

Your Unison and Ingenium Integration key contacts

Steve Haddrell

Southern England, Midlands,
Wales and Ireland
SteveH@unisonltd.com

Steve Chambers

Northern England and Scotland
SteveC@unisonltd.com

Stuart Singleton

North America, Mexico and Brazil
StuartS@unisonltd.com

Unison UK

Faroe House,
Thornburgh Road,
Scarborough, YO11 3UY
Tel: +44 (0) 1723 582 868

Office 22,
The Rural Innovation Centre,
Avenue H,
Stoneleigh Park,
Kenilworth, CV8 2LG

Unison USA

232 Slayton Ave.,
Suite 102,
Danville,
VA 24540,
USA
Tel: +1 (828) 808 4286

Ingenium Integration

The Forum,
Tameside Business Park,
Windmill Lane,
Denton, M34 3QS
Tel: +44 (0) 1723 580 163

E: sales@unisonltd.com
www.unisonltd.com

E: sales@ingeniumintegration.com
www.ingeniumintegration.com



As we are committed to continuous improvement, machine specifications are subject to change



Tube Bending / Laser Cutting / Automation & Control
Global Service / Support & Training

Let's shape

your success



Forming lasting partnerships - globally

There may be imitations, but there's only one Unison: the inventors of all-electric tube manipulation.

Around the globe, across all manner of industries, we're the byword for ultra-precise tube and pipe bending.

After manufacturing the world's first all-electric tube bender in 1994, we built the first all-electric multi-stack bender, then the world's largest all-electric tube bender for the shipbuilding industry.

Today, we offer the largest range of all-electric benders for diameters from 4 mm (5/32") to 275 mm (10" pipe).

You'll find our machines in aircraft manufacturing and MRO, marine, motorsport, oil & gas, architecture and precision engineering.

In fact, you'll find them in virtually every industrial sector that's involved in tube manipulation, where accuracy, repeatability and rapid setup are key - and where first-class support is valued.

Always innovating, we've further improved our industry-leading Unibend control system to deliver machine performance enhancements of up to 25%.

We've launched a new range of hybrid tube bending machines to make Unison quality, reliability and support available to a wider number of companies.

And, if all that wasn't enough, our sister company, Ingenium Integration, has become the official UK and Ireland distributor for Nukon fibre laser 2D, 3D and tube cutting machines.

In short, whatever your tube bending or laser cutting needs, it's more than likely we've the precise machine you're looking for... complete with uncompromising levels of support.

Key industries we work with



marine



oil & gas



aerospace



motorsport



architecture



' Tool changes are rapid, programming is incredibly user friendly, and the automatic setup ensures uncompromising levels of accuracy.'

Precision fabrications and thermal management systems specialist

' Our Unison Breeze machines have more than proved themselves since they were installed, in terms of reliability, accuracy, repeatability and capability. '

Leading performance exhaust system manufacturer

Unison Breeze Ultra-precise and all-electric

Breeze by name. Breeze by nature.

Widely regarded as 'the ultimate tube bending machines for specialist manufacturers and subcontractors', every model in the Unison Breeze range features all-electric operation, fully automated setup and our advanced Unibend control for right-first-time repeat sub-contract work, or immediately after producing a single trial part.

Add exceptional power and robust build quality and Unison Breeze machines make light work of challenges where other machines may struggle.



**Unison Breeze
20 mm all-electric CNC
tube bending machine**



At-a-glance

- *British-built, all-electric CNC tube and pipe bending machines*
- *Models from 4 mm (5/32") to 275 mm (10" pipe)*
- *User-friendly Unibend control for faster, right-first-time tube bending*
- *Single-stack, multi-stack, twin-head and pinball machines*
- *Opt2Sim CAD simulation software*
- *Single machines to fully automated work cells*
- *Fully automatic setup for rapid tool changes and increased productivity*
- *Exceptional power and robust mechanical design*
- *Unique mechanical and software design for easy manipulation of difficult materials*
- *Laser springback correction system for simple small batch production and reduced waste*
- *Up to 90% lower power consumption, noise and waste compared to traditional hydraulic tube bending machines*
- *From the inventors of all-electric tube manipulation*



Unison Synergy Hybrid multi-stack tube bending machines

If you aspire to Unison quality, but carry out repetitive tube bending that doesn't typically demand the rapid setup times and all-electric operation of our Breeze machines, it's time to discover Synergy.

New for 2022, Unison Synergy machines combine electric and hydraulic operation with exceptional levels of control, user-friendly features and robust build quality at a lower entry point.



