ▲ Highly aesthetic weld beads
- ▲ Allows adjustment of heat input while welding via a remote control device
- ▲ Spatter free welds
- ▲ All positional capabilities



CAG (CARBON ARC GOUGING)

- ▲ Used with high output DC welding plants-generally 500 amps plus
- ▲ Used primarily for removing cracked or defective weld metals in carbon steel



MMAW (Stick)

- ▲ All positional capabilities
- ▲ Good choice for site welding
- ▲ Low cost equipment
- ▲ Suitable for windy, outdoor conditions
- ▲ Suitable for welding on rusty or mill scale surface

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