INVEST IN THE FUTURE

Synergies Mig-Mag

The expertise of GYS, available to welders everywhere.

Cosmos **Pulse**

Galaxy **Pulse**

Neomig

Kronos

Synergic Mode (Easy)

Designed for instant access

The Easy synergic mode has been designed to give you a highly intuitive, smooth and effective 2-step experience.

1 From the main menu, all you need to do is set three essential parameters:

- material/gas combination,
- wire diameter,
- welding mode.

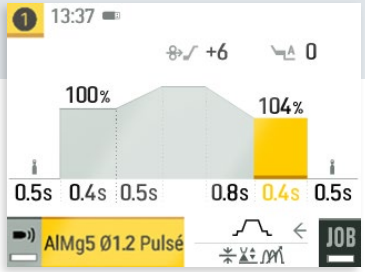
2 Then fine-tune the settings by adjusting:

- the thickness of the material,
- the arc length,
- the inductance.

The power source then automatically adjusts and manages hundreds of variables in the background to ensure that your arc is always stable, and your weld is always precise.

Simplicity, efficiency and impeccable results with every weld - that is what Easy mode is designed to achieve.

HMI 3.5″



Need more fine tuning?

The Expert synergic mode gives total control over your welding parameters. It allows you to manually adjust all the stages of the welding cycle for complex projects or specific materials.

Welding mode available on Kronos / Neomig / Galaxy / Cosmos

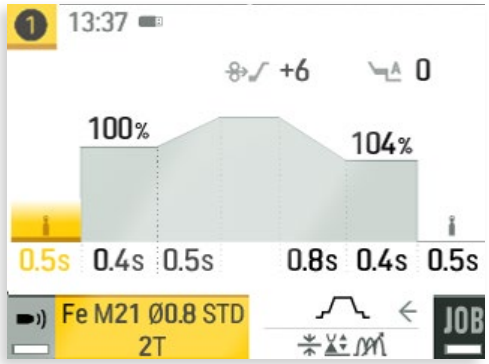
Standard

A universal mode for simple and quick welding applications.

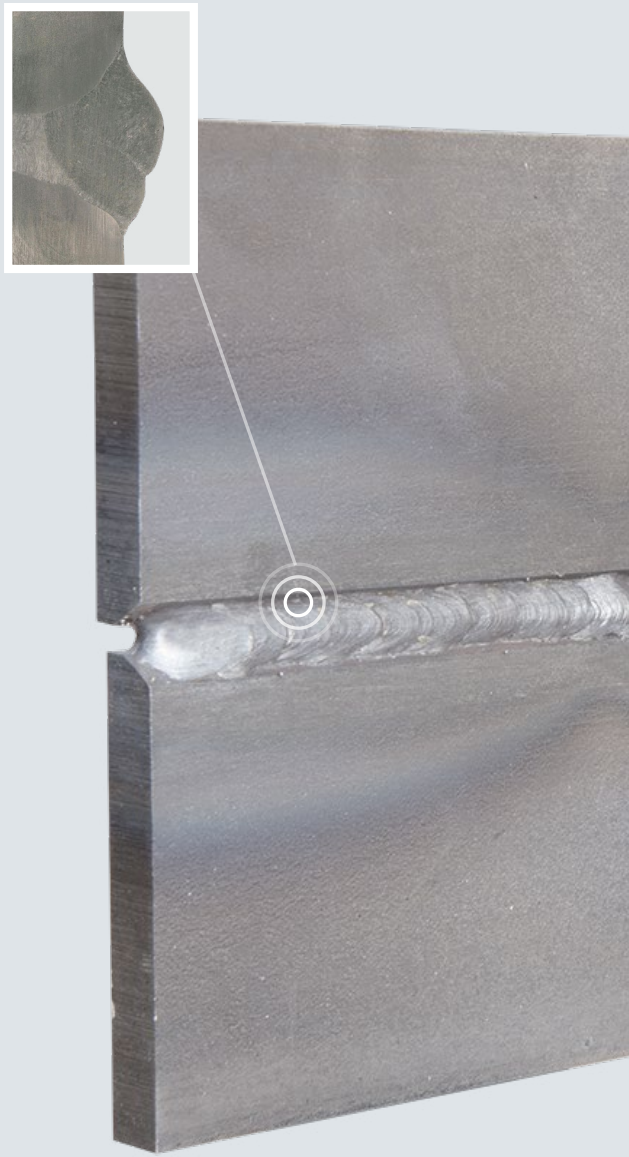
This welding mode uses a fully controlled and adaptive short-circuit, providing both ease of use and excellent arc stability.

