

# EAS SpeedHone

Compact, easy  
operation, precision  
honing for one-off and  
batch production



# Introduction to SpeedHone

SpeedHone is a compact machine with considerable flexibility and capability. With electronic controls, it de-skills the honing process and offers semi-automatic as well as manual operation. Tooling changes are quick and easy, making SpeedHone ideal for one off and batch production work. Honing from 1.14mm - 80mm diameter, with a increment of one micron, it has a stroke length to suit most applications and, with a wide rotational speed range, from 250-2500rpm, it is an essential machine for every tool room.

## Precision Control

### Reliable accuracy and consistency

- Tolerance accuracy to below 2 $\mu$
- One micron adjustment
- Exact cycle times
- Siemens HMI screen
- Precision stock removal

## Operational Efficiency

### Reduced cost per part

- Repeatable full and short stroke to 0.1mm
- Fully adjustable spindle and stroking speeds
- Quick change tooling (optional)
- Push button, closed door, hands-free operation
- Operation by non-skilled workers
- Online diagnostics (via Internet)
- Reduced maintenance
- Extended tool life

## Versatile and Flexible

### Wide ranging application and capability

- From one-offs to batch production (1-100)
- Manual and semi-automatic operation
- Honing diameters from 1.14mm - 80mm
- Blind end bores
- Rotational speed from 250-2500rpm
- Stroke length to suit most applications

\*subject to application



# High quality, high performance, best value



“The value offered by SpeedHone is best measured by the flexibility it affords and the simplicity of its operation. With electronic control, including Siemens HMI, this affordable machine de-skills the honing process and achieves reliable, repeatable precision. A compact machine with big capability.”

Martin Elliott, Managing Director

## Innovative in design, flexible in operation

- Clocking fixture: mandrel trued in by alignment gauge for speed & accuracy
- Foot pedal control function
- Integral coolant system
- Mach 2 LED lighting system
- Lightweight safety interlock guard

## Electronic control system with Siemens' digital HMI

- Conversational programming
- Tolerance accuracy to 0.001mm
- Remote access for assistance, immediate diagnosis, rapid support



## Easy operation

- Operatives can be trained in just one hour
- Can be used in manual, semi-automatic and automatic modes
- Ergonomic controls
- Electronically controlled
- Easy and rapid tool changes (circa 10 mins)
- Multiple changes per day

## Compact footprint, space-efficient

- W: 823mm x D: 1410mm x H: 1331mm
- Can be lifted and relocated on standard pallet truck

# EAS SpeedHone in action

The SpeedHone is fully electronic and so affords the choice of manual, semi-automatic and automatic operations, which de-skills the honing process. Operatives can access the machine's full functionality following just one hour of training. A unique alignment gauge trues the mandrel and speeds up tooling changes. Changeovers can be achieved in just 10 minutes. With two button control panels and simplistic functionality, the operation of SpeedHone is designed to be safe, reliable and ergonomic.

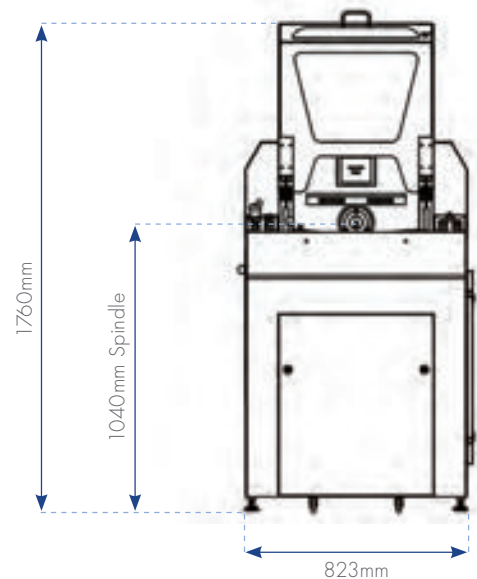
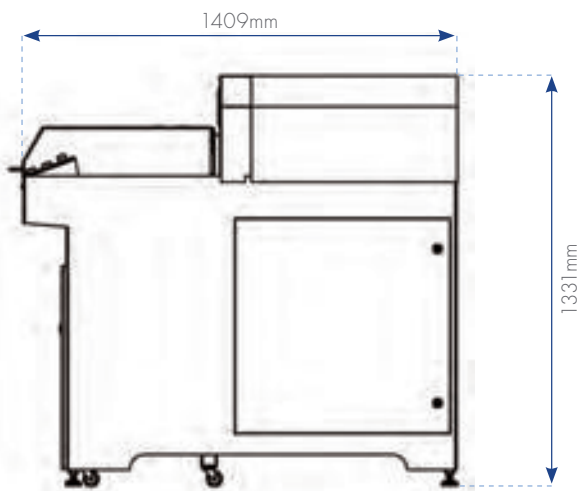
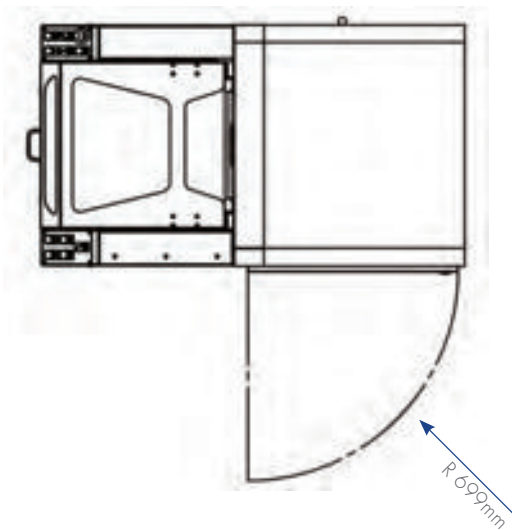
## EAS SpeedHone for

