



# Introduction



# Falcon ATC CNC Routers, Fast and Affordable.

Competitively priced CNC routers. At Mantech we understand the need for exceptionally good after-sales service that's part of our mantra, 'Affordable Machinery, First Class Service. Now with 2 years warranty.

The Falcon ATC CNC Router is the perfect choice for any workshop. With its automatic tool change feature, you can quickly and easily switch between tools for maximum efficiency. Its impressive performance and competitive price make it an ideal choice for any project.

The Falcon is an industrial CNC router, built to last and capable of automatic tool change functions. This CNC router offers all the essential features you need without any unnecessary extras, making it easy to operate. With full control over automatic tool changes, businesses can increase their productivity and output. If you're seeking a dependable and well-built automatic tool change CNC router, the Falcon should be at the top of your list of CNC Routers.

All Falcon ATC CNC Routers can be configured with a HITECO 9 position vertical drill bank or an Oscillating Knife System for increased versatility.

Why not call us today and book your very own personalised demonstration?

• Custom Joinery

• Personalised Products

Camper Conversions

Product Design

Education

1 Industrial Design

• Point of Sale • Custom Furniture

Plylining

• Woodwork

Architectural Design

Fabrication

Signmaking

Shopfitting

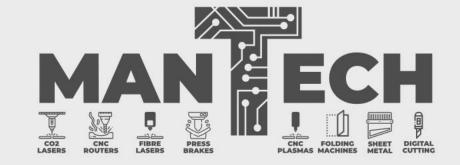
Aerospace

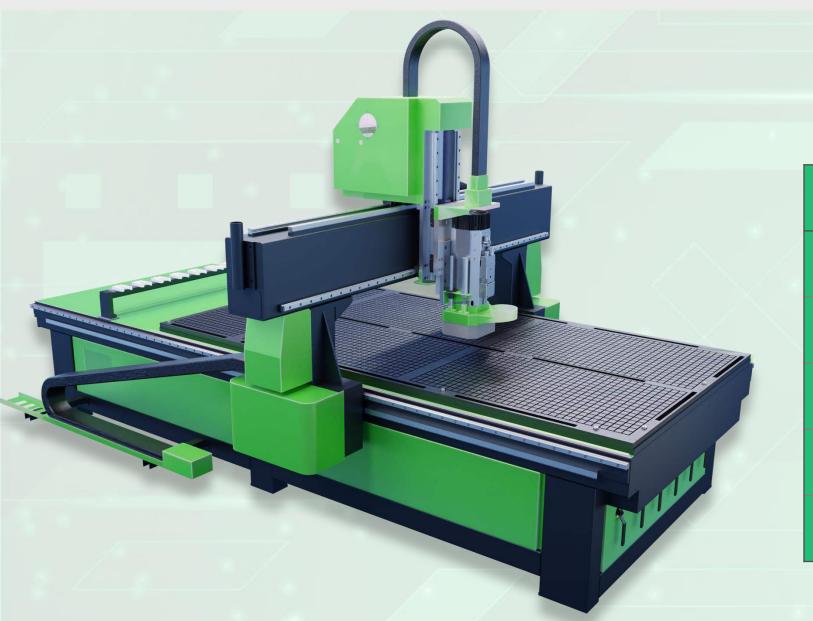
Marine Applications

⊕ Bespoke Products ⊕ Automotive ⊕ Set Design



## Falcon Models





Falcon CNC Routers are available in a range of standard bed sizes (custom sizes may be available upon request)

Model	Bed Size (mm)	Electrics	Spindle size (kW)
Falcon 1313	1300 x 1300	3-Phase	9.0 Air Cooled
Falcon 1325	1300 x 2500	3-Phase	9.0 Air Cooled
Falcon 1530	1500 x 3000	3-Phase	9.0 Air Cooled
Falcon 2030	2000 x 3000	3-Phase	9.0 Air Cooled
Falcon 2040	2000 x 4000	3-Phase	9.0 Air Cooled

The **Falcon ATC CNC Router** is the perfect choice for any workshop. With its automatic tool change feature, you can quickly and easily switch between tools for maximum efficiency. Its impressive performance and competitive price make it an ideal choice for any project.

#### **Affordable**

The Falcon CNC Router range includes high-quality, reliable components, yet this truly industrial CNC Router still comes with a highly competitive price tag.