- Excellent weld quality in all positions
- Ideal for root passes on carbon steels and stainless steels
- Low spatter rate
- Effective use: 0.8 mm to 30 mm +

Settings: Thickness, Arc Length and Inductance



Settings: Pre-gas, Wire creep, Hot start, Upslope, Downslope, Crater fill, Burn back, Post-gas



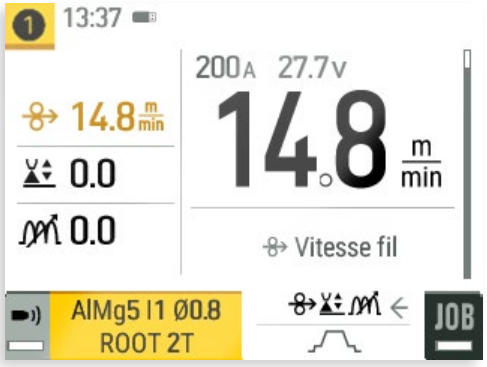
Welding mode available on Cosmos

Root

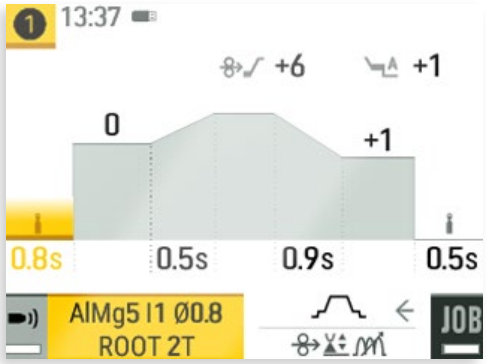
Root chamfer pass – The best choice for difficult root passes on steel.

Designed specifically for deep pass applications, this mode offers exceptional gap-filling performance, even when there is significant spacing between joints. It delivers precise penetration control during welding, ensuring uniform fusion, a wide bead, and a flat root.

- Simplifies root passes, without support, in all positions.
- Ideal for pipeline applications
- Effective use: 0.5 mm to 5 mm



Settings: Thickness, Arc Length and Inductance



Settings: Pre-gas, Wire creep, Hot start, Upslope, Downslope, Crater fill, Burn back, Post-gas

Welding mode available on Galaxy / Cosmos

Pulse

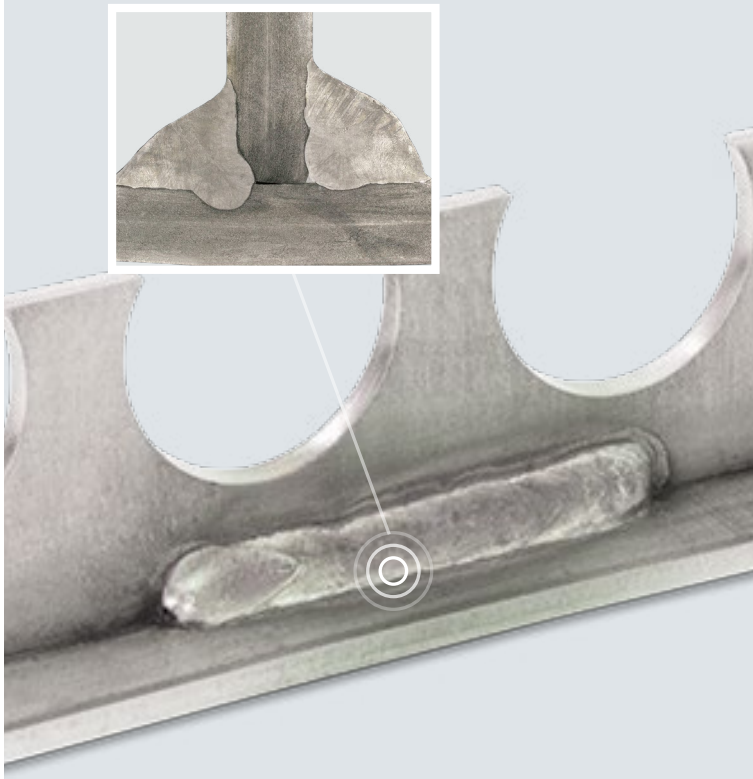
Aesthetic, spatter-free weld bead, ideal for aluminium or stainless steel.

