

SmartPLASMA™ Features

Proven Design

There are already over 1000 Plasma cutters in service throughout the world using Animatics SmartMotors™ as the drive and control element. SmartMotor's are extensively used in a wide variety of continuous duty production line applications.

Performance

Cutting speed up to 12.5m/min
 Rapid traverse speed 25m/min
 Accuracy +/- 0.25mm
 Cuts up to 25.4mm material thickness are dependent on cutting torch chosen.

Gantry

Light but rigid aluminium bridge low inertia gantry to allow fast traverse speeds and sturdy mount for Y and Z axes. Linked drives on X axis for 'crab' free motion.

Robust gear heads on X and Y axis deliver high torque and precision positioning to the timing belt drive.

Precision Linear guides on all axes provide smooth motion and long running life.

Flex rated robotic cables guided and protected in heavy duty cable chains.

Protection

Brush seals protect personnel and mechanism. Design takes account of the reality of factory environments to avoid damage and ease loading/unloading by operators.

Maintenance

The mechanics and electronics require very little maintenance and all spares are from stock.

Quality, Assurance, Support

UK Design and manufacture
 UK and worldwide technical support.
 Manufacturers 1 year standard warranty
 Extended warranty available.
 CE Marked



Fabricated Frame

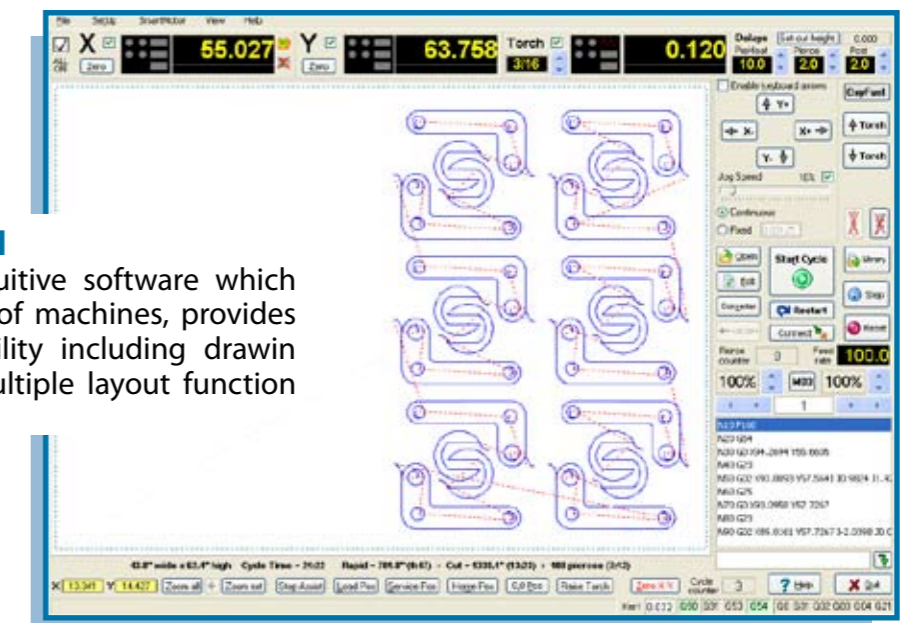
Industrial machines require a robust chassis. The SmartPlasma™ has a rigid CAD designed fabricated base.

Cutting Bed

Large working area, solid fabricated construction. Slats allow the debris to drop away. Zoned extraction help improve operator safety and factory environment. Note: Fan and filter are not included but is available if required. Standard bed sizes are 2m x 1m or 3m x 1.5m, we can make larger or smaller versions.

Intuitive Machine Control

User friendly PC based intuitive software which has been proven on 1000s of machines, provides comprehensive CNC capability including drawing to G code conversion. Multiple layout function maximises material usage.



Automatic Torch Height Control (THC)

This feature is essential to achieving consistent quality cutting and productivity. The arc voltage is monitored and information fed to the Z axis servo actuator, to adjust the electrode distance to the work piece, therefore maintaining the quality of the arc and consequent cut.



Cutting Torch

A choice of plasma sets is offered 60A, 80A or 100A. Selection is dependent on your needs. Please call to discuss your requirements.

Animatics and SMS™

The Animatics Corporation pioneered the concept of the integrated servomotor with an inbuilt controller, encoder and servo amplifier and for over 20 years their SmartMotors have been successfully used in thousands of industrial machines yielding cost benefits to those OEM manufacturers who have used it. These savings come from simplified wiring and the elimination of control cabinets for servo control electronics.



