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SCWEIßGERÄTE UND ZUBEHÖR

MMA series

BAUWEG welding machines of MMA series are compact inverter devices to be used at home or in a summer house which comply with the national quality standards of the Russian Federation. They have the following basic functions including smooth current control, antistick and overheat protection.

Inverters of MMA series are so easy to operate that they can be easily mastered by any person who has never used a welding machine before. Despite its small size and light weight, the output current of this device varies from 5 to 220A, depending on the model of the device and the diameter of the electrode used.

Thanks to the fact that our production principles are Quality and Service, the most advanced and reliable microelements and electronic components supplied by the leading world manufacturers are used in the production of MMA series welding machines.

According to our research and measurements, the performance indicators of other similar devices existed in the Russian market are overestimated by 25-60% having none of declared functions such as antistick, hot start, arc force, and current control. The quality and reliability of such devices leaves much to be desired.

And we can guarantee proper and consistent working of BAUWEG equipment of MMA series for at least 2 years.

A high level of production organization allows us to monitor the quality at each stage of production, from assembly to packaging. Therefore BAUWEG products presented in the stores have undergone a thorough check by the technical control department.

The scope of supply includes welding cables with a welding clamp and an electrode holder.

BAUWEG inverters of MMA series are the best choice for those who do not want to overpay for additional functions, but want to have a reliable tool that is easy to operate throughout its service life.





SCWEIßGERÄTE UND ZUBEHÖR



Recommended set:

Cable KG-16 with a welding clamp, 3m.
Cable KG-16 with an electrode holder, 3m.

Maximum set:

Cable KG-16 with a welding clamp, 10m.
Cable KG-16 with an electrode holder, 10m.

	MMA 180	MMA 200	MMA 220
Welding current, A	5 - 180	5 - 200	5 - 220
Electrode diameter, mm	1,6 - 4	1,6 - 4	1,6 - 5
Input voltage, V		160 - 256	

FOR HOUSEHOLD APPLICATION

Duty Cycle
40%

Antistick

Maximum capacity, kW	5,76	6,59	7,45
Voltage on the arc, V	20,2 - 27,2	20,2 - 28	20,2 - 28,8
Voltage at XX, V		55 ± 5%	
Power at XX, W		30 ± 5%	
Cos φ		0,77	
Efficiency, %		85	
Temperature conditions, °C		-10 . . . + 35	
IP grade		IP 21	
Dimensions, mm		245 * 125 * 180	
Net weight, kg		3,5	

ARC series

If you are going to build a house, make metal structures or perform other construction work in the garden, BAUWEG welding inverters of PRO series is the best value for money in the Russian market.

In addition to overheat protection of MMA series, PRO series devices have also undervoltage protection and fault to frame protection. Besides antistick there are two additional functions, arc force and hot start, which facilitate the ignition of the electrode.

When choosing a welding machine, you must pay attention to one of the main criteria, i.e. the machine duty cycle or load duration at the maximum current. This is the crucial factor on which the category and mode of operation of the equipment depends. We use the European measurement standards, i.e. a ten-minute duty cycle at $t^{\circ} + 25^{\circ}\text{C}$. At the same time, the load duration of PRO series device at the maximum current is 80%. Such value can be achieved when several affecting factors are observed simultaneously, including:

- the shape and thickness of the aluminum radiator bottom, which directly affect the removal of heat from the main power elements (transistors and diodes);
- the strength and speed of the air flow, as well as its trajectory.

In all BAUWEG inverters there is a tunnel arrangement and there are oversized radiators of in-house design. They have the best heat removal in comparison with other existing inverter devices in the Russian market.

Also, starting from PRO series, the devices have been equipped with industrial fans with an increased air flow (minimum 200 m³/h, which is approximately 5 times more compare to other devices existing in the market). The fans have a rolling bearing and their service life is about 75,000 hours.

