TubeHone

dynamic/commanding/dominant

designed for safe, robust, and powerful honing





TubeHonei Hone Technology



Welcome to the delapena group

delapena group are leading honing specialists in the UK and around the world.

We design and manufacture a wide range of standard and bespoke honing machines, tooling and abrasives for the Automotive, Aerospace and other manufacturing sectors.

Our services include application development, bespoke tooling design, process engineering, tooling refurbishment, maintenance, consultancy and training.



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Introducing the PrecisionHone

Developed by delapena`s expert engineers, this machine joins our suite of electronically controlled state-of-the-art honing machines.

The TubeHone is the ideal machine for cylinders up to 4m in length. Our standard TubeHone hones up to 650mm bores, with bespoke machine options up to 1m diameter.

The powerful motors make for rapid stock removal and a belt drive system reduces noise with a more rigid stroke. With failsafe interlocking guarding ensures operator safety and health & safety compliant.

dynamic/commanding/dominant

"For longer cylinders, the TubeHone offers robust and powerful honing in the horizontal plane. This machine is sophistication in design, yet simple and safe in operation. It consistently precision hones parts in batch quantities, at a scale of up to 1m in diameter and 4m in length. TubeHone achieves rapid stock removal, down to tolerance of 10 microns."

Martin Elliott, Managing Director



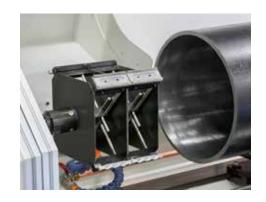


iHone is delapena's icon based software providing the operator with a conversational touchscreen interface. Featuring clear graphics for quickly and easily defining honing parameters.













Features & benefits

Safe, precise control – reliable accuracy and consistency

- Auto-shutoff guarding for operational safety
- Push button, automatic operation
- Electronic control system with Siemens components
- User-friendly control panel with digital cycle timer
- Hands free operation

Operational efficiency – reduce cost per part

- Belt drive system for reduced noise and rigid stroke
- Integral magnetic filtration and paper band filtration
- Rapid stoke removal
- Quick and easy set up
- Automatic feed system as standard

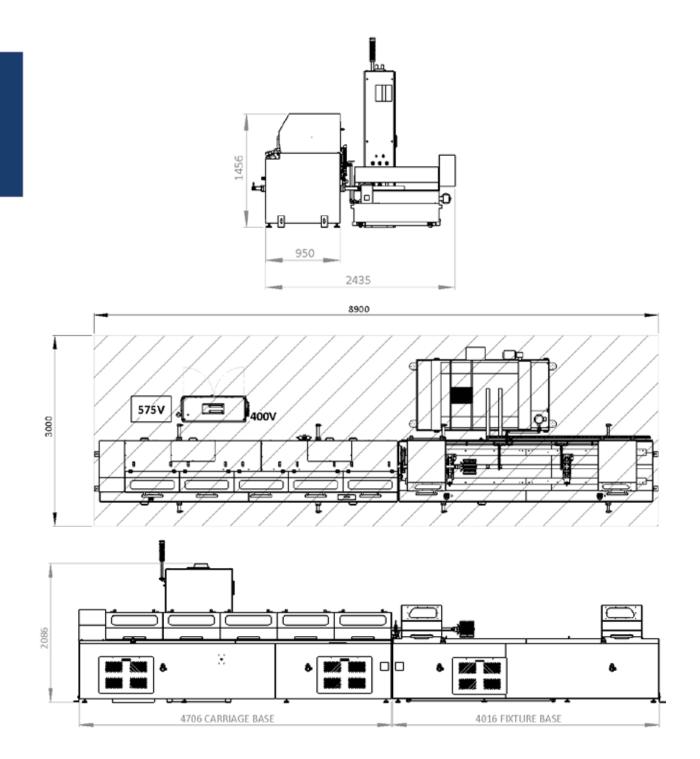
Versatile & flexible

- Standard TubeHone 2m or 4m variants
- Bore diameter of up to 650mm, as standard
- Bespoke option of up to 1m bore diameter
- Tolerance accuracy to 0.010mm

pioneering the way forward in honing

Floor plan

dynamic commanding dominant



Technical specification

Capacity and stroke

Diameter range up to 650mm standard – up to 1000mm on request

Maximum stroke - 4000mm

Stroking motor speed -0 - 25 metres/minute (infinitely adjustable*)

Stroking motor power – 3.0kW geared motor driving carriage via duplex chains.