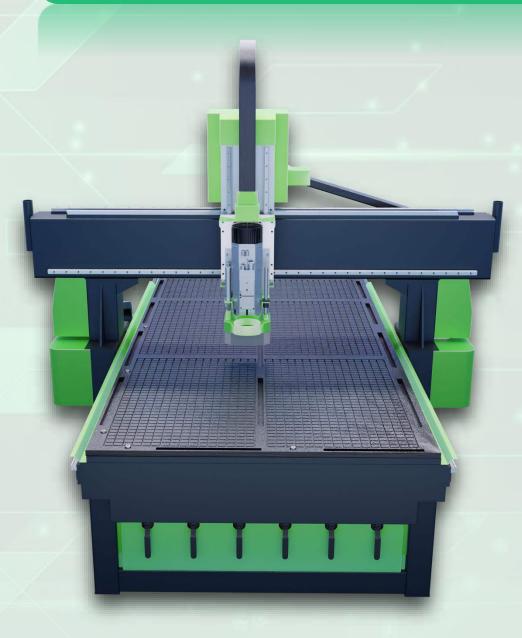
#### Automatic Tool Change

Fast auto tool changes at a cost less than most competitors' manual-based machines, allowing you to enjoy production time savings for less.

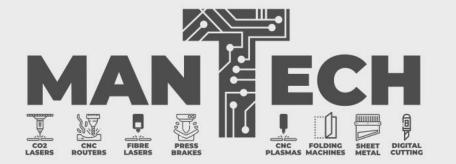
## **Easy to Operate**

Impressive performance doesn't have to be hard to achieve, that's why we introduced our easy-to-use Falcon range, making this CNC router cinch to use.





# **Main Features**



With our range **starting at only £16695 plus VAT** the Falcon offers our customers a high-performance, servo-driven automatic tool change system at an affordable price point for businesses looking for a versatile, industrial CNC Router thats built to last.

**Finance Options are available.** Why not spread the cost of your machinery purchase? Our finance partner Percy Finance Ltd is an appointed representative of AFS Compliance Ltd which is authorised and regulated by the Financial Conduct Authority. Firm number 625035, Percy Finance Ltd is a franchisee of Asset Finance Solutions (UK) Ltd.

#### **Easy to Operate**

Control your CNC router via the easy-touse DSP hand controller. Import files via USB Stick. You can control all aspects of your machine using by using a small easy to handle pendant system.

#### **Software Included**

Vectric V Carve Pro with all of our Falcon's, Industry-leading software that's easy to use and comes with all of the features you need from design and nesting to tooling configuration.

## **Powerful Spindles**

At the heart of the Falcon is an air-cooled 9kW high-performance HQD auto tool change spindle with **x10 tool positions** as standard.

#### **T-Slots**

Clamp awkward and warped materials using the built-in T-slot clamping system. This in addition to the included vacuum holding method.

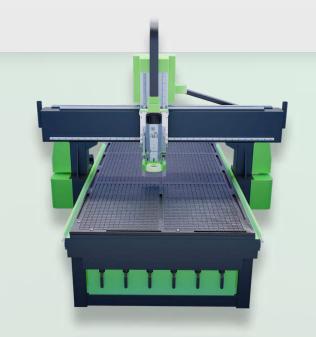
#### **Industrial Build**

Industrial build quality, enabling firstclass output and longevity, yet offering superb value. Our Falcon comes with a **300mm bridge for extra versatility.** 



#### Reliable

Simple controls, easy to use and reliable. The Falcon range offers our customers an excellent user experience.



#### **Servo Driven**

The Falcon range also comes with Delta Servo Drives and offers extremely accurate positional performance.

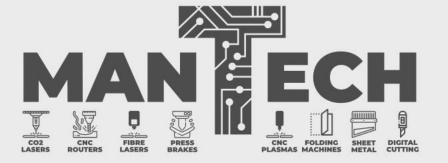


#### **Vacuum Holding**

Powerful vacuum systems enable efficient holding of materials. Vacuum pump/s included (qty is model dependent).