Knowing the need for welding at any time of year and in different climatic conditions, we use elements to be used at a wide temperature range. Therefore, any inverter of PRO series can be used at a temperature from -25°C to $+40^{\circ}\text{C}$.

Despite the serious application of PRO series devices, they are slightly larger than MMA series devices of the residential grade. Weighing only 5 kg, 945 grams of which are the weight of the cooling radiators, the devices can be used not only for welding with electrodes $\varnothing 5\text{mm}$, but also for cutting with electrodes $\varnothing 4\text{mm}$.

The devices are designed for welding all grades and classes of steels and their alloys, both ferrous and non-ferrous metals, which are commonly used in houses and during construction.

Using BAUWEG inverters, you can easily create a reliable, accurate and durable seam, in any welding position.



SCWEIßGERÄTE UND ZUBEHÖR



Recommended set:

Cable KG-16 with a welding clamp, 3m.
Cable KG-16 with an electrode holder, 3m.

Maximum set:

Cable KG-16 with a welding clamp, 20m.
Cable KG-16 with an electrode holder, 20m.

	ARC 180	ARC 200	ARC 220
Welding current, A	5 - 180	5 - 200	5 - 220
Electrode diameter, mm	1,6 - 4	1,6 - 5	1,6 - 5
Input voltage, V		130 - 256	

FOR SMALL CONSTRUCTION WORKS

Duty Cycle 80%	Arc force	Hot start	Antistick
Maximum capacity, kW	5,44	6,22	7,04
Voltage on the arc, V	20,2 - 27,2	20,2 - 28	20,2 - 28,8
Voltage at XX, V		55 ± 5%	
Power at XX, W		40 ± 5%	
Cos φ		0,77	
Efficiency, %		90	
Temperature conditions, °C		-15 . . . + 40	
IP grade		IP 21	
Dimensions, mm		295 * 130 * 280	
Net weight, kg		5	

Profi ARC series

BAUWEG welding machines of PROFI series are the most popular models among professionals. The reasonable price and ease of operation combined with reliability and extended warranty period make this series a bestseller among other BAUWEG devices.

The most advanced technologies have been implemented in this series of the devices, as well as in all BAUWEG machines, improving the technical parameters and the quality of welding. So in BAUWEG devices of PROFI series silicon based IGBT are currently used, which are the main type of fully controlled power transistor keys resistant to short circuit in the power circuit. TRENCHSTOP™ 5 IGBT are so good that they actually set a new standard for technical characteristics, and, accordingly, it gives BAUWEG an incomparable advantage over competitors.

One of the key indicators and advantages is low power consumption and efficiency of the welding machine, i.e. its ability of energy conversion. All BAUWEG machines have transformers made of amorphous (nanocrystalline) alloys, providing reduction in transformer no-load losses by more than five times in comparison with the traditional magnetic circuit made of electrical steel. There are almost no internal inductive losses of BAUWEG inverters; therefore all electricity consumed by the welding inverter is used on the arc, which makes it as efficient as possible.

Due to a low level of generated electromagnetic interference PROFI devices can be used in a circuit with a lower voltage of 130V. And a smoothing choke provides a steady arc, which makes it possible to achieve beautiful seams when welding in different positions.

The advantages of BAUWEG devices of PROFI series over PRO series are as follows:

- more reliable and rigid fixing of enclosed internals, which ensure the protection of the device if it falls down;
- a more powerful power supply unit, which provides a steadier arc and is more resistant to power supply voltage swings and surges in the power circuit;
- more powerful diodes, more capacitors with greater capacity and larger cooling radiators, which in the whole provides a better load duration equal to 90% at the maximum current, and the possibility of welding with an electrode Ø 6mm.

This series is especially popular among masters of field service teams, private specialists, contractors of gas services, water services companies, road, repair and construction companies.



SCWEIßGERÄTE UND ZUBEHÖR



Recommended set:

Cable KG-16 with a welding clamp, 3m.
Cable KG-16 with an electrode holder, 3m.