- Honing diameters 1.14mm – 80mm
- Batches of 1-100
- Blind end bores (tolerance within one micron)
- Multiple changes, quick change tooling

## Ideal for

- Bushes
- Sleeves
- Pump bodies
- Valve bodies
- Con rods
- Rocker arms
- Refurbishment of components

Customised tooling and tailor-made abrasives are offered by Delapena to further extend the flexibility of this machine.



## Capacity and Stroke

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|                       |                                    |
|-----------------------|------------------------------------|
| Diameter range        | 1.14 – 80mm                        |
| Maximum stroke length | Fully adjustable (3-250mm)*        |
| Stroking motor speed  | Fully adjustable (1 – 25m/min)*    |
| Stroking motor power  | 3 Nm                               |
| Stroking movement     | Precision reciprocating ball screw |
| Short stroking        | n/a                                |

## Spindle Drive and Stone Expansion

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|                     |                                 |
|---------------------|---------------------------------|
| Spindle speed       | Fully adjustable 250 - 2500 RPM |
| Spindle motor power | 1.5 kW                          |
| Braking             | Dynamic braking resistor        |
| Feed type           | Programmable electro-mechanical |
| Feed rate           | Programmable + timer            |
| Incremental feed    | 1 micron increments per second  |
| Feed movement       | Precision ball screw            |
| Stone pressure      | Programmable to 670N            |

## Electrical Equipment

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|                            |                                                       |
|----------------------------|-------------------------------------------------------|
| Conformity                 | CE approved. Conforms to Machine Directive 2006/42/EC |
| Motor protection category  | IP54                                                  |
| Standard electrical supply | 380 – 415V, 3 Phase, 50Hz                             |
| Control voltage            | 24VDC                                                 |

## Weight

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|       |       |
|-------|-------|
| Net   | 700kg |
| Gross | 850kg |

## Machine

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|            |                                     |
|------------|-------------------------------------|
| Dimensions | 823mm (W) x 1410mm (D) x 1331mm (H) |
|------------|-------------------------------------|

All dimensions are nominal. As a result of our policy of ongoing product development, Delapena reserves the right to revise specifications and design, without prior notice.

\*subject to application

# Delapena offers the complete honing solution

## To optimise performance of the EAS SpeedHone

### Tooling & abrasives

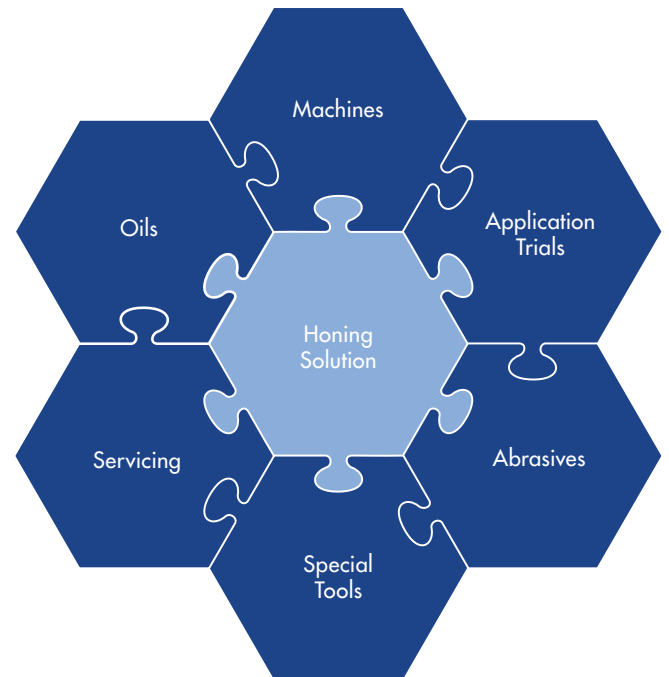
Delapena offers a complete range of horizontal, vertical and heavy duty tooling, plus special tooling which is designed and manufactured to order. Our tooling is supported by a full range of Standard and Super Abrasives to satisfy the most demanding requirements for the honing process, providing size, geometry and surface finish.

