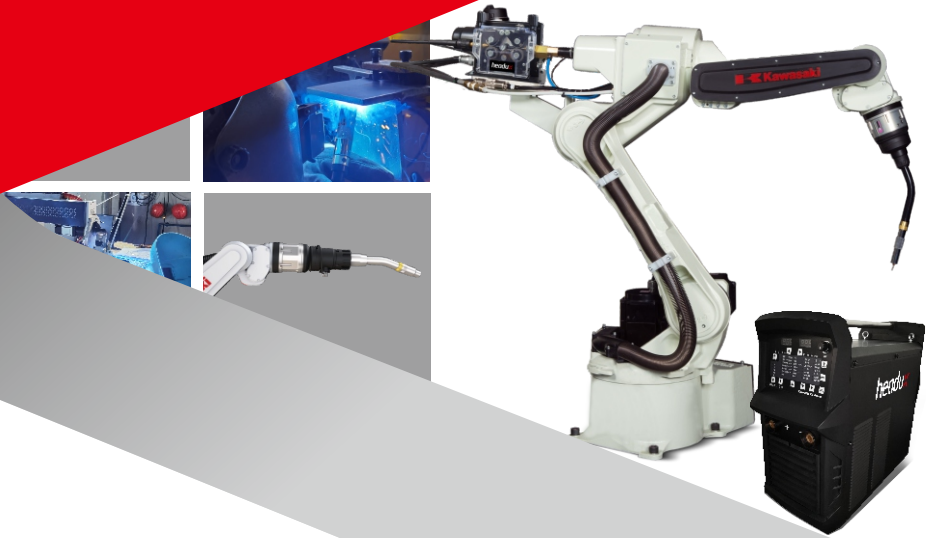


2024

PRODUCT CATALOGUE



**Robotic Welding
Equipments**

INSPIRED BY POWER



About Headux

1

TitanMig 350/500R

3

TitanMig 350RL

5

TitanMig 350RS

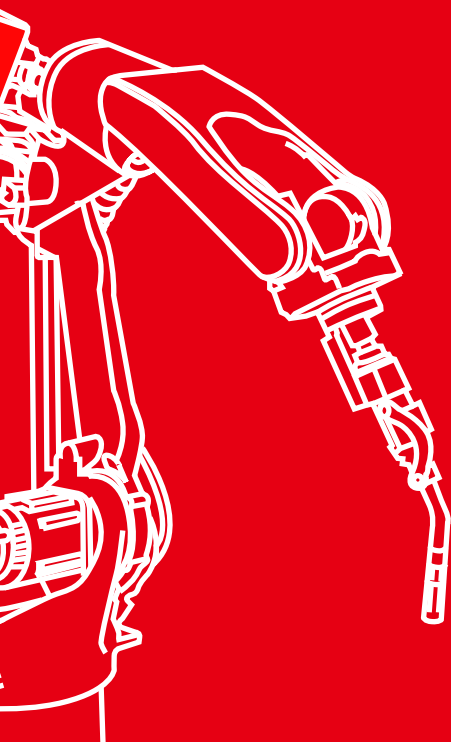
7

TitanMig X4/X5R Pulse

9

X-Super MIG Welding Process

11



About Headux

INNOVATIVE EXPERTS

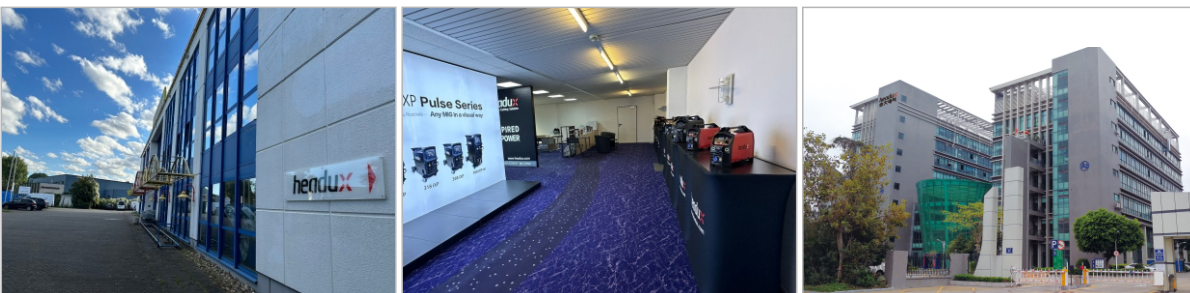
With a purpose, persistence and a burning desire for making innovative, efficient, user favorites products, our team of experts of power source, digital control, electric arc, metal materials, welding process, software, industrial engineering come together to found Headux in 2013.

