



# ***GUYSON***



# GUYSON BLAST EQUIPMENT

Guyson blast cleaning systems are recognised worldwide as being of the highest quality. They offer a faster and safer alternative to labour intensive operations such as hand deburring, scraping and wire brushing, chemical cleaning, acid etching or dipping, liquid honing, knife trimming, sanding, grinding and many other operations.

They are ideal for component producers, reconditioners and remanufacturers seeking to replace these slower and more labour intensive methods.

There are systems available to suit every application and budget and the purpose of this leaflet is to briefly give details of the different products in our current range.

## How does the blasting process work?

Guyson blasting uses compressed air to propel blast media directly at the component through an exclusively designed blast gun or blast nozzle. These clean and safe operations are housed within an illuminated cabinet from which dust is constantly being removed and the blast media recycled. This provides a continuous and reliable cleaning and finishing system.

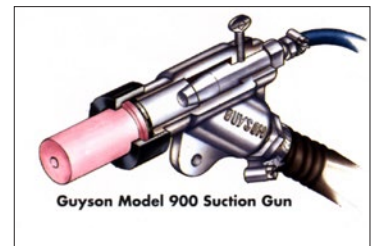
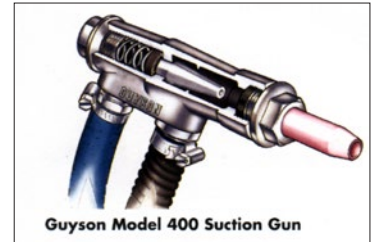
## What types of blast systems are available?

There are two types – suction feed (SF) and pressure feed (PF).

- A suction feed system uses a venturi siphoning action to draw the blast media from a hopper into the compressed air stream within the gun nozzle itself. The air and media pass through the nozzle, to be directed at the component.
- A pressure feed system stores the blast media within a pressure pot. When the pot is sealed, the blast media falls through a valve into a compressed air stream within the blast hose. It is then accelerated through the blast nozzle to impact upon the component.

The pressure feed system produces faster moving blast media and offers cycle times that can be up to four times faster than a suction feed system.

Both methods can use a very wide selection of blast media. By additionally varying the media particle size and the blast pressure used, these two systems can offer a range of finishing from light, delicate work to high production, demanding and aggressive applications.



Pressure Feed Nozzle



## What is a blast system?

A blast system is a combination of various items, which when assembled produce a working system. All that needs to be added to this system is a source of compressed air (see above) and a suitable electrical supply.

Guyson blast systems comprise the following elements:

|                                | Suction Feed              | Pressure Feed |
|--------------------------------|---------------------------|---------------|
| <b>Blast cabinet</b>           | Yes                       | Yes           |
| <b>Blast gun / nozzle</b>      | Yes                       | Yes           |
| <b>Dust collector / filter</b> | Yes                       | Yes           |
| <b>Media cyclone separator</b> | Optional (Euroblast only) | Yes           |
| <b>Pressure pot</b>            | Not applicable            | Yes           |



Suction Feed Formula Blast System



Suction Feed Euroblast Blast Cabinet  
With Side Loader

## How much compressed air is needed?

Guyson suction feed guns use between 8 cubic feet per minute (CFM) or 13.5 cubic metres per hour (CMH) and 45 CFM or 76.5 CMH. (Nominal blast pressure of 80 psi or 5 bar)

- Pressure blast systems can be specified to use between 21 CFM or 36 CMH and 115 CFM or 195 CMH. (Nominal blast pressure of 80 psi or 5 bar)
- As a general rule, the greater the flow of compressed air, the faster the blasting process becomes.

## What standard manual blast cabinet systems can Guyson offer?

There are two standard ranges of manual blast cabinet available, each ideally suited to specific applications and budgets - Formula and Euroblast.

## Formula

This range is perfect for light to medium industrial applications, small workshops and laboratories, garage and maintenance departments, educational establishments and even DIY applications.

Three strong and durable steel constructed cabinets are available, all using the industrial quality model 400 SF blast gun and all using the efficient F41 dust collector.



**Formula 1200**



**Formula 1400**



**Formula 1600**



**Inside a F41 Dust Collector**



**F41 Dust Collector**

These represent excellent value for money and provide Guyson quality at an affordable price.