Maximum set:

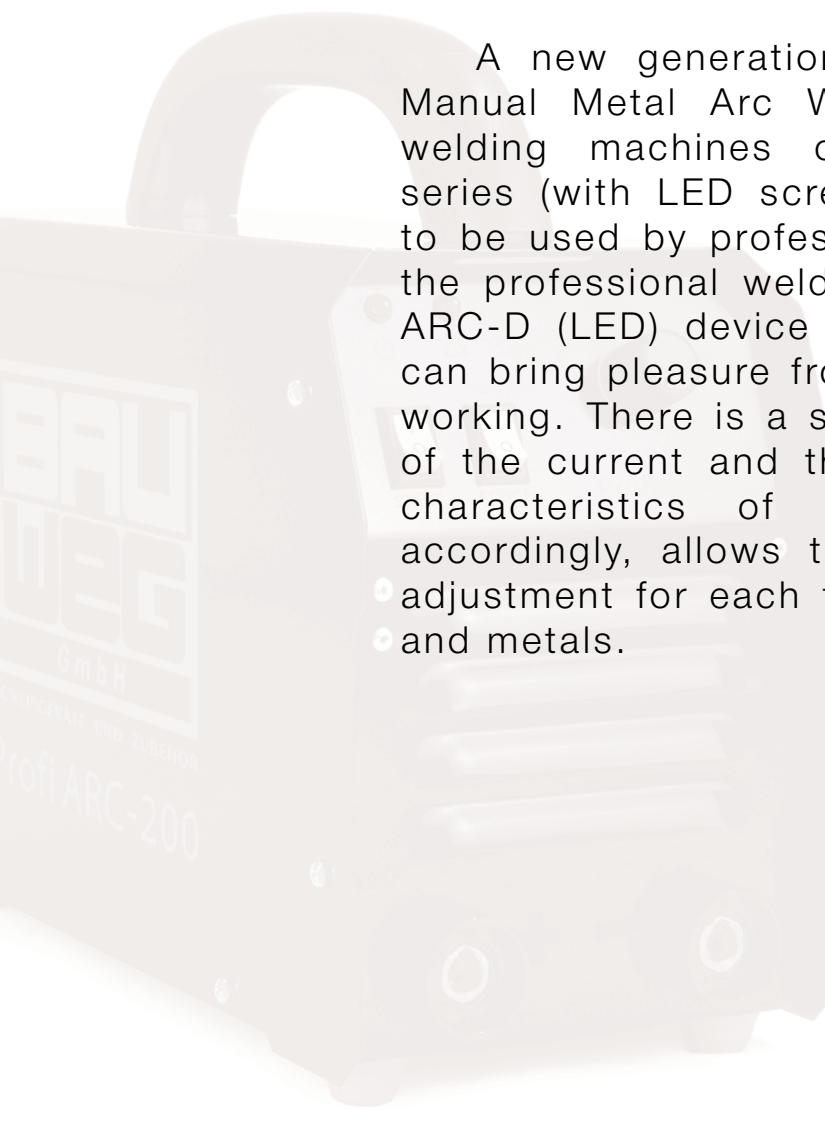
Cable KG-16 with a welding clamp, 40m.
Cable KG-16 with an electrode holder, 40m.

	Profi ARC 200	Profi ARC 220
Welding current, A	5 - 200	5 - 220
Electrode diameter, mm	1,6 - 5	1,6 - 5
Input voltage, V	130 - 256	

FOR CONSTRUCTION AND PRODUCTION

Duty Cycle 90%	Arc force	Hot start	Antistick
Maximum capacity, kW	6,22		7,04
Voltage on the arc, V	20,2 - 28		20,2 - 28,8
Voltage at XX, V		55 ± 5%	
Power at XX, W		40 ± 5%	
Cos φ		0,77	
Efficiency, %		90	
Temperature conditions, °C		-25 . . . + 40	
IP grade		IP 21	
Dimensions, mm		310 * 145 * 275	
Net weight, kg		6	

Profi ARC-D series



A new generation of inverters for Manual Metal Arc Welding, BAUWEG welding machines of PROFI ARC-D series (with LED screen) are designed to be used by professional welders. In the professional welder's hands PROFI ARC-D (LED) device is like a toy that can bring pleasure from the process of working. There is a smooth adjustment of the current and the current-voltage characteristics of the arc, which, accordingly, allows the most accurate adjustment for each type of electrodes and metals.