MAKING BETTER WELDERS

We have been working hard to make better welding& cutting products for global users, from simple welder to intelligent series, manual to robotic application, Arc to Laser welding, step by step, we keep our partners moving forward to future.

GLOBAL LOCAL

Working with our global partners in over 40 countries, we supply high-quality products, together with local technical support, to help the users achieve perfect welding works and valuable return.





ABB

FANUC

KUKA

YASKAWA

Kawasaki

HYUNDAI
ROBOTICS

STEP
新时达

EFORT

PROFI
BUS

PROFI
NET

DeviceNet

EtherNet/IP

CANopen

EtherCAT



TitanMig 350/500R

Full-Digital Industrial MIG Welder

Full Digital Welding Control

Based on the fast response and control technology of full digital high-frequency inverter, the proprietary algorithm accurately controls the droplet transition, separation and ball cutting. Excellent arc ignition technology, stable welding arc, fast speed and low spatter. Bring users an unprecedented welding experience.

Synergic Program

With a powerful built-in chip, it comes with a professional welding database, unified adjustment, automatic parameter matching, simple settings, and even novice users can easily become welding experts. The software can be continuously upgraded to meet future welding challenges.



Expert welding parameter

The current, voltage, arc starting, arc ending, arc soft and hard characteristics and other parameters can be adjusted separately on the operation panel. Entering the secondary menu, more internal setting parameters are open, which is convenient for professional welding engineers to achieve efficient and high-quality welding work according to their own experience

Up to 50 storage channels Jobs

50 storage channels can easily store and call personalized customized parameters to improve daily welding work efficiency

Robust & Reliable Design

Adopting redundant digital circuits, strong anti-interference ability, structure and protection design, reliable performance and durability

Flex Applications

The product is modularly designed, with a wide range of protection applications and wide applicability, which can easily and conveniently achieve all-round welding

Multi-Communication Protocol

Compatible with various digital communication interfaces, such as DeviceNet, CAN Open, Ethernet IP, EtherCat, etc., which can quickly connect to most robots

Model	XingMig 350 R	XingMig 500R
Input voltage(A)	3P~380(±25%),50-60Hz	3P~380(±25%),50-60Hz
Rated input power (KVA)	13.5	24
Rated output voltage (V)	12-40	12-45
Welding Range (A)	30-350	30-500
Open circuit voltage	76	85
Output 40°C	60%	60%
Duty Cycle 100%, 40°C	275	390
Wire feed speed(m/min)	1.2-22	1.2-22
Wire diameter (mm)	0.8/1.0/1.2	0.8/1.0/1.2/1.6
Arc adjustment	-9 hard to +9 soft (default 0)	-9 hard to +9 soft (default 0)
Cool way	air cooling(Optional Water cooling)	air cooling(Optional Water cooling)
Efficiency at 100% ED	87%	87%
Power factor at 100%ED	0.9	0.9
Degree of Protection	IP23	IP23
Insulation Class	F	F
Dimensions LWH(mm)	685x300x560	685x300x560
Weight (kg)	48	52

A robotic welding arm is shown in the process of welding a metal component. The arm is positioned vertically, and a bright blue and white welding arc is visible at the point of contact with the workpiece. A large spray of bright orange and yellow sparks is being emitted from the welding point, fanning out to the left. The background is dark, with some green and yellow light sources visible, suggesting an industrial setting.

TitanMig 350RS

Full Digital Ultra-thin Sheet Welding Expert

Full Digital Welding Control

Built-in powerful Micro chip, can accurately control various output waveforms and droplet transition. This machine integrates the advantages of high-speed welding, precise arc control and ultra-low spatter, bringing efficient output to customers.

X-Super ColdArc

Fast cold welding process waveform control technology, it outputs a short-circuit transition arc with low spatter, the arc is stable and straight, and the energy density is concentrated; while the penetration depth increases, the molten pool oscillates more strongly and spatter is less. Low spatter welding is achieved in CO2 shielded gas welding, and nearly spatter-free welding is achieved in mixed gas (MAG).