**Incredible Performance** 

Impressive Value For Money

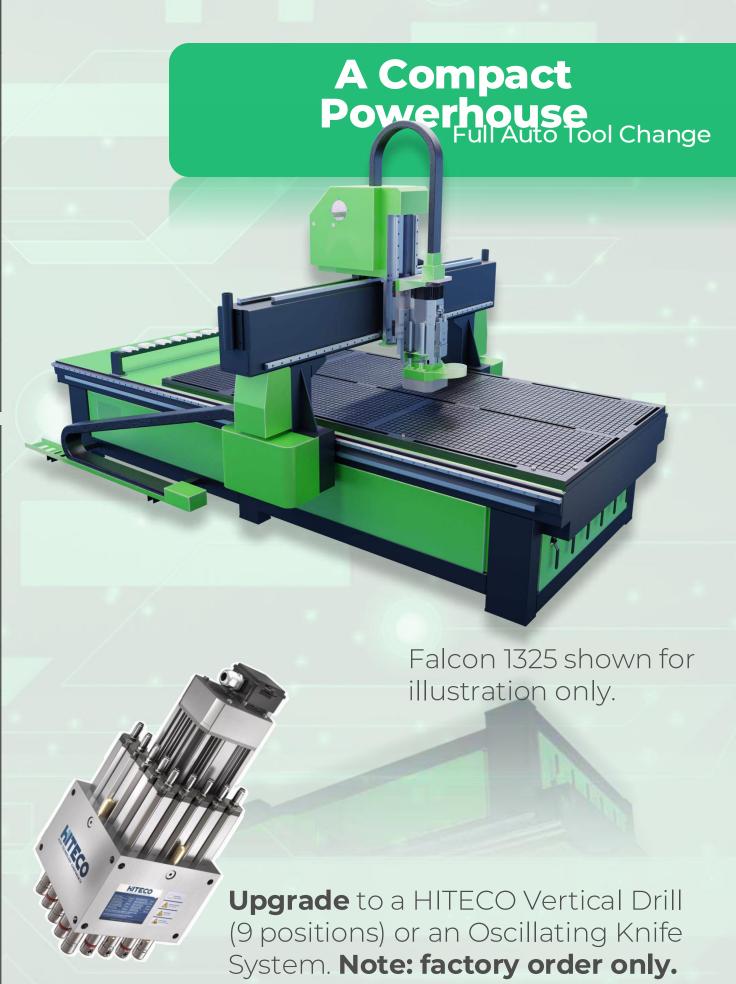


Data Sheet for the Falcon 1313 CNC Router

Falcon CNC Routers are available in a range of standard bed sizes (custom sizes may be available upon request)

Model: Falcon 1313		
Power requirements	3-Phase	
Tool Change	Auto Tool Change System with DSP Control.  Syntec when fitted with a drill bank or knife system	
Spindle Information		
Air Cooled	9.0kW	Auto Tool Change Electro Spindle
Tool Positions		10 Tool Positions
Collet Size		ER32
Bridge Height		
Standard height		300 mm
Bed Design		
Bed Size (mm)	1300 x 1300	
Vacuum Bed	Matrix Vacuum Holding System	
Vaccum Pump System	Yes - Included 7.5kW	
Extraction		
Swarf/Spoil Extraction	Yes Included	
Control System		
DSP control	NK105 Control System - Very Easy to Operate	
Drive System		
Servo	High Accuracy Delta Servo Drives	
Mechanical Drive System		
Z	TBI Ballscrew	
X,Y		Helical Rack & Pinion

Routers are available in a range of standard bed sizes (ci			
Weights & Dimensions	Weights & Dimensions (Non Drill Bank)		
Length (mm)	2350		
Height (mm)	2250		
Width (mm)	2450		
Weight (Approximately)			
Weight (kg)	1250		
Software			
CAD/CAM	Vectric V Carve Pro		
Post Processor	Falcon Post Processor Supplied		
Warranty			
Parts & Labour	24 Months		
Upgrades			
	Upgrade to a HITECO vertical drill bank.		



ertical Drill Bank

scillating Knife System

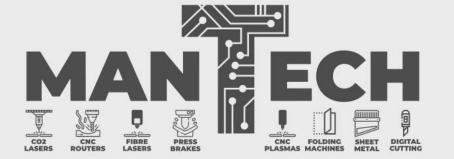
**Note:** bridge width will increase to

accommodate expanding the overall footprint, including Syntec and a 9position Hiteco vertical drill bank

Upgrade Oscillating Knife. **Note:** bridge width will increase to accommodate

expanding the overall footprint, to

accommodate the knife.



