

# TubeHone

Long bore length  
cylinder honing



# Introduction to TubeHone

TubeHone is safe, robust and powerful; 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. Powerful motors make for rapid stock removal and a belt drive system reduces noise with a more rigid stroke. Failsafe interlocking guarding ensures operator safety.

## Safe, Precise Control

### Reliable accuracy and consistency and safety

- Auto-shutoff guarding for operational safety
- Push button, automatic operation
- Electronic control system with Siemens components
- Tolerances down to 0.010 mm



## Operational Efficiency

### Reduced cost per part

- Delapena HD oil for all round lubrication
- Belt drive system for reduced noise and rigid stroke
- Integral magnetic filtration and paper band filtration
- Rapid stock removal



## Versatile and Flexible

### Wide ranging application and capability

- Standard 2m or 4m length variants
- Bore diameter of up to 650mm, as standard
- Bespoke option of up to 1m bore diameter
- Accommodates standard and HD tooling



# TubeHone: Safe, robust, powerful



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

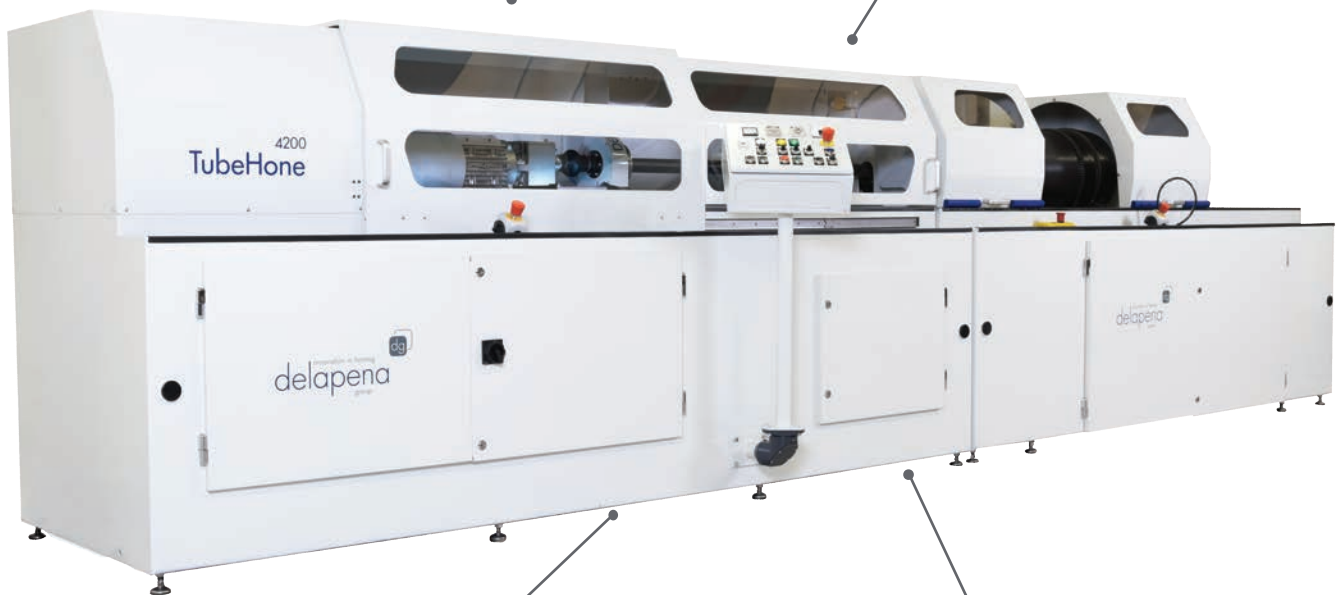
Martin Elliott, Managing Director

## Innovative in design, powerful in operation

- Standard 2m or 4m cylinder length machines
- Up to 650mm bore as standard, with up to 1m by bespoke design
- Uses Delapena standard or HD tooling

## Push button controls with Siemens components

- User-friendly control panel with digital cycle timer
- Tolerance accuracy to 0.010 mm



## Operational Efficiency

- Quick and easy set up
- Automatic feed system as standard
- Powerful motors for rapid stock removal
- Reinforced braded belt stroke system for ridged stroke
- Operation by non-skilled workers
- Delapena HD oil gives better all-round lubrication for improved operation

## Workforce safety

- Failsafe auto-stop guarding
- Hands-free operation
- Closed door, push button , automatic operation