This mode avoids the need to use a globular arc, which is difficult to control and produces a lot of spatter. With total control over the energy input during the weld, this mode delivers precise, high-quality results with minimal spatter.

- Quality joints with minimal finishing requirements
- Reduced and more targeted heat input into the workpiece
- Less distortion / deformation
- No final weld crater, and no cold weld
- Excellent arc stability
- Effective use: 0.8 mm to 30 mm +

Settings: Thickness, Arc Length and Inductance

Settings: Pre-gas, Wire creep, Hot start, Upslope, Downslope, Crater fill, Burn back, Post-gas



Welding option available on Galaxy / Cosmos

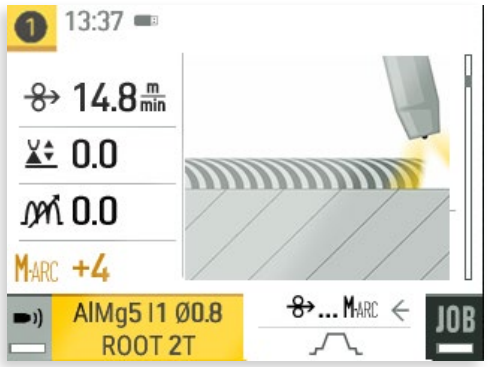
ModulArc

TIG appearance, MIG productivity

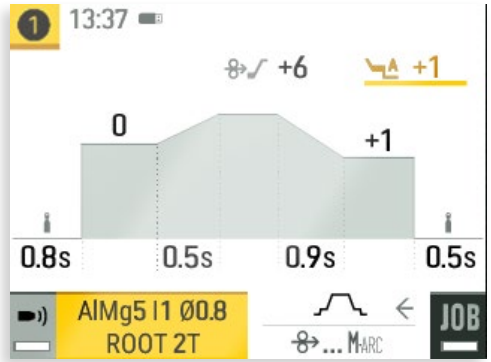
This is the ideal welding option for professional users who need perfect welding quality in all situations. With intuitive synergistic adjustment, you simply need to adjust the pulse frequency to prioritise for either maximum efficiency, or easier welding in-position.

- Better control of the weld pool even in difficult positions (vertical or overhead).
- Ideal for exposed / visible, high-quality assemblies.
- Optimised pulsed arc, for welds with reduced risk of defects.
- Precise thermal management limits warping and discolouration, even on thin materials.
- Effective use: 0.8 mm to 30 mm +

The ModulArc option is available in Standard, Pulse, and Root modes.



Settings: Thickness, Arc Length, Inductance, and Modul Arc.



Settings: Pre-gas, Wire creep, Hot start, Upslope, Downslope, Crater fill, Burn back, Post-gas

Welding mode available on Kronos / Neomig / Galaxy / Cosmos

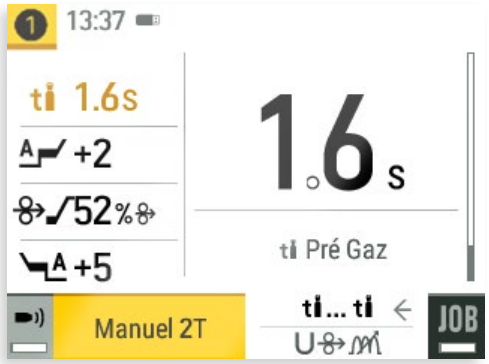
Manual

Some applications require a specifically adapted strategy.

This welding mode (non-synergic) offers complete control over the settings. This is the ideal solution for experienced users who need to control each parameter independently.

- Suitable for most welding applications
- Manual adjustment of wire voltage/speed and inductance if necessary
- Ideal for welding carbon steel
- Suitable for experienced welders and welding within DMOS guidelines
- Effective use: 1 mm to 30 mm