We also provide a professional refurbishment service for all variants of honing heads, to support your preventative maintenance programme.

### Oils

We offer a range of high quality oils that focus upon:

- Improved surface finish
- Reduced environmental impact
- Improved operator health and safety, with low misting additives
- Improved lubricity, for reduced tool wear, better surface finishes and consistency for components
- Improved oil longevity for better value



## To support use of the EAS SpeedHone

### Application trials

Each application trial includes data on surface finish, cycle times, abrasives and the best honing solution for the job.

### Commissioning

Every machine is commissioned by a Delapena engineer who manages the set up and provides training for all operatives.

### Training & continued education

To support clients to meet their Health & Safety requirements, we offer training as required for machine operatives. This is tailored to the specific client's requirements.

### Maintenance

The name Delapena is synonymous with reliability and the EAS SpeedHone is designed to be virtually maintenance free, with only annual checks required to ensure optimised operation. For reduced cost and downtime, the EAS SpeedHone can be remotely accessed via an internet connection to the Siemens control unit. This enables global remote access for assistance, immediate diagnostic assessment and rapid support.

## The wider range



E1000S

### ProductionHone Mini

Competitively priced NC controlled horizontal honing machine for the production of small to medium sized batches.



E2000S

### ProductionHone Maxi

The next step up from the ProductionHone Mini, offering increased capacity and torque, the ProductionHone Maxi is used for bores up to 80mm diameter. A NC controlled horizontal honing machine with a wide range of rotational and reciprocation speeds, allowing the workpiece to automatically stroke over the tool.



E2000S-XL

### CalibreHone

An innovative long bore precision honing machine, designed specifically to hone straight and tapered bores at lengths up to 1200mm. The CalibreHone (E2000S-XL) achieves tolerances and geometries to below  $2\mu$ , for diameters up to 50mm.



### PowerHone

A competitively priced vertical honing machine for large and heavy components in small to medium sized batches and one-offs. Suitable for both through and blind bores, producing an excellent surface finish and repeatability. Designed and engineered for durability, efficiency and economical honing.



E3000S

### PrecisionHone

A high precision vertical honing machine with wide ranging capability to hone parts from small scale to heavy components, with a diameter range of 1.14mm to 80mm (subject to application) and a tolerance accuracy to 0.001mm, with sub-micron adjustment.

# Honing excellence

Part of Delapena Group, Delapena Honing Equipment is an innovator in the design and manufacture of high precision, technically advanced honing machines. Our company has an impressive history that spans over 85 years and we are exceptionally proud of our heritage. The name Delapena is synonymous with quality and is often used as a verb in the engineering world as the definitive for honing.

Today Delapena is recognised as a master in the honing market, operating internationally to offer complete honing solutions that include not only a range of technically advanced machines, but also the tooling, fixtures, abrasives and other consumables that optimise their performance. From manually operated machines to fully automated systems with Siemens electronic controls, Delapena offers a solution for every honing need and our customers rely upon our trusted expertise to optimise their process and surpass their objectives.



To learn more about the EAS SpeedHone or any other products and services from Delapena Honing Equipment please visit [www.delapena.co.uk](http://www.delapena.co.uk)

For further details or a quotation call **+44 (0) 1242 516341** or email [sales@delapena.co.uk](mailto:sales@delapena.co.uk)

## Delapena Honing Equipment Ltd

The Runnings | Cheltenham | Gloucestershire | GL51 9NJ | UK  
Tel: +44 (0)1242 516341 | Fax: +44 (0)1242 221246  
[sales@delapena.co.uk](mailto:sales@delapena.co.uk) | [www.delapena.co.uk](http://www.delapena.co.uk)



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