The power electronics, metal-composite industry and developments based on microcontroller programming of arc welding are the main focus to create a tool for professionals, giving an impeccable result.

The following high-tech microcomponents are used in this device:

- Silicon IGBT transistors TRENCHSTOP™ of the 5th generation (from the leading manufacturers Infineon together with International Rectifier);
- diodes from the International Rectifier company with the original PowerTab® enclosure for the maximum efficient heat removal;
- High-temperature 105 °C Elzet™ capacitors, with the capacity for each unit (selected from more than 20 brands after the laboratory tests, the most reliable and stable in terms of performance, with the smallest error of 10-15% of the declared capacity);
- two power diode Ultrafast Soft Recovery by Vishey™ are installed at the output of the electrical circuit, which proved to be the most reliable during 15 years of production;
- core of amorphous nanocrystalline iron and
- copper lithzendraht wire winding of own design, which increases the efficiency of the device and reduces energy losses in these inverters by no more than 10%.

The devices use connectors 35-50 mm, with increased wear resistance and rated current up to 500A. Welding cables are included in the scope of supply for these models. Each welder chooses the required length and cross section of welding cables. Some welders need 2-2.5 meters of KG-16, and other welders need 20 meters of KG-35. At the request of the customer the machines must be completed with welding cables of the required length.

The antistress and antidust enclosure protects against dust, dirt and falls from a small height. The given design with separate power and control zones, together with reliability of used details and circuit engineering, allow the manufacturer to offer a 5 years warranty period for this equipment.



SCWEIßGERÄTE UND ZUBEHÖR



Recommended set:

Cable KG-25 with a welding clamp, 3m.
Cable KG-25 with an electrode holder, 3m.

Maximum set:

Cable KG-25 with a welding clamp, 40m.
Cable KG-25 with an electrode holder, 40m.

Profi ARC-D
200

Profi ARC-D
220

Welding current, A	5 - 200	5 - 220
Electrode diameter, mm	1,6 - 5	1,6 - 6
Input voltage, V	130 - 256	

FOR CONSTRUCTION WORK AND PRODUCTION RUN

Duty Cycle 100%	Arc force	Hot start	Antistick
Maximum capacity, kW		6,22	7,04
Voltage on the arc, V		20,2 - 28	20,2 - 28,8
Voltage at XX, V		55 ± 5%	
Power at XX, W		45 ± 5%	
Cos φ		0,77	
Efficiency, %		90	
Temperature conditions, °C		-25 . . . + 40	
IP grade		IP 21	
Dimensions, mm		320 * 145 * 280	
Net weight, kg		6,5	

MIG series

The magic technologies by BAUWEG, the manufacturer of the Russian Inverter Welding Machines.

BAUWEG, MIG, is the first Russian low-cost semiautomatic inverter welding machine for not only MAG welding, but also for standard MIG welding.

The minimum number of time-tested parts and the unique circuit design are the most daring and powerful solutions for ensuring the best price in the market!