**Unison Synergy
50 mm hybrid CNC
tube bending machine**

At-a-glance

- Hybrid multi-stack tube bending machines
- 50 mm or 80 mm collet capacity
- Exceptional power and rigid mechanical design
- Three-stack, multi-stack capability
- User-friendly Unibend Lite touchscreen control system
- Eaton hydraulics and Yaskawa motors and drives
- 3D component simulation and measuring machine interfaces
- Renowned Unison quality and reliability
- Designed for repetitive tube manipulation operations
- Servo-driven bend arm, carriage, plane of bend and carriage side shift
- Unison quality at a highly accessible price

' Synergy buyers benefit from exceptional levels of control and functionality. Synergy tube benders may be lower priced than our Breeze machines, but that's not at the expense of quality. '

Alan Pickering
Joint Managing Director, Unison Ltd



' Our challenge was to find a range of laser machines that mirrored the uncompromising levels of accuracy, reliability, build quality and support that are synonymous with the Unison name. We have found that in Nukon. '

Steve Haddrell
Sales Manager, Ingenium Integration

Gain the cutting edge

Nukon fibre lasers from Ingenium Integration

Precision tube bending and laser cutting go hand in hand. It's for that reason our sister company, automation specialist Ingenium Integration, has become the official UK and Ireland distributor for Nukon's high quality, highly accessible laser cutting systems.

If that wasn't enough to tempt you, purchasing a Nukon fibre laser machine from Ingenium Integration also means receiving the same uncompromising standards of service and support as enjoyed by owners of Unison tube bending machines.

At-a-glance

- Nukon fibre laser 2D, 3D and tube cutting machines
- Accessible high power and high performance
- Single machines to fully automated work cells
- nLIGHT fibre lasers with adaptive beam optimisation
- Lantek Expert software - one of the most advanced CAD/CAM nesting software packages available
- 2D machines for first-time laser users, businesses adding value to in-house products, and high-performance machines for demanding flat-bed cutting requirements
- 5-axis machines for the most challenging of applications
- Pipe, profile and flat metal sheet cutting solutions
- Fully automated loading and unloading technologies
- Only from Ingenium Integration in the UK and Ireland



Nukon Eco Speed Pro Line 2D fibre laser machine

NUKON[®]

 **ingenium**
integration

Shaping your success

Unibend control

Since its launch in the early 1990s, our user-friendly Unibend control system has been recognised as the industry-leading tool for precise tube and pipe manipulation.

Unibend is continually updated to bring maximum efficiency, simplicity and productivity to tube and pipe bending operations. In fact the latest version of Unibend offers Unison Breeze users performance enhancements in the region of 25% to tube manipulation cycle times.

Precision tooling

Purchasing tooling with your Unison machine means having the precise tooling you need.

Choosing Unison tooling means de-risking your process, as we'll ensure it fits easily and makes parts accurately.

Our technical team can also customise tool mounts, making it simple and straightforward to use new tooling easily with existing equipment.

With innovations such as quick-change collets and mandrels, and bar-coded tooling for automated setup, we save you time and money - and remove the risk of errors during changeovers.



Unibend:
user-friendly, high-
performance control

EvBend

Designed for low volume, high-accuracy production and prototyping, Unison EvBend 1000 and 2000 machines are CNC-controlled, manually operated 3-axis mandrel models offering accurate multi-plane bending at a lower cost than many CNC benders.

Widely used across aerospace, Formula One and the oil & gas industry, EvBend machines provide precision bending of tube of up to 50 mm diameter.

The EvBend CNC control includes a PC-based 15" touchscreen and is capable of processing up to 100 bends per component.

Automation and integration

The automation arm of the Unison family, Ingenium Integration creates the automation solutions that help manufacturers improve productivity, efficiency and quality.

Working in highly regulated sectors, such as aerospace, automotive, food & beverage, nuclear, shipbuilding and oil & gas, Ingenium Integration streamlines production to enable leaner manufacturing.

Depending on customer requirement, the company's fully automated work cells can include tube bending solutions from Unison Ltd, laser cutting technologies from Nukon, sophisticated jigs and fixtures, remote handling, robotised cells with transfer systems, tooling verification with remote diagnostics, and automated flow lines.



Precision
tooling



Opt2Sim

Ideal for 'Design to Manufacture' production strategies, our sophisticated Opt2Sim tube bending simulation software uses machine and component data to provide a precise virtual insight into the tube bending process - before you bend a single part.

Coiling machines

Fully programmable in speed, profile and pitch, our all-electric CNC Breeze coilers produce precise helical and pancake coils that are widely used in heat exchangers.

Tube washing machines

Used to ensure a spotless tube finish, Unison tube washing machines can be found in a wide range of industries, particularly oil & gas.



Service and support

First class service and support come as standard when you're a Unison or Ingenium Integration customer.

From making sure your teams are trained to get the maximum from your new Breeze, Synergy or Nukon machine, to advising on your manufacturing challenges and providing prompt maintenance, spares and consumables... we're here to help you every step of the way.

Sawing solutions

Our fully automatic rising saws feature a proven design for the most demanding tube-sawing applications.

Standard features include hydraulic clamp, variable blade speed and dynamic cutting feed.

End forming

Unison all-electric end forming machines feature fully automatic setup for simple and straightforward tube end expansion, reduction, beading, flaring, crimping and swaging.