## What features are available on Formula blast systems?

- Model 400 Blast Gun (trigger operated on Formula 1200)
- Adjustable gun support arm (except Formula 1200)
- Side opening RH door
- Full width viewing window with easy changeable anti-frost sheet
- Internal LED cabinet lighting - with external switch and convenient UK and European single-phase plug design
- Trigger operated airwash gun for component cleaning
- Pneumatic interlock switch on door
- Sealed gauntlet gloves
- Perforated steel floor
- Moisture trap/air pressure regulator
- Baffled air inlet with breather pad
- Quick release mixer box below hopper for rapid media change
- Inter-connecting hose and flanges
- Model F41 dust collector
- Instruction and parts manual plus CE marking
- Electrics : 240 volts, 1 phase, 50 Hz or 380 volts, 3 phase, 50 Hz



## Euroblast

The Euroblast cabinet range provides a solution to every manual blasting problem.

There are seven standard highly durable, sheet steel constructed cabinets available plus a further five application cabinets for more specialised requirements. NEW addition to the Euroblast stable is the Ex range of four ATEX certified blast cabinets.



**Euroblast 2**



**Euroblast 4**



**Euroblast 6**



**Euroblast 7**



**Euroblast 8**



**Euroblast 9**



**Euroblast 10**



**Euroblast Ex 4, 6, 8, 10**

Most of these Euroblast cabinets can be used as either the suction feed (SF) or pressure feed (PF) blast systems.

The range is highly versatile, with exceptional component entry and handling systems being available.

Efficient media cyclone separators are available plus a range of dust collectors to suit every application and throughput.

Quality and flexibility make the Guyson Euroblast range totally unbeatable.

## What features are available on the standard Euroblast SF systems?

- 1 x Model 400 or 900 Blast Gun
- Adjustable gun support arm
- Toughened glass viewing window with quick change protective anti-frost sheet
- Externally mounted fluorescent lighting
- Armhole sleeves and one pair rubber gauntlet gloves
- Full width footpedal for blast gun operation
- Trigger operated airwash gun for component cleaning
- Heavy duty perforated steel floor
- Perforated steel lower floor in hopper
- Air pressure regulator and gauge
- Moisture trap/air input filter
- Pneumatic interlock switches on all doors
- Baffled air inlets with quick change breather pads
- Quick release mixer box below hopper for rapid media change
- Inter-connecting hose and flanges
- Initial spares pack (comprising spare nozzle, airjet and media hose-tail)
- Dust collector to suit blast gun and application
- Full instruction and parts manual plus CE marking
- Electrics : 240 volts, 1 phase, 50 Hz or 380/415 volts, 3 phase, 50 Hz

## What features are available on the standard Euroblast PF systems?

- Tungsten lined blast nozzle
- Toughened glass viewing window protected by fine mesh gauze with quick change anti-frost sheet
- Externally mounted fluorescent lighting
- Armhole sleeves and one pair heavy duty rubber gauntlet gloves
- Black rubber curtain and lining for additional cabinet protection
- Full width footpedal for blast gun operation
- Trigger operated airwash gun for component cleaning
- Heavy duty perforated steel floor
- Perforated steel floor in hopper
- Air pressure regulator and gauge
- Moisture trap/air input final filter
- Pneumatic interlock switches on all doors
- Baffled perforated steel air inlets
- Inter-connecting hoses and flanges
- Media cyclone separator and dust collector to suit size of nozzle and application
- Full instruction and parts manual plus CE marking
- Electrics: 380/415 volts, 3 phase, 50 Hz

## Options available on Euroblast ranges

| Option                                                                 | Benefit                                                                                                                                                                                                                                                                        |                                                                                       |
|------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <b>Media cyclone separator</b><br>(SF range only – standard on PF)     | Improves separation of dust from good blast media prior to media being recycled. This means that the consistency of the finish is improved and the cycle times are maintained, as only better quality blast media is recycled. There is normally an improvement in visibility. |    |
| <b>Fixed position turntable</b><br>(not available on Euroblast 2)      | Enables heavier objects to be turned and positioned within the blast cabinet. Available either with standard painted finish or with blast resistant polyurethane coating.                                                                                                      |   |
| <b>Side loading turntable</b><br>(load is dependent upon cabinet size) | As above but also enables heavy objects to be loaded from a crane or forklift.                                                                                                                                                                                                 |  |
| <b>Sealed lower sieve floor</b>                                        | Useful in application where debris is being removed from the surface of the object being blasted, which could cause blockages to the nozzle.                                                                                                                                   |  |

## Options available on Euroblast ranges (cont...)

| Option                                                                                   | Benefit                                                                                                              |                                                                                       |
|------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <b>Rubber lining to the inside of the cabinet (standard on PF systems)</b>               | Offers further protection to cabinet from overblasting.                                                              |    |
| <b>Polyurethane lining to the cyclone</b>                                                | Wear resistance                                                                                                      |   |
| <b>Solid polyurethane ducting</b>                                                        | Wear resistance                                                                                                      |  |
| <b>Explosion relief panels and secondary filters for C400 &amp; C800 dust collectors</b> | Offers greater safety when the blasting process may potentially cause explosions or create very fine dust particles. |  |