Settings: Voltage, Wire Speed and Inductance



Settings: Pre-gas, I Start, Wire creep, Burn Back, Post-gas

Synergic programmes

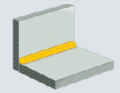
Cosmos

			Standard				Pulse				Root		
Welding mode													
Wire diameter			0.8	1.0	1.2	1.6	0.8	1.0	1.2	1.6	0.8	1.0	1.2
Welding position			PB				PB				PB		
Synergy code			708	710	712	716	508	510	512	516			
Steel													
101	Fe Ar Co2 15-20%	M21	■	■	■		■	■	■	■	■	■	■
102	Fe Ar Co2 8-12%	M20	■	■	■		■	■	■		■	■	■
103	Fe Co2 100%	C1	■	■	■	■					■	■	■
104	FCW M Ar Co2 15-20%	M21			■	■			■	■			
115	FCW Co2 100%	C1			■	■							
113	Fe No Gas	O			■	■							
Aluminum													
216	Al Mg Ar 100%	I1	■	■	■	■	■	■	■	■			
217	Al Si Ar 100%	I1		■	■	■		■	■	■			
Stainless steel													
301	Cr Ni 308 Ar 2%Co2	M12	■	■	■	■	■	■	■	■			
302	Cr Ni 316 Ar 2%Co2	M12	■	■	■	■	■	■	■	■			
Brazing													
701	Cu Si Ar 100%	I1	■	■			■	■					

Legend

■ Synergy available on unit

PB Fillet position



Synergic programmes

Galaxy

Galaxy 220 / 250 / 320

Galaxy 400

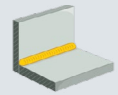
			Galaxy 220 / 250 / 320							Galaxy 400						
Welding mode			Standard				Pulse			Standard				Pulse		
Wire diameter			0.8	1.0	1.2	1.6*	0.8	1.0	1.2	0.8	1.0	1.2	1.6	0.8	1.0	1.2	1.6
Welding position			PB				PB			PB				PB			
Synergy code			708	710	712	716	508	510	512	708	710	712	716	508	510	512	516
Steel																	
101	Fe Ar Co2 15-20%	M21	■	■	■		■	■		■	■	■		■	■	■	
102	Fe Ar Co2 8-12%	M20	■	■	■		■	■		■	■	■		■	■	■	
103	Fe Co2 100%	C1	■	■	■					■	■	■					
104	FCW M Ar Co2 15-20%	M21			■	■						■	■			■	■
115	FCW Co2 100%	C1										■	■				
113	Fe No Gas	O			■	■						■	■				
Aluminum																	
216	Al Mg Ar 100%	I1	■	■	■		■	■	■	■	■	■		■	■	■	
217	Al Si Ar 100%	I1		■	■			■	■		■	■			■	■	
Stainless steel																	
301	Cr Ni 308 Ar 2%Co2	M12	■	■	■		■	■		■	■	■		■	■	■	
302	Cr Ni 316 Ar 2%Co2	M12	■	■	■		■	■		■	■	■		■	■	■	
Brazing																	
701	Cu Si Ar 100%	I1	■	■			■	■		■	■			■	■		

Legend

■ Synergy available on unit

* Not available for Galaxy 220/250

PB Fillet position



Synergic programmes

Neomig

			Welding mode	Standard			
			Wire diameter	0.8	1.0	1.2	1.6
			Welding position	PB			
			Synergy code	708	710	712	716
Steel							
101	Fe Ar Co2 15-20%	M21		■	■	■	
102	Fe Ar Co2 8-12%	M20		■	■	■	
103	Fe Co2 100%	C1		■	■	■	
104	FCW M Ar Co2 15-20%	M21				■	■
115	FCW Co2 100%	C1					
113	Fe No Gas	O				■	■
Aluminum							
216	Al Mg Ar 100%	I1		■	■	■	
217	Al Si Ar 100%	I1			■	■	
Stainless steel							
301	Cr Ni 308 Ar 2%Co2	M12		■	■	■	
302	Cr Ni 316 Ar 2%Co2	M12		■	■	■	
Brazing							
701	Cu Si Ar 100%	I1		■	■		

Synergic programmes

Kronos

			Welding mode	Standard			
			Wire diameter	0.8	1.0	1.2	1.6*
			Welding position	PB			
			Synergy code	708	710	712	716
Steel							
101	Fe Ar Co2 15-20%	M21		■	■	■	■
102	Fe Ar Co2 8-12%	M20		■	■	■	■
103	Fe Co2 100%	C1		■	■	■	
104	FCW M Ar Co2 15-20%	M21					
115	FCW Co2 100%	C1					
113	Fe No Gas	O					
Aluminum							
216	Al Mg Ar 100%	I1		■	■	■	
217	Al Si Ar 100%	I1			■	■	
Stainless steel							
301	Cr Ni 308 Ar 2%Co2	M12		■	■	■	
302	Cr Ni 316 Ar 2%Co2	M12		■	■	■	
Brazing							
701	Cu Si Ar 100%	I1		■	■		

Legend

■ Synergy available on unit

* Not available for Kronos 250/320

PB Fillet position