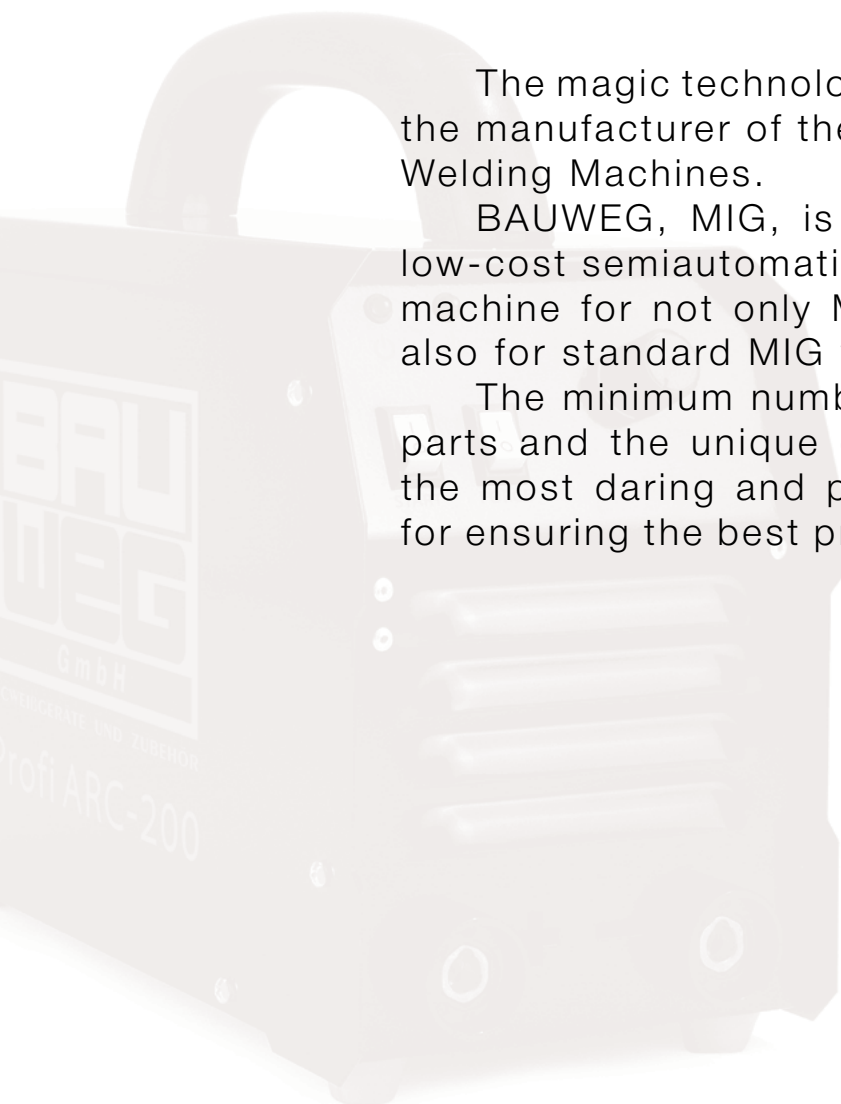
BAUWEG MIG semiautomatic welding machines are the best solution for household and garage use ... when you want a professional result using a low-cost tool.

Easy to operate, smooth feed, soft start, minimal metal scattering, a built-in welding control and factory setting of the best current-voltage characteristics of the arc have been implemented in our new product.

An opportunity to operate at unstable supply voltage, the load duration equal to 40% at a maximum current of 200A and guaranteed lifetime of at least 2 years are additional advantages to choose MIG Machines as favorite semiautomatic welding machines for wire with a diameter of 0.6 and / or 0,8 mm.

The CEE plug of the welding torch detachable from the semiautomatic welding machine facilitates replacement of the failed hose, if it built into the device. Another absolute advantage is the possibility of using a standardized Euro-torch.

The MIG machine can be supplied as a single product, as well as with the most popular and proven 3 meter welding torch and a 3 meter KG-16 cable with a 200A clamp.