## What sizes are the blast cabinets in each range?

### (A) Formula

| Internal Blast Chamber Size |             |            |            | Overall Height |
|-----------------------------|-------------|------------|------------|----------------|
| Model                       | Height (mm) | Width (mm) | Depth (mm) | Height (mm)    |
| F1200                       | 495         | 600        | 460        | 785            |
| F1400                       | 591         | 815        | 561        | 1527           |
| F1600                       | 770         | 1070       | 760        | 1694           |

### (B) Euroblast

| Internal Blast Chamber Size |             |            |            | Overall Height |
|-----------------------------|-------------|------------|------------|----------------|
| Model                       | Height (mm) | Width (mm) | Depth (mm) | Height (mm)    |
| Euroblast 2                 | 500         | 660        | 480        | 1600           |
| Euroblast 4                 | 715         | 800        | 540        | 1655           |
| Euroblast 6                 | 880         | 1050       | 740        | 1825           |
| Euroblast 7                 | 880         | 1480       | 900        | 1825           |
| Euroblast 8                 | 880         | 1050       | 1050       | 1825           |
| Euroblast 9                 | 1325        | 1200       | 1200       | 2265           |
| Euroblast 10                | 1145        | 1480       | 1480       | 2125           |



**Formula Blast System**



**Euroblast Blast System**

## Dust Collectors

### Model 41

**Filter area:** 1.8 m<sup>2</sup>

**Airflow:** 7 m<sup>3</sup>/min variable by closing an outlet baffle

**Filter type:** 4-off fabric bag filter

**Filter cleaning system:** Manual shake

**Phase:** Single / Three

**Voltage:** 230 / 400

**Cycle (Hz):** 50

**Power (kW):** 0.37

**Full load current\* (amps):** 3.0 (1Ph) / 1.4 (3Ph)

**Dimensions\*\* (H x W x D):** 1041 x 450 x 553



### Model C400

**Filter area:** 10 m<sup>2</sup>

**Airflow:** 11 m<sup>3</sup>/min variable by closing an inlet / outlet baffle

**Filter type:** 1 off Micronic polyester filter cartridge (EPA 12)  
(optional HEPA 14 Secondary Filter available)

**Filter cleaning system:** Manual reverse compressed air pulse (optional automatic reverse compressed air pulse)

**Phase:** Single / Three

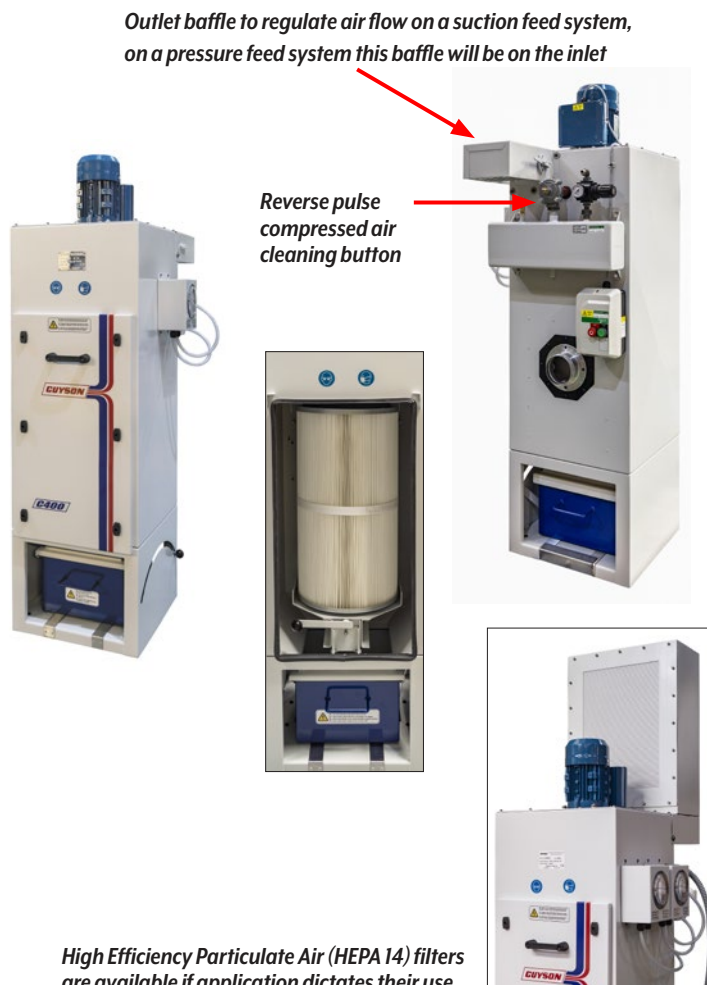
**Voltage:** 230 / 400

**Cycle (Hz):** 50

**Power (kW):** 0.75

**Full load current\* (amps):** 5.5 (1Ph) / 2.0 (3Ph)

**Dimensions\*\*\* (H x W x D):** 1650 x 460 x 770



\* Fuses should be sized to comply with the full load current. When sizing fuses, smallest fuse rating should be used to suit motor and starting characteristics.

\*\* Cabinet only sizes - without electric control box

\*\*\* Includes motor in height

*High Efficiency Particulate Air (HEPA 14) filters are available if application dictates their use*

## Dust Collectors

### Model C600

Depending on the specific zone or environment, this dust collector can be specified with an optional ATEX compliant motor, controls and switchgear.

**Filter area:** 7.5 m<sup>2</sup>

**Airflow:** 11 m<sup>3</sup>/min

**Filter type:** 1 off Micronic polyester filter cartridge (EPA 12)  
(optional HEPA 14 Secondary Filter available)

**Filter cleaning system:** Automatic reverse compressed air pulse

**Phase:** Single / Three

**Voltage:** 230 / 400

**Cycle (Hz):** 50

**Power (kW):** 0.75

**Full load current\* (amps):** 5.5 (1Ph) / 2.0 (3Ph)

**Dimensions (H x W x D):** 2093 x 596 x 595



*C800 with secondary HEPA 14 filter on roof*

