



# Oil & Gas

**OUR CAPABILITIES**



Trusted by the best



welding.com.au  
1300 300 884



# At WIA we're Trusted by the Best



## WE PARTNER WITH THE WORLD'S LEADING WELDING BRANDS, INCLUDING MILLER FOR EQUIPMENT & HOBART FOR FILLER METALS.

As part of the ITW (Illinois Tool Works) global manufacturing group, we are driven by innovation, customer needs and technical expertise. We have been supporting and advising Australian industry for over 50 years.

## OUR CREDENTIALS ARE GLOBAL.

We work with our global partners and offer a track record of success stories right across the globe, including some of the most challenging regions for onshore pipelines, including Canada, Russia and China.

We have a strong global team behind us to offer accredited advice and packaged solutions.

Our partnership with the Miller and Hobart brands allow us to offer a high efficiency welding and heating solution for the pipeline industry in high strength pipe welding.

Talk to us for advice on the right welding, heating systems and welding consumables.



# We know the Pipeline Industry



## **WE UNDERSTAND THE CHALLENGES FACED BY THE OIL & GAS INDUSTRY. WHILE HIGHER STRENGTH PIPE OFFERS BENEFITS, IT ALSO CREATES NEW CHALLENGES.**

Large diameter high strength pipe is now widely accepted by Australia's natural gas industry due to significant benefits when compared to low strength pipelines. Benefits include lower total steel mass, lower transportation costs and lower fabrication costs.

Filler metals must provide equal or greater strength and also offer lower hydrogen content from the deposited weld metal. Conventional Manual Metal Arc Welding (MMAW) is prone to hydrogen induced cold cracking (HICC) due to the high weld metal hydrogen content, typically exceeding 16ml/100g. HICC leads to costly repairs and increased fabrication costs.

Higher productivity and increased efficiencies are at the top of the list for most industry segments. For the pipeline industry, it is a particular concern given overhead costs are significantly higher than those for general fabrication.

## **OUR SOLUTIONS.**

We can offer an improved RMD™ (Regulated Metal Deposition) process to address the hydrogen cracking issue, and also significantly increase the deposition efficiency over the MMAW process. This also results in less training time required for inexperienced operators.



# Our Products

**OUR RANGE INCLUDES  
SPECIALIST EQUIPMENT  
& HIGH PERFORMING  
FILLER METALS.**

Designed for the needs of the pipeline and process piping industry, our products have been developed in consultation with the industry to deliver real benefits and efficiencies.



# Equipment



## PRO HEAT 35

### INDUCTION HEATING SYSTEM

Pre and post weld heat treatment is critical to eliminate hydrogen cracking in high strength steels. Whether on the mainline, on tie-ins or at compressor/pumping stations, induction heating provides superior pre-heating and stress relief. Induction heating is more effective, faster, versatile and extremely safe compared to other heating methods.

- › Provides faster time-to-temperature.
- › Drives and keeps moisture out of the weld.
- › Heats uniformly.
- › Improves safety.



## BIG BLUE 700X DUO PRO

### MULTI-PROCESS DUAL OPERATOR DIESEL ENGINE DRIVEN WELDER WITH SINGLE & THREE AUXILIARY POWER

The Miller Big Blue 700X Duo Pro has one dependable engine with two premium pipe-quality arcs, allowing operators to work independently of each other with no arc interaction.

Full multi-process capability provides the best Stick, MIG, Flux-Cored and TIG performances available. Multi-operator welding has never been easier, simpler or more versatile.



## PIPEWORX WELDING SYSTEM

### MULTI-PROCESS DC WELDING SYSTEM

The PipeWorx Welding System is becoming the industry standard and the contractor's choice for pipe welding fabrication.

With a streamlined set-up it allows one touch welding, quick process changeover, and advanced RMD™ and Pro Pulse MIG processes. The results are faster training and project turnaround times.

# Filler Metals



## METAL-CORED WIRE

**HOBART'S INNOVATIVE RMD™ METAL-CORED WIRE ROOT PASS PROCESS OFFERS A NUMBER OF BENEFITS:**

- > Consistent side wall fusion.
- > Less weld spatter.
- > Tolerant to hi-lo fit-up conditions.
- > More tolerant of tip-to-work distance.
- > Less welder training time.
- > Thicker root passes can eliminate hot pass, improving productivity.
- > Eliminate backing (purge) gas on some stainless steel applications.
- > Wider selection of cored wire range compared to solid wire.

ROOT (RMD)					
PIPE GRADE	PRODUCTS	AWS CLASSIFICATION	TENSILE	YIELD	CVN
X70	Metalloy 76	E70C-6M H4	558MPa	476MPa	54J@-40 °C
	Metalloy 71SG	E70C-6M H4	579MPa	510MPa	46J@-60 °C
X80	Metalloy 80N1	E80C-Ni1	565MPa	510MPa	54J@-45 °C
X100	Metalloy 110	E110C-K4	814MPa	725MPa	58J@-50 °C

## FLUX-CORED WIRE

**HOBART'S EFFICIENT FLUX-CORED WIRE RANGE PROVIDES THE OPTION OF GAS-SHIELDED AND SELF-SHIELDED WELDING PROCESSES. EACH PROCESS OFFERS DISTINCTIVE BENEFIT TO PIPELINE INDUSTRY.**

### GAS-SHIELDED

Gas-Shielded cored wires are suited for workshop and covered field welding conditions, providing the potential integration with external orbital welding systems.

PIPE GRADE	PRODUCTS	AWS CLASSIFICATION	TENSILE	YIELD	CVN
X70	FabCo 812-Ni1M	E81T1 Ni1 MJ H4	581MPa	532MPa	75J@-60 °C 53J@-60 °C (SR 8hr 621 °C)
X80	Tri-Mark TM-101	E101T1-GM	758MPa	703MPa	48J@-50 °C
X100	FabCo Xtreme 120	E121T5-GC H4	866MPa	763MPa	102J@-60 °C

### SELF-SHIELDED

Hobart's Self-Shielded range offers the benefit of withstanding harsh and windy conditions where no welding enclosures are applied, and eliminates the need of gas cylinder transfer on site.

Self-Shielded Flux-Cored wires are deemed to be the best alternative to the MMAW process, which requires less welding operator training, and offers higher productivity and deposition efficiency. The other distinctive advantage compared to MMAW is reduced deposit metal hydrogen content.

PIPE GRADE	PRODUCTS	AWS CLASSIFICATION	TENSILE	YIELD	CVN
X70	Fabshield 81N1+	E71T8-Ni1 J H8	495MPa	414MPa	280J@-40 °C
X80	Fabshield X80	E81T8-Ni2J H8	649MPa	578MPa	134J@-40 °C

## Training Partnership

WIA currently operate 3 fully equipped facilities for the purpose of providing operator based training around the Miller and Hobart product range with locations in Adelaide, Brisbane and Newcastle.

## Contact Us

For more information on WIA, Miller and Hobart products, contact one of our technical specialists on **1300 300 884**.



Trusted by the best



welding.com.au  
1300 300 884