Ultra-low current ignition and welding

Arc initiation and welding can be easily performed at 30A current, the arc is extremely stable, and the weld is beautifully formed

Concentrated arc energy, low heat output

Excellent arc initiation, stable arc, high straightness, concentrated energy, and the workpiece melts evenly at low heat output, without deformation, high welding quality, and few defects

Ultra-thin sheet welding application

Suitable for low-spatter welding of thin and ultra-thin plates, and can weld thin plates of 0.4mm (inclusive) or more in all positions with high quality. Suitable for automobiles, electric vehicles, metal furniture, chassis and other fields.

Multi-Communication Protocol

Compatible with various digital communication interfaces, such as DeviceNet, CAN Open, Ethernet IP, EtherCat, etc., which can quickly connect to most robots



Model	XingMig 350RS
Input voltage(A)	3P~380(±25%),50-60Hz
Rated input power (KVA)	13.5
Rated ouput voltage (V)	12-40
Welding Range (A)	30-350
Open circuit voltage	76
Output 40°C	60%
Duty Cycle 100%, 40°C	275
Wire feed speed(m/min)	1.2-22
Wire diameter (mm)	0.8/1.0/1.2
Arc adjustment	-9 hard to +9 soft (default 0)
Cool way	air cooling(Optional Water cooling)
Efficiency at 100% ED	87%
Power factor at 100%ED	0.9
Degree of Protection	IP23
Insulation Class	F
Dimensions LWH(mm)	685x300x560
Weight (kg)	48

TitanMig 350RL

Full Digital X-Supper Low Spatter Welder

Full Digital Welding Control

Based on high-frequency digital circuit rapid response and control technology, the proprietary low spatter control algorithm greatly improves the short circuit of the arc. The arc fine control capability makes the arc extremely stable and gentle during the short-circuit transition welding process, with only very low spatter, which is suitable for short arc welding.



X-Super LSC Low Spatter Control

Adopting the independently developed X-Super LSC ultra-low spatter waveform control technology, when the arc is set shorter, the arc has the characteristics of concentrated energy density and higher temperature in the center area. This feature is suitable for base welding (low current), high-speed welding and low spatter requirements. It also has good process performance for thin plates that control deformation (such as galvanized plates).

Advantage Applications

The arc has a higher energy density at a shorter setting, which is suitable for root welding; it is suitable for bridge welding with a larger air gap; when the arc is in high-energy working mode; it can perform high-current filling and capping (low spatter) High Productivity The arc is soft and stable, with ultra-low spatter, high weld quality, less rework, and no grinding, which greatly saves processing time. It meets the welding needs of carbon steel and stainless steel with high requirements such as low spatter, no grinding and weld formation, and is also suitable for welding galvanized sheets.



Model	XingMig 350 R L
Input voltage(A)	3P~380(±25%),50-60Hz
Rated input power (KVA)	13.5
Rated ouput voltage (V)	12-40
Welding Range (A)	30-350
Open circuit voltage	76
Output 40°C	60%
Duty Cycle 100%, 40°C	275
Wire feed speed(m/min)	1.2-22
Wire diameter (mm)	0.8/1.0/1.2
Arc adjustment	-9 hard to +9 soft (default 0)
Cool way	air cooling(Optional Water cooling)
Efficiency at 100% ED	87%
Power factor at 100%ED	0.9
Degree of Protection	IP23
Insulation Class	F
Dimensions LWH(mm)	685x300x560
Weight (kg)	48

TitanMig X4/X5 Pulse

Top Performance MIG Pulse Welder



Full Digital Welding Control

Based on the rapid response and control technology of full digital high-frequency inverter, the proprietary algorithm accurately controls arc initiation, droplet transfer, separation and ball cutting. The welding arc is stable, spatter is low, and the weld is perfectly formed.

Precise Wire Feeding

The photoelectric encoder quickly responds to and controls the high-precision wire feeding motor, accurately controls the wire speed, and achieves efficient and excellent welding performance

Synergic Welding Program

It has a powerful built-in chip, comes with a professional welding database, unified adjustment, automatic parameter matching, simple settings, and novice users can easily become welding experts. The software can be continuously upgraded to meet future welding challenges.



