

# ***CITOMIG XP***

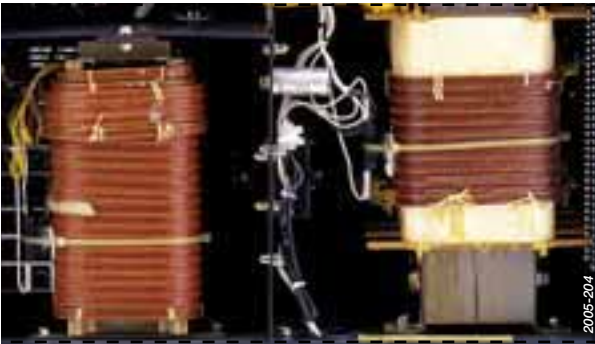
A full range of MIG-MAG equipment featuring switch-based intuitive adjustment.



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# CITOMIG XP, a long history between the OERLIKON b



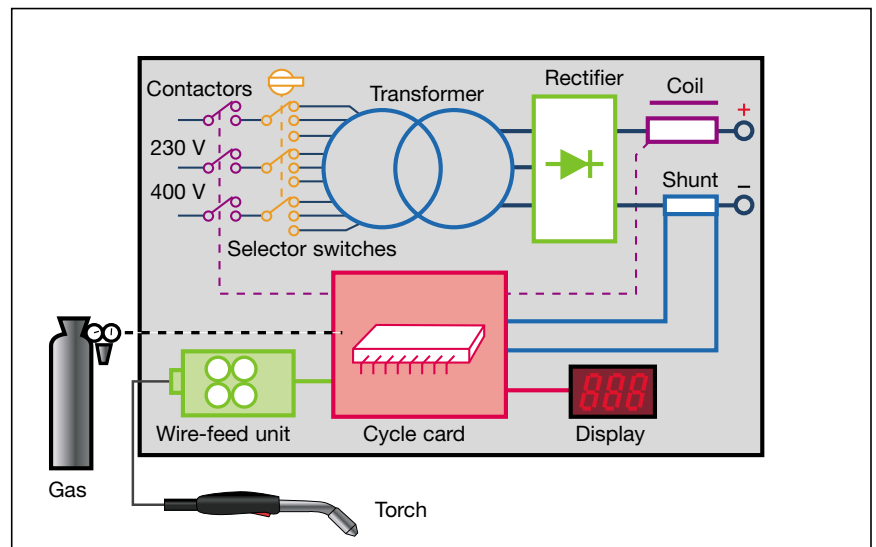
All our XP range OERLIKON generators have been designed with robust, well-calibrated components meeting the most demanding requirements.

## OERLIKON solution

The ideal industrial solution employing top technology in each component of the set.

## Optimised power source

Simple and reliable circuitry to guarantee optimal welding, quality with minimum maintenance, ideal for large production runs.



## Technological development

OERLIKON has equipped CITOMIG sets with digital wire speed regulation, maintaining a constant value in the wire-feed supply, and especially in the torch, regardless of variations in resistance. Combining excellent wire feed regularity with optimised calibration of the electromagnetic parts, CITOMIG sets produce a perfectly stable arc for top-quality weld beads in terms of defects and surface appearance.

## Intuitive adjustment

After entering the consumable parameters (wire grade / diameter and gas), the operator selects the thickness to be welded and the system immediately provides optimised adjustment values for the welding operation.





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With its CITOMIG range OERLIKON offers welding sets employing highly developed and carefully applied technology. This robust and reliable range will always meet the challenge, even under heavy duty conditions.

## CITOMIG

CITOMIG sets available in air or water, compact or separate versions, meet every need and offer the following advantages:

### Product features:

- Three-phase, dual-voltage power supply allowing connection to any type of three-phase power supply.
- Digital parameter display (plate thickness / current / wire speed).
- 4-rollers feed with speed regulation system providing constant wire feed.
- "Assisted adjustment" mode taking into account the thickness to be welded.
- "Spatter reduction" system based on coil saturation after the striking phase.
- 2T/4T/spot/intermittent welding modes for an optimised operating procedure.
- Ventilation automatically operates when required.
- 2 coil positions.
- Plug-in harnesses on generator side.
- Fully sheathed and shielded harness for greater robustness.
- Ultra-compact wire-feed unit designed for restricted access.
- Wire-feed unit delivered with the possibility of wire speed adjustment and equipped with gas purge.



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# Top performance under all conditions



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Every company producing industrial goods aims to combine high productivity with quality. CITOMIG sets, with their special construction, measures adapted to all the components of the set, are a perfect response to this requirement. This requirement arises in sectors such as infrastructure, railway and road construction and boiler making.