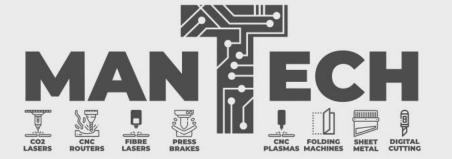
Data Sheet for the Falcon 1325 CNC Router

Falcon CNC Routers are available in a range of standard bed sizes (custom sizes may be available upon request)

Model: Falcon 1325		
Power requirements	3-Phase	
Tool Change	Manual Tool Change System	
Spindle Information		
Air Cooled	9.0kW Auto Tool Change Electro Spindle	
Tool Positions	10 Tool Positions	
Collet Size	ER32	
Bridge Height		
Standard height	300 mm	
Bed Design		
Bed Size (mm)	1300 x 2500	
Vacuum Bed	Matrix Vacuum Holding System	
Vaccum Pump System	Yes - Included 7.5kW	
Extraction		
Swarf/Spoil Extraction	Yes Included	
Control System		
DSP control	NK105 Control System - Very Easy to Operate	
Drive System		
Servo	High Accuracy Delta Servo Drives	
Mechanical Drive System		
Z	TBI Ballscrew	
X,Y	Helical Rack & Pinion	

Weights & Dimensions	
Length (mm)	3660
Height (mm)	2250
Width (mm)	2450
Weight (Approximately)	
Weight (kg)	1500
Software	
CAD/CAM	Vectric V Carve Pro
Post Processor	Falcon Post Processor Supplied
Warranty	
Parts & Labour	24 Months
Upgrades	
Vertical Drill Bank	Upgrade to a HITECO vertical drill bank. <b>Note:</b> bridge width will increase to accommodate expanding the overall footprint, including Syntec and a 9-position Hiteco vertical drill bank
Oscillating Knife System	Upgrade Oscillating Knife. <b>Note:</b> bridge width will increase to accommodate expanding the overall footprint, to accommodate the knife.





Data Sheet for the Falcon 1530 CNC Router

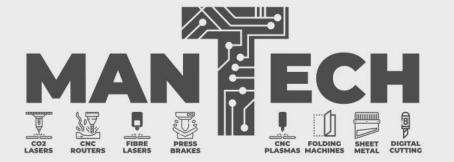
Falcon CNC Routers are available in a range of standard bed sizes (custom sizes may be available upon request)

Model: Falcon 1530			W
Power requirements		3-Phase	
Tool Change		ool Change System with DSP Control.  c when fitted with a drill bank or knife system	Le
Spindle Information			H
Air Cooled	9.0kW	Auto Tool Change Electro Spindle	■ W
Tool Positions		10 Tool Positions	VV
Collet Size		ER32	l w
Bridge Height			
Standard height		300 mm	- VV
Bed Design	* /		S
Bed Size (mm)		1500 x 3000	CA
Vacuum Bed	N	Matrix Vacuum Holding System	Po
Vaccum Pump System	Yes - Included 7.5kW		W
Extraction			Pa
Swarf/Spoil Extraction		Yes Included	U
Control System			
DSP control	NK105 (	Control System - Very Easy to Operate	Ve
Drive System			
Servo	Н	igh Accuracy Delta Servo Drives	
Mechanical Drive System			
Z		TBI Ballscrew	
X,Y		Helical Rack & Pinion	

	Weights & Dimensions	
	Length (mm)	4180
	Height (mm)	2250
	Width (mm)	2520
	Weight (Approximately)	
-	Weight (kg)	1750
	Software	

Weight (kg)	1750		
Software			
CAD/CAM	Vectric V Carve Pro		
Post Processor	Falcon Post Processor Supplied		
Warranty			
Parts & Labour	24 Months		
Upgrades			
Vertical Drill Bank	Upgrade to a HITECO vertical drill bank. <b>Note:</b> bridge width will increase to accommodate expanding the overall footprint, including Syntec and a 9-position Hiteco vertical drill bank		
Oscillating Knife System	Upgrade Oscillating Knife. <b>Note:</b> bridge width will increase to accommodate expanding the overall footprint, to accommodate the knife.		





Data Sheet for the Falcon 2030 CNC Router

Falcon CNC Routers are available in a range of standard bed sizes (custom sizes may be available upon request)

Model: Falcon 2030			
Power requirements	3-Phase		
Tool Change		ool Change System with DSP Control. c when fitted with a drill bank or knife system	
Spindle Information			
Air Cooled	9.0kW	Auto Tool Change Electro Spindle	
Tool Positions		10 Tool Positions	
Collet Size		ER32	
Bridge Height			
Standard height		300 mm	
Bed Design			
Bed Size (mm)	4	2000 x 3000	
Vacuum Bed	Matrix Vacuum Holding System		
Vaccum Pump System	Yes - Included 7.5kW		
Extraction			
Swarf/Spoil Extraction		Yes Included	
Control System			
DSP control	NK105 (	Control System - Very Easy to Operate	
Drive System			
Servo	High Accuracy Delta Servo Drives		
Mechanical Drive System			
Z		TBI Ballscrew	
X,Y		Helical Rack & Pinion	