# TubeHone in Action

## TubeHone for

- User-friendly control panel with digital cycle timer
- Accurate and repeatable stroking movement
- Fully adjustable spindle and stroking speeds
- Automatic feed system as standard

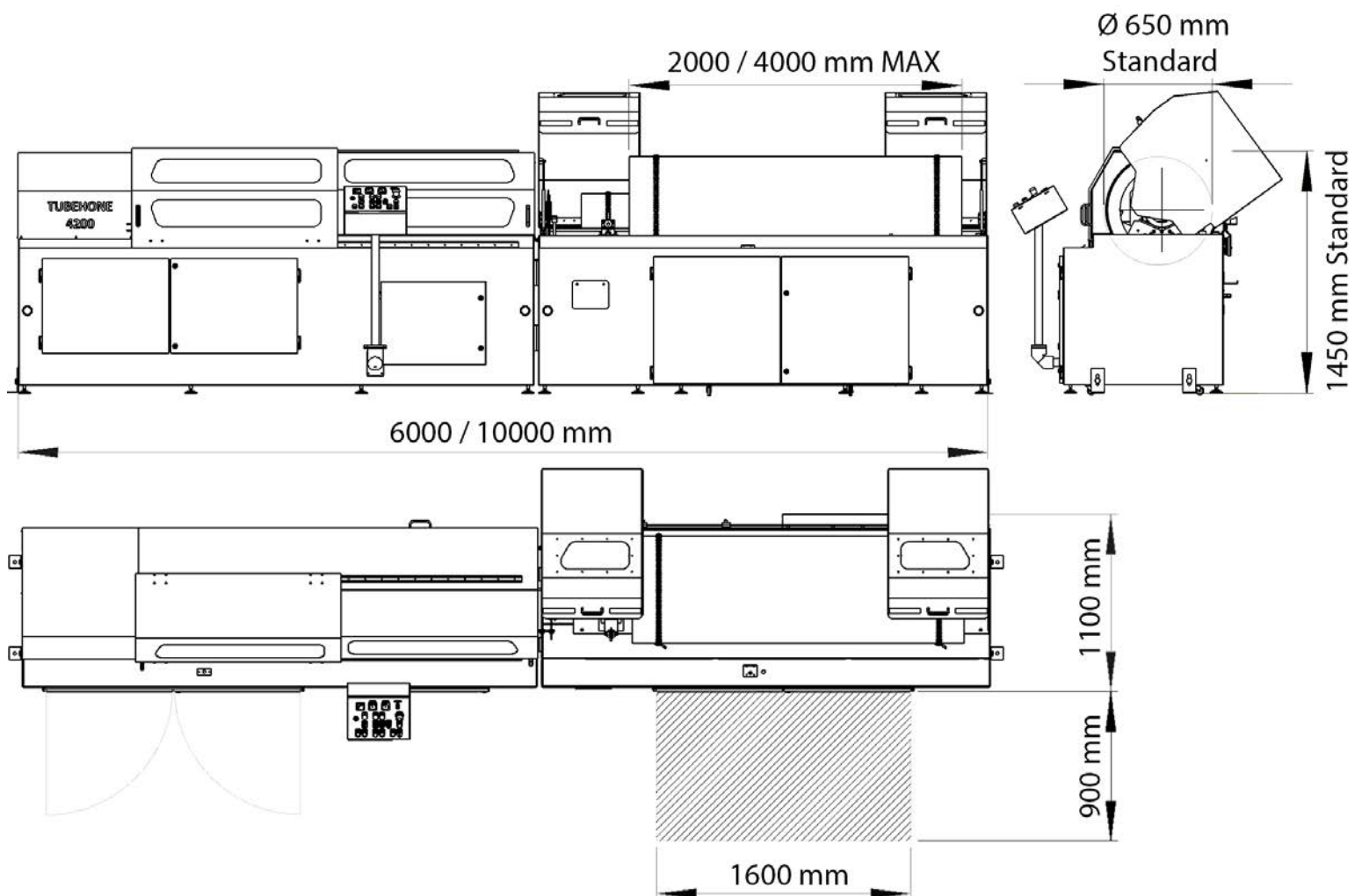
## Ideal for

- Oil and Gas
- Marine
- Hydraulics

## Typical applications

- Cylinder liners
- Pump bodies
- Hydraulic cylinders
- Large valve bodies
- Compressor bodies

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



# Technical specifications

## Capacity and Stroke

Diameter range	Up to 650mm standard - Up to 1000mm on request
Maximum stroke length	4000mm
Stroking motor speed	0 – 25 metres/minute (infinitely adjustable)*
Stroking motor power	3.0 kW geared motor driving carriage via duplex chains.

