bodyshop
SOLUTIONS

Your Specialist Body Shop Equipment & Service Supplier

YOUR FAST GUIDE
To help you purchase the right

Spot Welder & MIG/MAG Welder

Your "ALL IN ONE" body shop solution...

Spot Welders

When buying a Spot Welder, what should you look for?

These are the main points to bear in mind to get the "Ideal Spot Welder":

1. Must be "Simple to Use" (Automatic preferably).
2. Must be "Versatile" to work with and come with a "Variety of Electrodes" for different jobs.
3. Must be "Easy to Move Around" the workshop and "Lightweight" to operate.
4. Must be "Water-cooled", so that it will not overheat and cut-out.
5. Must be able to "Work with All the Current Steels".
6. Must be "Upgradeable should New Steels be Introduced" into the modern cars.
7. Needs to have "Wide Vehicle Manufacturer Approvals", to carry out all repairs.
8. Must be compliant with EU Directives and current UK law for the level of Electro Magnetic Fields

Point 1: Because there is no information readily available, how can you set the welder correctly? Are you going to guess the settings?

Before spot welding car panels together you first need to know:

i. the steel type (boron, HSS, dual-phase, TRIP, etc.) and

ii. the steel thickness.

Without this information, it is impossible to set the amps, volts or air pressure correctly. The best solution is to buy a Spot Welder that has an "Automatic Function"

- ☑ To give you this Automatic Function we have the InvertaSpot GT Automatic Spot Welder, from Wielander & Schill, which automatically:

  i. measures the thickness and type of the steel, and

  ii. sets the amps, volts, time and air pressure.

  This really speeds up each job, gets it 100% right every time and avoids costly mistakes!

  To give added peace of mind, should new steels be introduced in the future, the Automatic Mode will still be able to recognize these steels and give a perfect weld every time. In addition, the welder can also be used in Manual Mode if you require, e.g. when using the Vauxhall program.

Spot Welders

When buying a Spot Welder, what should you look for?

Point 2: When working on a car, it is important to be able to use the spot welder in as many parts of the car as possible.

The welder needs to have a variety of electrodes available.

- ☑ There are many electrodes available for the InvertaSpot GT Automatic including the new 500mm long electrode for welding back panels on VW's and other vehicles with a deep floor pan. Other electrodes are available, including for wheel arches and welding under sill sections. To avoid any damage to the car when welding, most of the electrodes are fully insulated, which avoids arcing out on the panels.

  Optional Extra also available: Single Sided Gun should you want to do dent pulling, etc.

Point 3: The welder should be very easy to move around a busy workshop and lightweight enough to use easily.

- ☑ The Easy to Move and Lightweight to Use InvertaSpot GT Automatic is based around a very low centre of gravity that makes it very easy to move around the workshop. The 10m power cable is long enough to reach all sections of the car and is ideal for welding in any size of workshop. Also, the fully adjustable balancer makes the welding gun lightweight to use even when using the bigger electrodes.

Point 4: Why should the welder be water-cooled?

When doing a lot of spot welding the tips and electrodes will get very hot. By having a water cooled machine this will be reduced.

- ☑ The InvertaSpot GT Automatic has a unique water cooling system on all electrodes which means the welder will never overheat and allows the operator to use the machine non-stop. Even after 200 welds the welder is cool and every weld will be identical. The welding tips also will last much longer.

Point 5: What specifications should I be looking for in a modern spot welder?

To cover all your potential requirements you need 14,000amps of welding power and 600daN of clamping force

- ☑ The InvertaSpot GT Automatic is programmed to operate at up to **14,000amps** of welding power. This is more than enough for the modern car of today. It operates off a 32a fuse, so the running costs are 65% lower when compared with other welding equipment. The clamping force is up to **600daN** on 6 bar air supply. Also the **Power Control Program** ensures every weld is the same quality. There is constant output when measuring any material combination. You can never make a mistake!

Call Mark or Emma on 01327 300700 (option 3) for more information

Point 6: Is the welder upgradeable and does it have a facility to record the welds?

- The InvertaSpot GT Automatic is extremely user friendly and is used internationally around the world. It is programmed to be used in many languages, including English, French, German, Italian, Russian, Polish and Spanish. The welder has full traceability as the data is saved on an SD card, ready for printing when needed. The data records each weld to show if it is good or bad. The welding programs can also be updated should new software become available for the machine.

Point 7: What car manufacturers recognise and approve the spot welder?

Wide car manufacturer approval will certainly enable great versatility of work.

- The InvertaSpot GT Automatic has been tested and recommended by most major car manufacturers including: **Mercedes-Benz, BMW, Audi/VW, Porsche, Chrysler, General Motors, Volvo, Ford, JLR, Peugeot/Citroen, Renault, Nissan and Honda.**

Point 8: From a Health and Safety point of view, it is important to consider safe working practices and be compliant with EU Directives

- The InvertaSpot GT Automatic has been tested to comply with the EC regulation 2004/40EG.