Weights & Dimensions	
Length (mm)	4180
Height (mm)	2250
Width (mm)	3065
Weight (Approximately)	
Weight (kg)	2000
Software	

# Veight (kg) 2000 Oftware AD/CAM Vectric V Carve Pro Falcon Post Processor Supplied Varranty Parts & Labour Upgrades Upgrade to a HITECO vertical drill bank. Note: bridge width will increase to accommodate expanding the overall footprint, including Syntec and a 9-position Hiteco vertical drill bank

Upgrade Oscillating Knife. **Note:** bridge width will increase to accommodate expanding the overall footprint, to accommodate the knife.

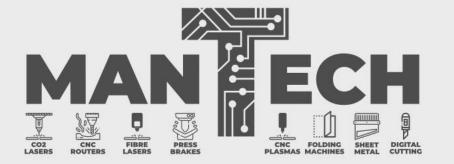


cillating Knife System

Upgrade to a HITECO Vertical Drill

(9 positions) or an Oscillating Knife

System. Note: factory order only.



Data Sheet for the Falcon 2040 CNC Router

Falcon CNC Routers are available in a range of standard bed sizes (custom sizes may be available upon request)

Model: Falcon 2040		
Power requirements	3-Phase	
Tool Change & Control	Auto Tool Change System with DSP Control.  Syntec when fitted with a drill bank or knife system	
Spindle Information		
Air Cooled	9.0kW Auto Tool Change Electro	Spindle
Tool Positions	10 Tool Positions	
Collet Size	ER32	
Bridge Height		
Standard height	300 mm	
Bed Design		
Bed Size (mm)	2000 x 4000	
Vacuum Bed	Matrix Vacuum Holding System	
Vaccum Pump System	Yes - Included 7.5kW	
Extraction		
Swarf/Spoil Extraction	Yes Included	
Control System		
DSP control	NK105 Control System - Very Easy to Operate	
Drive System		
Servo	High Accuracy Delta Servo Drives	
Mechanical Drive System		
Z	TBI Ballscrew	
X,Y	Helical Rack & Pinion	

5360
2250
3065
2100
Vectric V Carve Pro
Falcon Post Processor Supplied
24 Months
Upgrade to a HITECO vertical drill bank. <b>Note:</b> bridge width will increase to accommodate expanding the overall footprint, including Syntec and a 9-position Hiteco vertical drill bank



cillating Knife System

Upgrade Oscillating Knife. **Note:** bridge

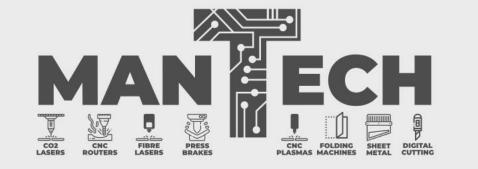
width will increase to accommodate

expanding the overall footprint, to

accommodate the knife.

## **Software Features**





Each of our Falcon CNC Routers is equipped with the **latest edition of Vectric VCarve Pro**, ensuring seamless and user-friendly CAD/CAM capabilities. Designed to enhance productivity and precision, VCarve Pro offers an intuitive interface with powerful design and toolpath creation tools, making it ideal for users at all experience levels. This impressive software package streamlines your process, allowing you to bring your ideas to life with ease and accuracy.

#### **2D Import & Editing**

VCarve can import 2D designs from other programs but also provides a full set of drawing and editing tools.

#### **2D & 2.5D Toolpath Options**

The toolpath options cover all typical 2D routing operations such as profiling, pocketing, auto-inlays, drilling and thread milling as well as 2.5D strategies.

#### **3D Rough & Finish**

For 3D you can rough and finish the model and there are options to project 2D and 2.5D toolpaths onto the 3D surface.

#### **Customise & Control**

Each toolpath includes appropriate options to customize the settings and provide a high level of control for different types of operation.

#### **3D Model Import**

VCarve includes the ability to import multiple Vectric 3D models as well as a single 3rd party model, where they can be assembled to suit your design.