SCWEIßGERÄTE UND ZUBEHÖR

MIG
200

Welding current, A	10 - 200
Operation mode	Flux-cored arc welding (MIG/MAG)
Wire diameter, mm	0,6 / 0,8

FOR HOUSEHOLD APPLICATION

Duty Cycle
40%

Soft start

Metals to be used	carbon, construction, low alloy and stainless steel
Wire type	coppered and stainless wire
Wire speed, m/min.	1 - 15
Voltage on the arc, V	12 - 24
Maximum capacity, kW	5,65
Efficiency, %	85
Input voltage, V	160 - 256
IP grade	IP 21
Dimensions, mm	430 * 210 * 325
Net weight, kg	8



Recommended set:

Cable KG-16 with a welding clamp, 3m.
Welding torch 180-200A 3m.

Profi MIG series

BAUWEG inverters for Semiautomatic Flux-cored arc welding of Profi MIG series are designed to replace obsolete semiautomatic welding machines of the transformer type. There is a possibility of mechanized welding not only in Metal Inert Gas welding (MIG) or in Metal Active Gas welding (MAG), but also in No Gas Flux-cored Wire Welding (NoGas) with reverse polarity. The additional WARM function has been implemented.

BAUWEG modern semiautomatic welding machines are 3-4 times lighter than the previous models and at the same time are more simple and easier to operate. Switching to inverter technologies and avoiding low-efficiency transformers allowed us to increase the efficiency of BAUWEG machines of T-series up to 85%, and made it possible to operate from a network with a voltage of 160V.

The quality control of the assembly at all stages of production and the output quality control of welding using a special test bed allow us to state that the claimed power, current and working voltage parameters fully correspond to the actual values.

Microcontroller regulation allows you to programmatically and accurately configure all parameters and characteristics of welding processes at the development stage. The power electronics and control circuit are mounted on separate boards. The power to the control unit is supplied from an independent power supply source, not from a power transformer winding, as in 60% of welding inverters supplied to Russia. This is an important advantage, because the reliable operation of the device depends on the stability of the power supply to the control circuit, especially when the supply voltage is unstable.

The main advantages of BAUWEG semiautomatic machines of Profi MIG series are:

- high level of quality (2 years guarantee);
- the best price in comparison with similar models of other brands;
- easy adjustment;
- low power consumption;
- absence of metal scattering;
- stability of welding;
- no jerking when feeding wire;
- soft start function;
- arc force function;
- inductance control, i.e. smart adjustment of penetration (depth of penetration, height and width of the roller) for work with both thin and thick metal;
- selection of operation modes of the torch button 2T and 4T;
- WARM mode, i.e. metal heating with a carbon electrode;
- polarity reversion (for working with cored wire).

Using BAUWEG semiautomatic machines you can always perform highly efficient welding with an ideal seam both long and short, up to a rivet.



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Recommended set:

Cable KG-16 with a welding clamp, 3m.
Cable KG-16 with an electrode holder, 3m.
Welding torch 200A 3m.

	Profi MIG 160	Profi MIG 180	Profi MIG 200
Welding current, A	10 - 160	10 - 180	10 - 200
Operation mode	14,5 - 22	14,5 - 23	14,5 - 24
Wire diameter, mm	0,6 / 0,8	0,6 / 0,8	0,6 / 0,8 / 1,0

FOR HOUSEHOLD APPLICATION
AND AUTO REPAIR SHOPS

Duty Cycle 50%	No gas welding	Soft start	Polarity reversion
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Metals to be used	carbon, construction, low alloy and stainless steel		
Wire type	coppered, flux cored and stainless wire		
Wire speed, m/min.	1,5 - 14		
Voltage on the arc, V	40 ± 5%		
Maximum capacity, kW	5,18	5,41	5,65
Efficiency, %	85		
Input voltage, V	160 - 256		
IP grade	IP 21		
Dimensions, mm	450 * 230 * 330		
Net weight, kg	9		

Mega MIG series

BAUWEG inverters of MEGA MIG series are designed for semiautomatic wire welding (MIG / MAG / NoGas), as well as for Manual Metal Arc Welding (MMA). It is a two-in-one professional general-purpose device, with advanced welding settings (inductance), a function of polarity reversion (for NoGas mode), several protection degrees, additional power margin to provide maximum reliability and faultless welding quality.