In Summary

To ensure that you purchase the right welder to cover all your likely requirements, it is certainly worth bearing in mind the above 8 points.

The InvertaSpot GT Automatic meets all the requirements in the above points. It will give you peace of mind that you have the market leading spot welder, enabling both your staff to operate effectively and efficiently and also your business to benefit from lower running costs and greater productivity.

email: info@bodyshopsolutionsltd.com tel: 01327 300700

MIG/MAG Welders

When buying a MIG/MAG Welder, what should you look for?

These are the main points to consider to get the "Ideal MIG/MAG Welder":

1. Must Weld Steel: SG2, SG3, etc.
2. Must Weld Aluminium: AlMg, AlSi and others
3. Must Braze: CuSi3, CuAl8, CuBz9

} Needs to have "Pulsing Mode" for Aluminium and for Brazing

4. Must be Easy to Use
5. Must be Approved by Vehicle Manufacturers

Why is there a need for the correct MIG/MAG welder?

Car manufacturers are now designing their new cars to be as lightweight as possible for fuel efficiency. To achieve this, they are incorporating various grades of aluminium and different types of steel into their designs. This can be very confusing for the repairer, but if he wants to repair these cars correctly he must invest in the proper MIG/MAG equipment so he can achieve excellent results every time on the variety of materials being used.

Point 1: Welding Aluminium:

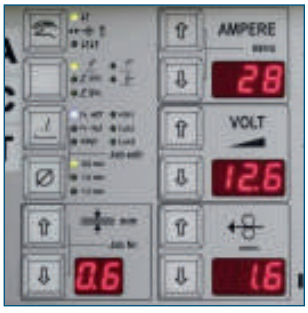
To be able to weld aluminium correctly, the welding equipment should have the capability to weld AlMg (magnesium); AlSi (silicon) and have welding amps of 270A. There should be the facility for Pulsing and for Inter-Pulsing, to enable benefits including smooth, spatter free welding and also welding thicker sections. The program should also be capable of upgrading should new types of wire be required.

- ☑ The InvertaPuls IP6-2 is fitted with 2 torches and is perfect for meeting all of this aluminium welding specification, including pulsing, that is now required on the increasing number of aluminium cars being produced today.

Point 2: Welding Steel:

On many cars today, the steel panels are being made thinner. The thinner panels retain their strength because of the different mixes of steel being used. This mixed steel makes welding a more difficult job to do. Many welders on the market are just too powerful to do the job and just blow holes.

- ☑ The InvertaPuls IP6-2 i s fitted with Automotive Cold Transfer (ACT). This is a special program that works at very low amps (28A) and low volts to make the welding of very thin panels an easy job to do. The ACT program is for steel welding only.



Call Mark or Emma on 01327 300700 (option 3) for more information

Point 3: Brazing:

The different galvanised mixes in the steel and on the surface coatings means the correct repair method is to braze the joint. Again, different wires must be used depending on the repair, e.g. CuSi3, CuAl8, CuBz9.

The "pulsing mode" must be available for overlap joints and for plug welding.

- ☑ The InvertaPuls IP6-2 is already programmed to take these wires and give perfect results every time. When an operator has set the machine exactly for a particular job, this can be saved and then recalled when that same job is required in the future. It has pulsing mode.

Point 4: Easy to Use:

- ☑ The InvertaPuls IP6-2 is effectively two machines in one. It is fitted with two torches and two bottle holders, so that you can have one side ready for steel welding and the other side ready for Aluminium.

  Just press the trigger on a torch and the welder is automatically ready for the job. It is easy to move around the workshop and easy to upgrade the programs.

Point 5: Approved by Vehicle Manufacturers:

- ☑ The InvertaPuls IP6-2 has been tested and accepted my many car manufacturers including: **Mercedes-Benz, Audi/VW, Porsche, Opel, Vauxhall, Ford, JLR and Peugeot/Citroen.**

In Summary

To ensure that you purchase the right MIG/MAG welder to cover all your likely requirements, it is certainly worth bearing in mind the above 5 points.

InvertaPuls IP6-2 meets all the requirements in the above points. It will enable you to achieve perfect results every time and is programmed to work well on all the types of aluminium and steel found on the modern car of today.

email: info@bodyshopsolutionsltd.com tel: 01327 300700

Unit 9 Stephenson Close,
Daventry NN11 8RF

Tel: 01327 300700

Fax: 01327 300586

Email: info@bodyshopsolutionsltd.com
Web: www.bodyshopsolutionsltd.com

@BSHOPSOLUTIONS

bodyshopsolutions