#### **Instant Preview Updates**

All toolpaths can be previewed to show just how the part will look when it is actually cut, this allows instant feedback to allow toolpaths to be further optimized

#### **Drawing & Layout Tools**

The software has a comprehensive set of drawing tools to let you easily create vectors from scratch or add to imported data.

#### **Merging Templates**

All of our Spartan CNC Routers are configured with matrix vacuum holding beds as standard for effective material holding whilst cutting and engraving.

### **True Shape Nesting**

Part Nesting is perfect for Sign and Cabinet makers who need to minimize material wastage and cut as many parts – letters & cabinet doors / panels – as possible from sheet materials. Reduce Material Costs = Increased Profits.

#### **Job Sheet Creation**

The create set-up job sheet command allows you to create a summary sheet that details all the important information you will need at your CNC machine when you come to run the toolpaths.

#### **Gadgets**

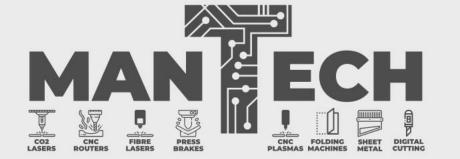
Gadgets are small programs that add additional functionality to Vectric products. They can be used to add new features to the software or automate common sequences of tasks.

#### 2 Sided Machining

Two-sided machining adds the ability to create double-sided projects in the same session. It avoids the need to have 2 sessions, one for each side.

And much more...

# Delivery, Installation & Training



Our typical delivery, installation and training process.

## **Delivery**

Your Falcon includes delivery to the UK mainland; however, offloading and siting are the customer's responsibility, and a suitable forklift is required to remove the CNC from the wagon. Note that we will advise you on the method of offloading, such as the correctly rated forklift, and how to move the machine into place. Upgraded delivery methods are available if you have no means to offload the machinery.

## Installation

Our professional installation team will promptly arrive on the agreed installation date. Typically, the commissioning of the machine will take one day, with the first half of the day being the commissioning, and the second part of the day being dedicated to your training. Our engineer will take care of everything for you in getting the machine commissioned and ready for operation, the only requirement is to ensure the machine is connected to your electrical supply.

## **Finance Options**

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All quotes are subject to status - minimum trading of 2 years.

## **Machine Training**

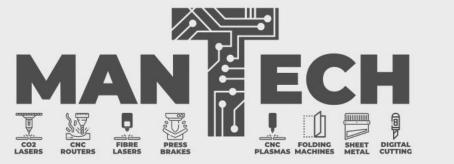
Our CNC Router installation engineers are not only highly skilled professionals but also approachable and patient, dedicated to making your experience seamless. They provide comprehensive machinery training in a relaxed and supportive atmosphere, ensuring you feel confident and comfortable every step of the way. With their expertise and commitment to excellence, you can trust that your installation and training will be a smooth, stress-free process, setting you up for long-term success.

## **Software Training**

We include Vectric VCarve Pro with all our CNC Routers and provide training for up to four operators in a calm, supportive setting. Our expert engineers tailor the training to each person's skill level, ensuring everyone can safely import designs, set up tool paths, and prepare files for production. Our goal is to equip your team with the basic knowledge and skills necessary to safely use your new machine.



# Aftersales Service & Support



Mantech's Aftersales and Support are founded on over 25 years of experience providing machinery tools to businesses across the UK, Ireland, and Europe. We offer comprehensive support through our fully staffed 6-person service desk and a team of 15 skilled road engineers, dedicated to delivering prompt and professional assistance. All customers benefit from access to our service portal, enabling them to easily track communications, book services, and stay informed every step of the way. At Mantech, service isn't just a priority—it's the foundation of our business.

#### **Service Desk**

Our dedicated 6-person service desk is always ready to assist you with any inquiries or technical issues. With a fully staffed, office-based team, we ensure you receive prompt and reliable support whenever you need it.

## **Fully Manned Team**

Our robust support network includes 15 skilled road engineers who are strategically positioned to provide on-site assistance across the UK, Ireland, and Europe. Whether it's installation, maintenance, or repairs, our expert team is equipped to deliver fast, professional service.

## **Extended Warranty**

For added peace of mind, we offer extended warranty options of up to 5 years, providing you with comprehensive coverage and minimising downtime. Our warranties are designed to keep your equipment running smoothly, ensuring long-term reliability and performance.

#### **Service Portal**

Our online service portal offers convenient access for tracking communications, booking services, and monitoring the progress of your requests. It also provides a wealth of resources, including hints, tips, and guides to help you get the most out of your machinery.