Professional Welding Parameters

The operation panel can adjust the current, voltage, arc starting, arc ending, arc hardness and softness characteristics and other parameters and more internal setting parameters are open, which is convenient for professional welding engineers to achieve efficient and high-quality welding work according to their own experience

Fine DC and Pulse Welding Process

The standard configuration is fine DC and pulse carbon steel process programs, with extremely stable arc, low spatter and perfect weld formation. This machine can also be upgraded with optional fine stainless steel pulse and fine aluminum alloy pulse process programs

Multi-Communication Protocol

Compatible with various digital communication interfaces, such as DeviceNet, CAN Open, Ethernet IP, EtherCat, etc., which can quickly connect to most robots

X-Super Stick Constant Penetration (optional)

When the welding environment changes or the dry extension changes due to interference, the control system will automatically match the voltage to achieve current stability, correct the wire feeding speed, and maintain a constant penetration during welding.

X-Super (XS) Welding Expert Process (optional)

Other X-Super welding expert processes can be selected, such as deep arc penetration process, high-speed pulse welding, high-speed vertical upward welding, etc.

Model	TitanMig X4 Pulse	TitanMig X5 Pulse
Input voltage(A)	3P~380(±25%),50-60Hz	3P~380(±25%),50-60Hz
Rated input power (KVA)	13.5	24
Rated output voltage (V)	12-40	12-45
Welding Range (A)	30-350	30-500
Open circuit voltage	85	85
Output 40°C	60%	60%
Duty Cycle 100%, 40°C	275	390
Wire feed speed(m/min)	1.2-22	1.2-22
Wire diameter (mm)	0.8/1.0/1.2	0.8/1.0/1.2/1.6
Arc adjustment	-9 hard to +9 soft (default 0)	-9 hard to +9 soft (default 0)
Cool way	air cooling(Optional Water cooling)	air cooling(Optional Water cooling)
Efficiency at 100% ED	87%	87%
Power factor at 100%ED	0.9	0.9
Degree of Protection	IP23	IP23
Insulation Class	F	F
Dimensions LWH(mm)	685x300x560	685x300x560
Weight (kg)	48	52

X-Super MIG Welding Process

X-Super Low Spatter MIG Process

Finely control the arc, extremely low spatter, concentrated arc energy density, high temperature in the center area, suitable for thin metal sheet with controlled deformation , such as galvanized sheets.

X-Super Fast MIG Process

Adopting a unique arc design, the arc is stable and straight, the energy density is concentrated, the molten pool oscillates more strongly while the penetration depth increases, and there is less spatter, which is particularly suitable for high-speed welding, and the speed can be increased up to 30%.

X-Super Fast MIG Pulse Process

Using pulse welding under a special arc, the appearance is improved while the penetration depth is increased, and perfect fish scale patterns can be generated. The X-Super Fast MIG Pulse Process integrates the function of short-circuit low spatter, which further improves the welding quality.

X-Super Up MIG Process

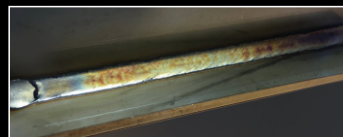
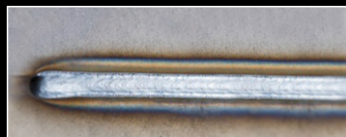
Suitable for upward welding, the arc output is low in heat, and it has process advantages when welding workpieces with small heat capacity (small parts), and is also suitable for thin plates or workpieces that are easy to burn through.

X-Super Cold MIG Welding Process

Using a special current mode, the average heat during the short circuit is reduced, and a stable arc is obtained, which is particularly suitable for low-temperature welding of galvanized plates, reducing porosity sensitivity and component segregation, and is an ideal welding process for coated metals.

X-Super Root MIG Welding Process

Using a special current mode, the penetration depth of small current is increased. Due to the use of a short arc process, the occurrence of undercut is reduced, ensuring the quality of root welding.





RoHS



headux

EUROPE

Headux International GmbH
Max-Planck-Str. 34, 50858 Cologne , Germany.

ASIA & PACIFIC

Headux Electric Co., Ltd.
Fl. 8, Bldg A1, Youlitong Industrial Park, 56 Qingsong
Rd., Pingshan, 518111 Shenzhen, China.

Email:info@headux.com

Http:www.headux.com