

Synergy Engineering Solutions

The Numatic Synergy-01 technical product brochure

ABOUT SES:

Synergy Engineering Solutions is a small

upcoming engineering consultancy based in the Sussex area with a team of 7 dedicated specialist engineers. Just like our name points out, we as a company combine our specialist expertise with yours to create a goal that may not have been obtainable in the first instance

SES IS DEDICATED TO PRODUCING GREEN AND EFFICIENT ENGINEERING BASED SOLUTIONS. OUR DESIGN SOLUTIONS INVOLVES A CAREFUL BALANCE BETWEEN THREE DRIVING FACTORS:

ECONOMICS - Balancing today's construction costs with operational and social costs.

SOCIETY: Designing products that do not compromise the integrity of surrounding areas or those of future generations.

ENVIRONMENT: Working best we can with natural systems instead of against them by choosing materials and design approaches to protect the environment.



THE SES MISSION:

Supplying the performance you demand, coupled with the reliability you can trust.

- To deliver the most reliable engineering solutions for the most demanding of applications.

- To offer a cheap and sustainable option for any company, whilst offering maximum performance and extended longevity of our products.

Incorporating low maintenance with reduction of noise levels in all of our products.
Ensuring that all of our products are aimed towards the mass market, whilst catering for your own companies needs.

WHO'S WHO:

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ABOUT NUMATIC:

Numatic manufactures

a range of domestic, commercial, industrial cleaning and maintenance equipment for worldwide distribution. Product ranges are successful in both industrial and domestic markets and are best known for their 'Henry' vacuum range. Numatic International currently employs over 700 people, and produce over 4500 products per day.

With Numatic now being a market leader in both the domestic and industrial Clean Care industry, they have recently looked to spread its wings into other markets of expertise in order to expand as a company.

"Our aim is to continue to be innovative, maintain a high standard of quality and to provide good value for money in whatever field we produce products in

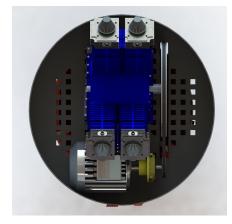
Chris Duncan, Managing Director of Numatic.

DESIGNING FOR NUMATIC:

Numatic has in the past focused their expertise in clean care products. However with the help of Synergy Engineering Solutions we both aim to make a breakthrough in a new exciting range of air compressor products.

Both Synergy Engineering Solutions and Numatic plan to combine key factors of being different in their design, concept and execution, whilst at the same time incorporating a wealth of technology and innovation in every single product of which both companies strive to produce.







SYNERGY-01

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The Synergy-01 air compressor sets an entirely new standard in design and construction of industrial air compressors, built and named by the professional engineering team, 'Synergy Engineering Solutions'. Both SES and Numatic have strived to ensure high performance, coupled with reliability and long service life.

By keeping with the exciting, yet familiar innovative Numatic aesthetics it will be easily recognized as a Numatic product despite the product being in a totally different field to what it is usually seen in.

PRODUCT SPECIFICATIONS:

| MODEL | CFM | AIR CAPACITY | HORSE POWER | BAR | PISTON SETUP | DIMENSIONS |
|------------|-----|-----------------|------------------------|---------------|---------------------------|-------------|
| SYNERGY-01 | 55 | 200 LITRE | 10HP (7.5 KW MOTOR) | 6.45 - 8.5 | 4 CYLINDER ARRANGEMENT | 1.6 x 1.01m |

PRODUCT DESCRIPTION:

The Numatic Synergy-01 offers a combination of performance,

safety and value for money.

The features included in this air compressor that makes the Numatic Synergy-01 one of the most efficient and low maintenance compressors around on the market.

INTERNAL FEATURES:

COMPRESSOR: The compressor is a compact, one stage, four cylinder piston arrangement. The design ensures that all components are user replaceable, therefore meaning lower maintenance costs and time.

AUTOMATIC CLUTCH:

The clutch ensures that less work is exerted on the motor, giving the components a longer life span and lower operational costs. PULLEYS: The design of the pulley wheels are created to act as fans so the air flow around the casing has both natural and forced convection. Therefore every minute there is 2000 litres of cool air passing over the components. Meaning less energy is required ensuring that efficiency is kept at a high level.

EXTERNAL FEATURES:



AIR FLOW: Holes are inserted to the top of the lid to let the hot air escape from the compressor.

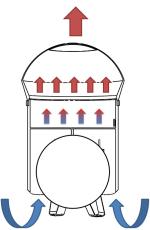
SOUND PROOFING: The casing is padded with acoustic insulating foam to reduce sound levels.

EXTENSIVE RESEARCH LOOKED INTO WHAT WAS THE MOST PROBLEMATIC ASPECT OF AN AIR COMPRESSOR. A RESOUNDING 85% SAID THAT NOISE LEVELS WAS THE BIGGEST PROBLEM.

HANDLES: Rubber handles are indented to the side of the lid so the user will not hurt themselves as they remove the lid.

FILTER: Inserted below the air flow holes so no dust enters the components of the compressor, ensuring maintenance is made just that little bit easier. A filter is also inserted between the casing and the tank.

MATERIAL: The casing and lid material will look familiar to those who know the famous Numatic brand. Use of acrylic structofoam used on their range Vacuum cleaners have been incorporated into the casing. The casing also acts as a passageway for air cool air to find its way up the compressor. *(SEE DIAGRAM)*



GRILL: All internal components are attached to the grill, the grill is a meshed like material which ensures airflow can be kept at an optimized level.

•**POSITIONING:** The spherical shape of the tank means the height of the tank is ergonomically perfect for maintenance, and in turn giving good, easy access to the drainage valve.

TANK: At 55 cubic feet per minute, the 200 litre tank can be filled from empty to full in the space of one minute. This means that workers can use the compressor at the same time in an averaged sized garage of about 4-5 people.

USAGE: To guarantee maximum use of the air compressor, an extra 10% has been added on the cfm to cope with possible leakage that may be caused in the day to day usage of the product.



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