## Infrastructure

Infrastructure represent an important sector. OERLIKON covers a wide range of infrastructure applications and proposes global solutions including manual and automatic equipments, consumables and services.

Through its worldwide network OERLIKON provides the after sales service and welding expertise required to produce highly technical structures.

## Boiler making

Perfectly targeted for all steel boiler making activities, CITOMIG sets provide the quality and productivity required for highly competitive welding.

The various accessories and options available for this range offer the ideal response to all requirements in this sector.

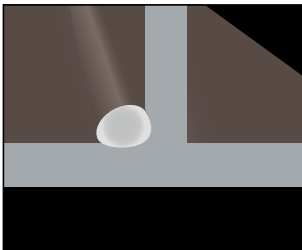


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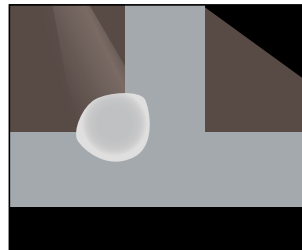


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## MIG-MAG process performance levels



**Short-Arc MIG, thickness < 3.0 mm.**



**Spray-Arc MIG, thickness < 10 mm.**

This type of machine has been carefully developed to offer excellent welding quality with no deterioration over time, and provides unrivalled durability under the toughest conditions. Another essential advantage at the process level is that the instantaneous current is never limited so that the power source delivers exactly the current required by the process. This is a considerable advantage when welding aluminium of medium and high thickness.

### Rail transport

Railway applications also require exemplary welding quality to withstand high mechanical strain accentuated by permanent vibration. This concerns both manufacture and workshop or on-site repairs.

CITOMIG sets, providing high arc stiffness and constant welding parameters, meet this requirement perfectly.



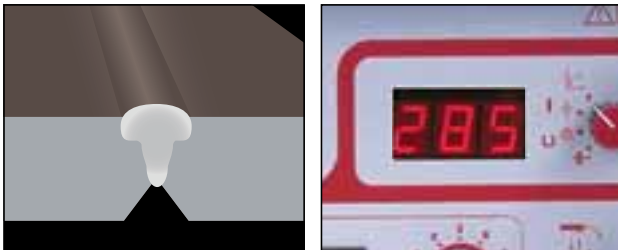
### Road transport

This sector has a lower potential for automation and therefore requires the use of welding sets with an optimal quality/price ratio.

High quality welding, long service life, low maintenance: CITOMIG sets provide a very favourable response to these criteria which optimise the cost of the welding operation.



### MIG-MAG process performance levels



**Joint filling with cored wire**  
**Spray-Arc MIG, thickness < 25 mm.**



**Penetration pass**  
**Short-Arc MIG, thickness < 25 mm.**

# Simplicity of assisted adjustment according to plate th



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All the essential elements for these applications are included in the CITOMIG range.

- Compact and separate wheel-mounted sets and cylinder holders
- Lightweight and robust wire-feed unit with trolley and pivot
- Assisted adjustment system
- Digital display of voltage, wire speed and current
- Complete cycle



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## Items on the front panel

- 1** Display unit
- 2** Wire feed / gas purge
- 3** Wire feed unit socket
- 4** Earth socket
- 5** Display selector switch
- 6** Mode selector switch
- 7** Wire speed / time adjustment
- 8** Voltage switches
- 9** Coil positions