## Spindle Drive

Spindle speed	0 – 250 rev/min (infinitely adjustable)*
Spindle motor power	4.0 kW geared motor

## Stone Expansion

Standard	Delapena Automatic Friction Feed System
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## Coolant System

Internal Fluid System	280 litre tank with integral weirs and in-line cartridge filter
Fluid Pump	1.6 kW

## Electrical Equipment

Conformity	CE approved. Conforms to BS EN 6024 and BS7671
Motor protection category	IP54
Standard electrical supply	380 – 420V, 3 Phase, 50Hz
Control voltage	24VDC

## Weight

Net	Subject to application
Gross	Subject to application

## Machine

Dimensions	Subject to application
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## Freight packaging

Dimensions	Subject to application
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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.

### After Sales Support

Having been at the forefront of honing technology for over ninety years, we continue to lead the way. Our equipment is backed by a comprehensive tooling service and an extensive range of consumables. Whatever your tooling requirement we are best placed to deliver solutions quickly and competitively. Delapena also offers a process trial and prototype service to help you meet your customers' exacting specifications. Delapena is committed to providing the very highest levels of after sales service and support.

\*Subject to honing application

# Delapena offers the complete honing solution

## To optimise performance of the TubeHone

### Tooling & abrasives

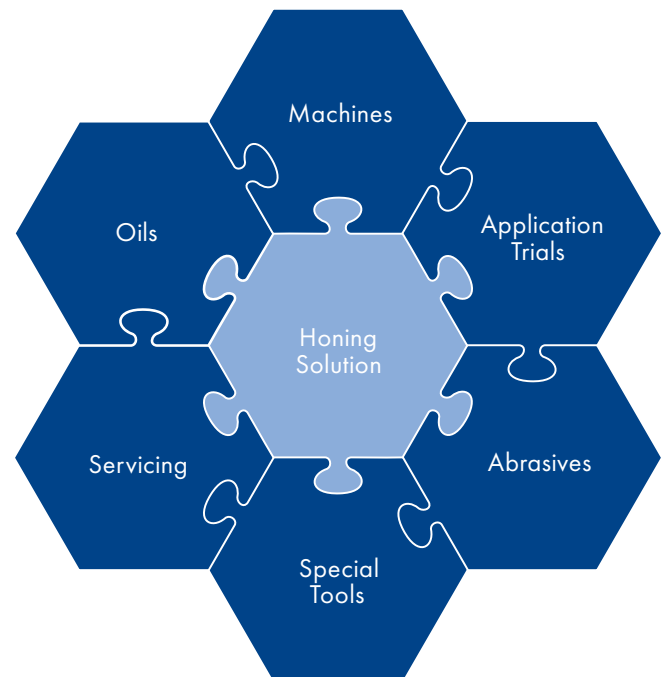
Delapena offers a complete range of horizontal, vertical and heavy duty tooling, plus special tooling which is designed and manufactured to order. Our tooling is supported by a full range of Standard and Super Abrasives to satisfy the most demanding requirements for the honing process, providing size,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

### 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 TubeHone is designed to be virtually maintenance free, with only annual checks required to ensure optimised operation.



## 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. An 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

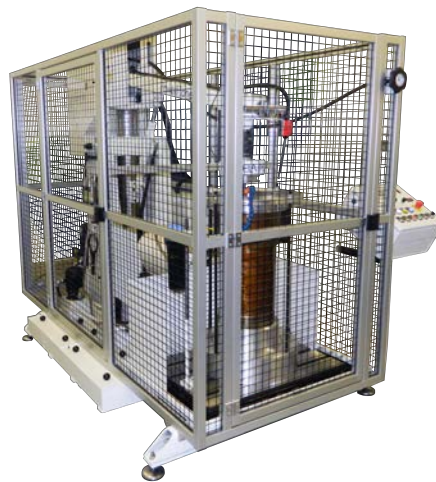
An innovative long bore precision honing machine, designed specifically to hone straight and tapered bores at lengths up to 1200mm. The CalibreHone (E2000S-XL) achieves tolerances and geometries to below  $2\mu$ , for diameters up to 50mm.



EAS

### SpeedHone

SpeedHone is a compact, electronically controlled machine that simplifies the honing process. Tooling changes are quick and easy, making SpeedHone ideal for one off and batch production work. With enormous flexibility, SpeedHone is an essential machine for every tool room.



### 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 all over the world

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 TubeHone 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)**

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