### Model C800

**Filter area:** 20 m<sup>2</sup>

**Airflow:** 22 m<sup>3</sup>/min variable by closing an inlet baffle

**Filter type:** 2 off Micronic polyester filter cartridge (EPA 12)  
(optional HEPA 14 Secondary Filter available)

**Filter cleaning system:** Automatic reverse compressed air pulse

**Phase:** Three

**Voltage:** 400

**Cycle (Hz):** 50

**Power (kW):** 1.50

**Full load current\* (amps):** 3.6

**Dimensions\*\* (H x W x D):** 2275 x 700 x 950



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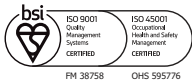
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# Guyson International

## How do I choose the best system for me?

When deciding what blast system is the most suitable, consider the following questions:

- How large and heavy are the components and do they need to be moved within the cabinet?
- How often will the blast system be used?
- Do I have sufficient compressed air available?
- Has the most suitable blast media for the application been evaluated?
- Will excess dust or contamination removed from the surfaces have to be controlled?
- Could the system be used for other purposes once on site?
- Will the system suit my needs in the future?
- Are there any dangers, such as potential for explosions, associated with the blasting process or the location of the equipment?
- Will the blasting process involve aggressive blast media and will wear resistance/maintenance be an issue?

Only you the customer know what budget you have and what your own specific throughput might be but as an example we have tried to provide a representative number of options, available at different price ranges based on broad usage, volume and speed of processing and tried to summarise these for you in the table below.

| Application                   | Model         | Blast Gun  | Cyclone Pressure Pot | Dust Collector | Fixed Position Turn Table | Side Loading Turn Table | Price Range £ | Cleaning Rate Comparison |
|-------------------------------|---------------|------------|----------------------|----------------|---------------------------|-------------------------|---------------|--------------------------|
| Light / Medium workshop use   | Formula FI600 | 400        | No                   | 4IDC           | No                        | No                      | >£3,000       | 60 Minutes               |
| Light / Medium industrial use | Euroblast 6SF | 400        | No                   | 4IDC           | Yes <£700                 | Yes <£2,500             | <£5,000       | 60 Minutes               |
| Medium / Heavy industrial use | Euroblast 6SF | 900        | No                   | C400DC         | Yes <£700                 | Yes <£2,500             | >£6,000       | 30 Minutes               |
| Heavy Duty industrial use     | Euroblast 6PF | 6mm Nozzle | G27 75/16            | C400DC         | Yes <£700                 | Yes <£2,500             | >£10,000      | 10 Minutes               |

**Prices given for guide purposes only and exclude VAT**

**Remember** – Guyson are here to advise you at every stage of your evaluation. Assistance can be given at all times and sample parts processed if required, so that you have complete confidence that your final choice will be the right one. Just contact Guyson Customer Service at any time for friendly and professional advice.