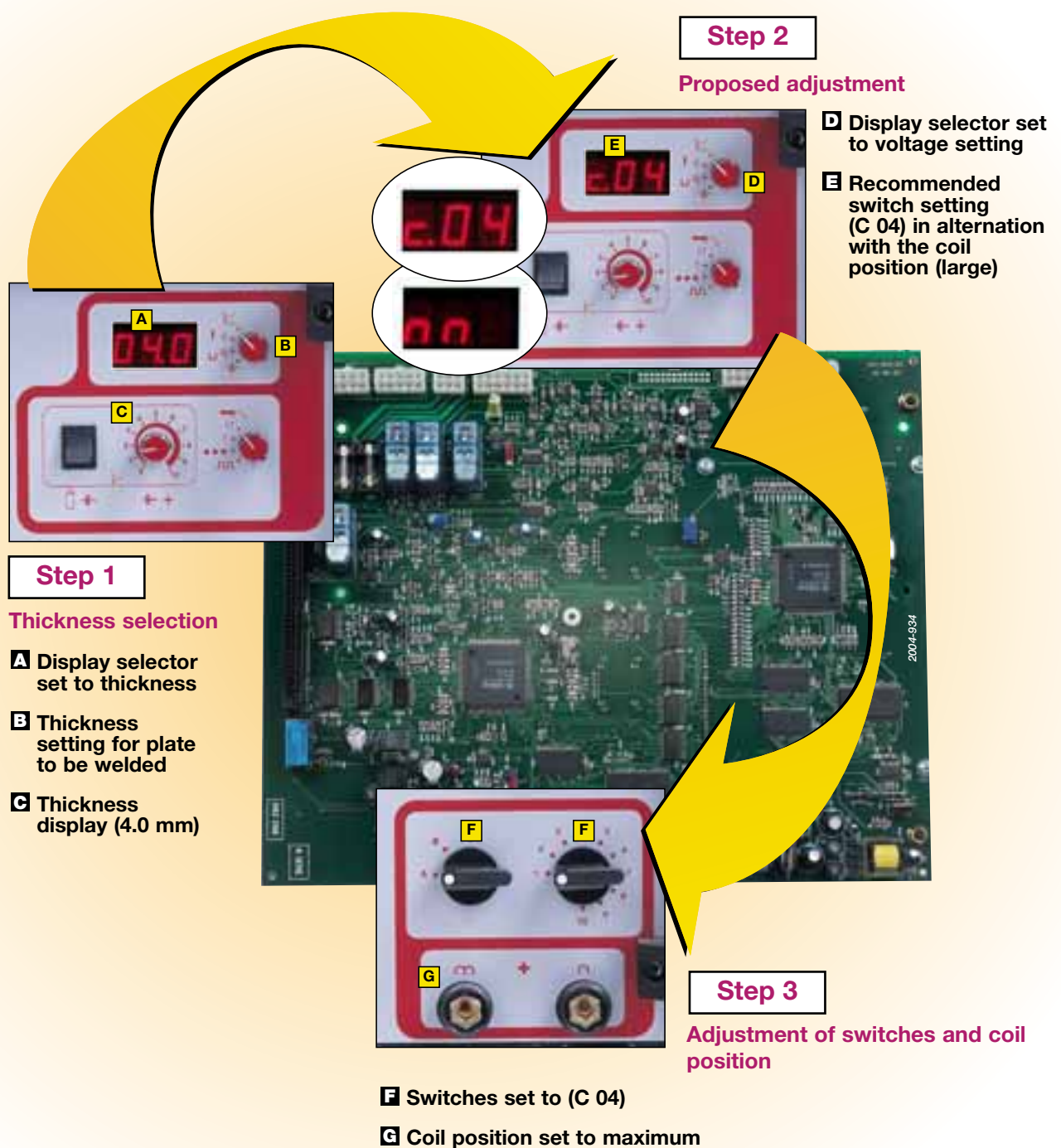
## Items on the CITOMIG generator

- A** Manoeuvring handle
- B** Front control panel
- C** Lifting eyes
- D** Power source
- E** Portable wire-feed unit on trolley or pivot arm
- F** Torch
- G** Compartment for cooling unit
- H** Swivel rollers



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CITOMIG 400 XP, the first switch-based intuitive-adjustment MIG-MAG set available on the market, is designed to allow easy and reliable access to the best adjustment based on the thickness of the weld piece. Easy use with assisted adjustment according to the thickness of the plate and selection of the ideal fusion mode for the type of material to be welded - Steel - Stainless steel - Aluminium.





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Excellent striking and fusion quality. Initial welding mode: spot. Digital display unit. 2T / 4T control. Possibility of adjusting the cycle parameters - Pre-gas - Post-gas - Wire speed at striking and dynamism of striking. Regulated wire feed speed. Possibility of polarity inversion. Gas purge and wire feed. Cylinder holder. Large diameter wheels built into the bodywork.

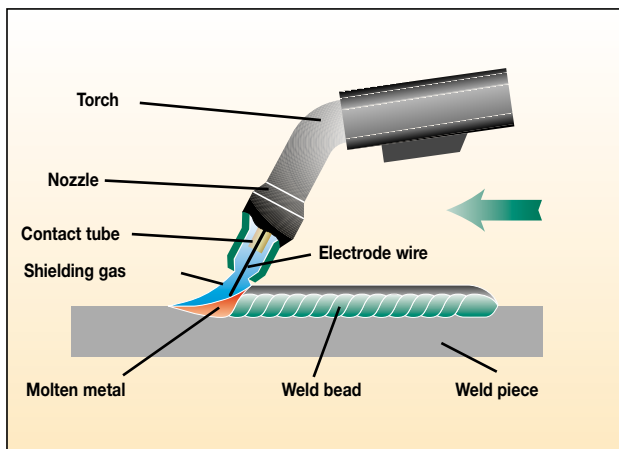
## A complete welding cycle

To guarantee welding quality the power source must be equipped with all the adjustments required for a complete weld cycle.