Spindle Drive and Stone Expansion

Spindle speed – 0-250rev/min (infinitely adjustable?

Spindle motor power – 4.0 kW geared motor

Standard – delapena automatic friction feed system

Electrical Equipment

Conformity CAUK/CE approved. Conforms to BSEN60204 and BS7671

Motor protection category IP54

Standard electrical supply 380 – 420V,3 Phase, 50Hz

Control voltage 24VDC

Coolant system

Internal fluid system – 280 litre tank with integral weirs and in-line filter

Fluid pump - 1.6kW

Weight

Subject to application

Machine Dimensions

Subject to application

intelligent honing

delapena brings you iHone; a graphical icon based machine interface designed to simplify the process of programming our honing machines. Using Siemen's touchscreen technology we now offer a conversational style interface that is easy to use, but still packed with features.

Much of our honing knowledge and best practices are baked into the iHone system, included are on-screen help pages enabling the operator to diagnose geometry and finish issues on the machine. The controller allows for extensive program storage enabling fast setup of repeat work maximising productivity.















intelligent honing

Large icon based function keys allow you to modify honing data on the fly and access in-process features.

In process monitors allows you to determine machine status at a glance from motor torques to cycle-time monitors.

Programs can be stored for later recall facilitating minimum set up time for repeat work.

Parameters are entered in a logical order and all pages accompanied by clear graphics to highlight the effect of each parameter.

The lower panel contains primary functions such as cycle time, mode select & emergency stop buttons.

All this is facilitated by a Seimens touchscreen panel that can be maneuvered to suit the operator.

delapena

complete honing supplier

Tooling

At delapena we design, manufacture and supply a wide range of honing tools for our own machines as well as specialist fittings for many other manufactures machines. We also provide a range of manual held tooling.

Tooling Refurbishment

Our honing tool refurbishment service covers all aspects of the tooling from full refurbishment of the honing tool to manufacturing new tools and spares.

delapena refurbishes honing tools for Automotive OEMs and has recently been extensively expanded to cope with the new demand.

Currently the department services Gehring, Nagel and Diahon tools.

Sintering

delapena sintered products is the UK's specialist research and development facility for the honing market, producing specific super abrasives for customers' applications.

In a state-of-the-art production facility, first class standards are applied throughout the entire process, with complete traceability, from mixing and dosing powders to specialist sintering and quality control.















PrecisionHone

flagship/advanced/accurate

Our flagship machine, the PrecisionHone is a vertical honing machine for production honing of small parts. Accurate and packed with features, for large batch work and tight tolerances the PrecisionHone is the machine of choice. Now featuring our iHone technology; enabling ease of use and fast set up.

PowerHone

precise/efficient/versatile

The PowerHone E is a vertical honing machine for large and heavy components in small to medium size batches and prototypes. Sturdy machine design, accurate and repeatable stoking movement.

ForceHone

rapid/powerful/robust

The ForceHone is the big brother to the SpeedHone, featuring faster drives and more powerful motors for small to medium parts and increased productivity gains.





The wider range

Selection of new generation honing machines

Our range of honing machines are user-friendly and versatile, producing consistently high-quality results. delapena honing machines feature control systems that allow for easy setup and storage of programs, with our iHone software making this easier than ever before on our range of new flagship machines.

delapena honing machines can be found in businesses all over the world. We provide comprehensive support, training, and guidance throughout commissioning and beyond.



i Hone Technology



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