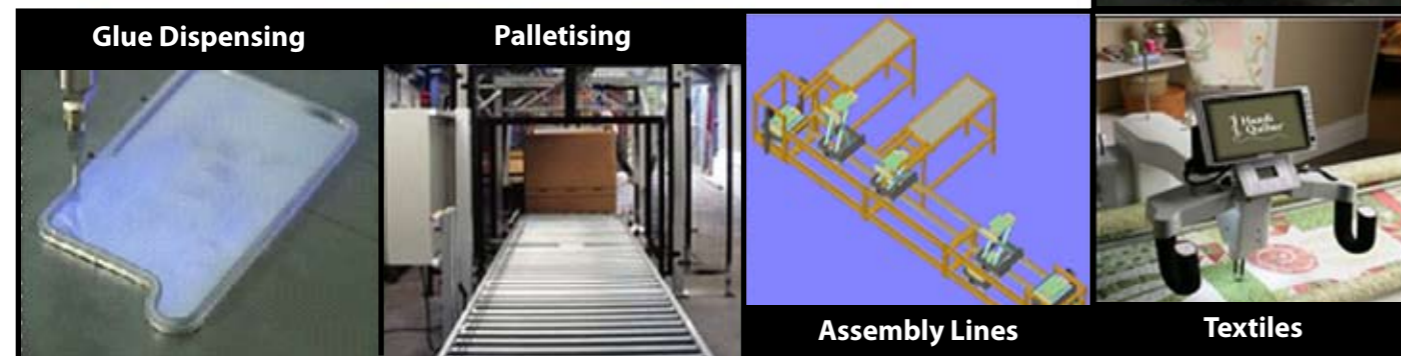
SMS are the machine building division of the Animatics group with the brief to develop the highest quality and best value servo controlled machines available anywhere. Its team of engineers have over 50 years experience of designing robotic and automation equipment for use in demanding environments such as the nuclear industry, where reliability and quality cannot be compromised. SMS have looked at market leading applications of the SmartMotor™ where the technology has been proven to work in hundreds of machines in the USA and they have redesigned from scratch these machines for use in the European market using market leading application software and best design practice for robustness, accuracy and longevity.

The first of these UK designed and built machines is the SmartPLASMA CNC™ machine which is offered complete with an inbuilt dust extraction bed*, automatic torch height control** and is supplied with the best available plasma cutting technology and easy to use CNC software. This software accepts industry standard G-code or drawings in DXF file format that can be created using any CAD package such as AutoCAD, TurboCAD, and Solidworks amongst others. The result is a high quality, robust machine with features usually only found on more expensive machines and based on the proven technology of the Animatics SmartMotor™, the SmartPLASMA™ design provides a revolutionary high performance, low cost solution for sheet metal cutting.

Other Activities

SMS are experienced in a wide range of multi axis positioning and motion control related systems. SMS projects and installations include the power generation, automotive, confectionary and packaging industries, where they have equipment operating continuously in critical production processes.

The concept and technology utilised in the SmartPlasma machine is adopted for a wide variety of applications, and provides a common platform, enabling new machines to be designed and built quickly and economically.



Demonstration

Please call to arrange a demonstration of the SmartPLASMA™ or other SmartMACHINE technologies. We can arrange online demonstrations

* The SmartPLASMA machine will need to be connected to a suitable extraction fan and filter unit or vented outside.

**The height of the torch is automatically controlled to allow for variation in the height of the sheet.

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■ Redefining cost/performance in CNC Plasma Cutting

When SMS set about designing and building the **SmartPLASMA™** machine, it was with the knowledge that the people it would be selling the machine to would take no nonsense when it came to price, performance, reliability and support. Given the deluge of machines coming from the Far East it may seem surprising that SMS should even contemplate creating a machine designed and built in the UK. But SMS is no ordinary company.

As a subsidiary of the California based Animatics Corporation, SMS has direct access to the Animatics SmartMotors and supporting CNC software which are revolutionising the design and manufacture of computer controlled machines around the world. Animatics asked SMS to consider marketing a US designed and built, low cost CNC plasma cutting machine that already used their motors to great effect. SMS however, with its background in designing, building and supporting bespoke industrial manufacturing equipment, quickly recognised that the machine in question would not meet European machinery standards and would need to be redesigned. That machine did however demonstrate the effectiveness of the Animatics' integrated servo motors in controlling multiple axes simultaneously, to give excellent path accuracy at speed together with automatic torch height control. Given the SmartMotor™, the user friendly PC software that was also available to SMS, and the company's experience in machine design, it became an easy and low risk decision to develop the **SmartPLASMA**.

After researching the market and sourcing the best components, gearheads, dust extraction beds and cutting torches, SMS proudly offers the **SmartPLASMA** SP2010 and SP3015 machines, in the knowledge that in terms of quality and performance, it's a winner. SMS can make bold claims about its capabilities but it's your opinion that matters...so please come, take a look and judge for yourself. If you need a plasma cutting machine, consider the SMS **SmartPLASMA**.