CITOMIG sets feature these elements, even beyond current requirements.

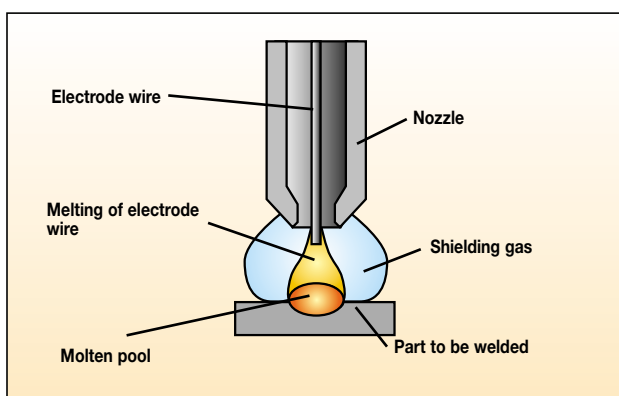
The diagram below shows all the possibilities offered by the OERLIKON range.

## Metal transfer

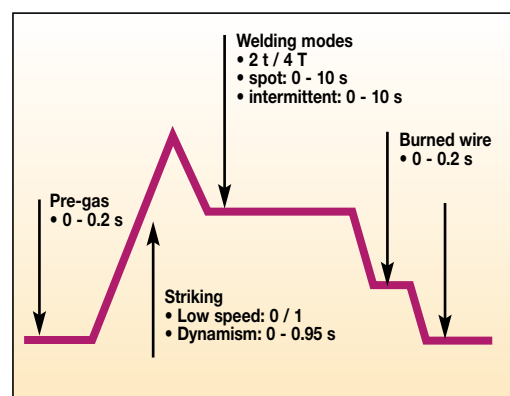


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## Schematic diagram



## Welding cycle



# Impressive technical characteristics



Technical characteristics:		CITOMIG 300 XP	CITOMIG 400 XP	CITOMIG 500 XP
<b>Primary power supply</b>		220 V - 400 V three-phase		
<b>Maximum current drain</b>		27 A - 16 A	47 A - 27 A	63.3 A - 36.6 A
<b>Open circuit voltage</b>		16.5 V - 35.8 V	16.6 V - 45.8 V	15.8 V - 50.4 V
<b>Duty cycle at 40 °C</b>	50 %	270 A	380 A (40 %)	480 A
	60 %	240 A	320 A	410 A
	100 %	200 A	280 A	350 A
<b>Number of steps</b>		12	30	30
<b>Number of rollers</b>		4		
<b>Dimensions</b>		780 x 390 x 821 mm	925 x 580 x 1 060 mm	925 x 580 x 1 060 mm
<b>Weight</b>		98 kg	161 kg	201 kg
<b>Standards</b>		EN 60974-1; EN 60974-10		
<b>Protection index</b>		IP 23 S		
<b>Insulation class</b>		H		
<b>Basic set</b>				
<b>Compact air</b>		W 000 260 959	W 000 260 961	-
<b>Compact water</b>		-	W 000 260 962	-
<b>Separate air</b>		W 000 260 960	W 000 260 964	W 000 260 965
<b>Separate water</b>		-	W 000 260 963	W 000 260 966
<b>Package - ready-to-use set</b>				
<b>Compact air</b>		W 000 261 771	W 000 261 774	-
<b>Compact water</b>		-	W 000 261 773	-
<b>Separate air</b>		W 000 261 772	W 000 261 775	-
<b>Separate water</b>		-	W 000 261 776	W 000 261 777
<b>Options and additions</b>				
<b>Wire-feed units with trolley</b>		<b>DV 4004 XP</b>		
<b>Harness length</b>	<b>Air</b>	5 m	W 000 260 999	
		10 m	W 000 261 000	
	<b>Water</b>	5 m	W 000 261 001	
		10 m	W 000 261 002	
<b>Number of rollers</b>		4		
<b>Slinging arm</b>		W 000 305 061		
<b>Pivoting wire-feed unit support</b>		W 000 055 048		

Torch		CITORCH M 341	CITORCH M 341 W	CITORCH M 441	CITORCH M 441 W
<b>Air</b>	3 m	W 000 345 091	-	W 000 345 097	-
	4 m	W 000 345 092	-	W 000 345 098	-
	5 m	W 000 345 093	-	W 000 345 099	-
<b>Water</b>	3 m	-	W 000 345 094	-	W 000 345 100
	4 m	-	W 000 345 095	-	W 000 345 101
	5 m	-	W 000 345 096	-	W 000 345 102



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