BAUWEG semiautomatic machines of MEGA MIG series are designed for professionals and for operation in tough environment conditions. A larger margin of power and endurance limit is provided by oversized cooling radiators of own design, additional capacitors and diode bridges. There are no strict requirements to the power supply network, the machine can also be supplied from the generator. There is an opportunity to operate from the network which ensures greater reliability with increased Load Duration (80% at maximum current).

BAUWEG semi-automatic machines of MEGA MIG series are the best choice for craftsmen, experts and professionals. These machines can be used in metalworking industries, in specialized auto repair shops and services, in factories for construction of cabins, racks and other metal structures.

BAUWEG semiautomatic machines of MEGA MIG series are designed for operation in different conditions, including tough environment conditions!

BAUWEG semi-automatic machines of MEGA MIG series are the best choice for craftsmen, experts and professionals. These machines can be used in metalworking industries, in specialized auto repair shops and services, in factories for construction of cabins, racks and other metal structures.



SCWEIßGERÄTE UND ZUBEHÖR

Mega MIG
200

Welding current, A	10 - 200
Operation mode	Manual Metal Arc Welding (MMA) Flux-cored welding (MIG/MAG) / NoGAs welding
Wire diameter, mm	0,6 / 0,8 / 1,0

FOR CONSTRUCTION AND PRODUCTION

Duty Cycle 80%	No gas welding	Soft start	Polarity reversion
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Metals to be used	carbon, construction, low alloy and stainless steel
Wire type	coppered, flux cored and stainless wire
Wire speed, m/min.	1,5 - 14
Electrode diameter, mm	1,6 - 5
Maximum capacity, kW	6,59
Efficiency, %	85
Input voltage, V	160 - 256
IP grade	IP 21
Dimensions, mm	485 * 265 * 345
Net weight, kg	11



Recommended set:

Cable KG-16 with a welding clamp, 3m.
Cable KG-16 with an electrode holder, 3m.
Welding torch 200A 3m.



Gloves size standard, XL
Under the order production of the shortened or strengthened is possible,
as well as leggings made in a lightweight option with no lining.

Leggings of the welder

Area of application	For all types of welding and cutting, when working with cutting and grinding tool
The thickness of the split leather, mm	1 - 1,2

FOR CONSTRUCTION AND PRODUCTION

Class	B
Type of split	natural, beef
Type of Leggings	five-fingered, elongated

Gloves are made manually with drawing a company logo by method of a silk-screen printing.
For comfortable work gloves are made with soft lining.
The seams are stitched with strong thread, with a lining split leather with a thickness of 0,8 mm. for pota thread.
Protect the hands, wrist joints and lower forearms.

COMPANY BACKGROUND

High quality standards at the enterprise and the desire to take the leading position in the welding equipment market result in the most modern, technological and competitive BAUWEG products.

Own development, keeping up with the times, ahead of both Eastern and Western manufacturers of similar welding techniques. The desire to always keep quality at the highest level and the social responsibility of the company does not allow to transfer production to China.

Production of the equipment successfully works in Russia since 2006. During this time of development of plant, its own development department together with the marketing department and direct participation of trade partners from Russia and the CIS countries have created the most necessary and sufficient series of devices for performing arc and semiautomatic welding. The range of products covers the needs of both private consumers and construction and manufacturing companies.

Technologies of process automation: development-purchase-production-sale, allow providing consumers with the best equipment in terms of price / quality ratio.

The use of the most modern hardware components from reliable suppliers and cooperation with manufacturers from year to year allow us to ensure high quality of our products.

After designing the devices for 220V, today the plant is developing products for industrial operation at a voltage of 380V.

ABOUT THE SERVICE

All service departments in all cities undergo a thorough check before we sign a contract with them. A large stock of components in our own warehouse and in the ASC excludes long-term repairs of the device, and the quality of the components used minimizes the percentage of repair cases.





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