

CASE STUDY: HOW SHERWOOD STAINLESS STEEL

ACHIEVED 65% CYCLE TIME REDUCTION WITH
QUICKGRIND TOOLING SOLUTIONS



Based in the West Midlands, Sherwood Stainless Steel & Aluminium Limited has been a trusted supplier of stainless steel and aluminium products for over 30 years. The company supplies coil, blanks, sheet, and aluminium extrusion to customers across the UK and beyond, serving diverse sectors including construction, automotive, electric vehicles (EV), and medical industries.

Under the leadership of Production Manager Chris Burkitt, Sherwood has built a reputation for quality and reliability whilst continuously adapting to meet the evolving demands of modern manufacturing.





THE CHALLENGE:

RISING DEMANDS IN A COMPETITIVE MARKET

Sherwood faced several interconnected challenges that threatened to impact their competitive position:

Increasing Complexity and Precision Requirements

“One of our biggest challenges is the increasing complexity and precision required by customers—especially in EV projects,” explains Chris Burkitt.

The transition to electric vehicles has created new opportunities but also raised the bar for manufacturing precision and quality standards. With customers demanding faster turnaround times without compromising quality, Sherwood needed to find ways to produce more efficiently whilst maintaining their high standards.

The automotive and medical sectors require complete traceability throughout the supply chain, adding complexity to production planning and execution.

Specifically, Sherwood wanted to achieve:

- Improved tool life
- Better surface finishes
- Reduced cycle times, particularly in aluminium machining
- Greater operational efficiency

THE SOLUTION:

STRATEGIC PARTNERSHIP WITH QUICKGRIND

Sherwood first discovered Quickgrind through industry contacts whilst searching for a tooling partner who could support their machining operations with both off-the-shelf and bespoke solutions.

Their messaging around innovation and ‘Infinite Possibilities’ caught our attention, but it was the combination of technical expertise and flexibility that convinced us to get in touch,

Early in the relationship, Sherwood’s team visited Quickgrind’s manufacturing facility in Tewkesbury, a decision that proved pivotal in building confidence.

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Rather than simply supplying tools, Quickgrind adopted a consultative and collaborative approach from day one, that focused on understanding Sherwood’s specific challenges and requirements.

There’s been constant dialogue, prompt delivery of samples, and quick turnaround on any adjustments needed,” notes Burkitt.

IMPLEMENTATION:

A COMPREHENSIVE TOOLING STRATEGY

PHASE 1:

Standard Tool Optimisation

Sherwood began by implementing Quickgrind's proven standard tooling solutions:

Complete Drill Conversion: The company switched all drilling operations to Quickgrind's solid carbide drills, achieving immediate improvements in tool life and hole quality.

Alligator Range Implementation: Sherwood adopted the Alligator range of high-performance end mills, specifically designed for multiple applications in aluminium and other non-ferrous materials. This range includes:

- Alligator Duo for general aluminium milling
- Alligator Duo Ballnose for complex geometries
- Alligator Trio for multi-purpose applications

PHASE 2:

Standard Tool Optimisation

As the relationship matured, Quickgrind developed bespoke tooling solutions tailored to Sherwood's specific requirements.

“We started as a customer, but now we’re working together on development projects—trialling new tool geometries and coatings tailored to our materials and processes,” explains Burkitt.

PHASE 3:

Knowledge Transfer and Training

Quickgrind's commitment to partnership extended beyond tool supply to include comprehensive training programmes. Several members of Sherwood's team attended cutting tool seminars at Quickgrind's facility, with highly positive feedback:

“The sessions improved understanding of tool selection, correct feeds and speeds, and how to maximise tool life. It’s already making a difference on the shop floor.”

RESULTS:

EXCEPTIONAL PERFORMANCE IMPROVEMENTS

Increasing Complexity and Precision Requirements

The most significant achievement came from a specially designed multi-tool that transformed a critical machining operation.

65% reduction in machining time on a key component, delivering:

- Fewer secondary operations required
- Lower overall manufacturing costs
- Faster delivery times to customers
- Improved production capacity

Comprehensive Performance Gains

Beyond the headline result, Sherwood experienced improvements across all key metrics:

- **Tool Life Extension:** Significantly longer tool life across all applications, reducing tool changeover frequency and associated downtime.
- **Enhanced Surface Quality:** Better surface finishes that often eliminated secondary finishing operations.
- **Improved Efficiency:** Faster machining cycles that increased overall productivity without compromising quality.
- **Cost Optimisation:** Lower cost per part through improved efficiency and reduced tool consumption.

Operational Excellence

“Professional, approachable, and collaborative. They listen to feedback and genuinely act on it.”

The partnership has enabled Sherwood to:

- Respond more quickly to urgent customer requirements
- Explore new machining approaches previously not considered
- Access cutting-edge tooling technology and expertise
- Maintain competitive advantage in demanding markets

BEYOND TOOL PERFORMANCE

Market Expansion Opportunities

The enhanced capabilities provided by Quickgrind tooling have positioned Sherwood to capitalise on growing market opportunities:

“EV production is opening up more opportunities in aluminium light-weighting to improve efficiency, reduce carbon impact, and maintain aesthetic quality,” notes Burkitt.

Competitive Differentiation

The combination of improved efficiency, quality, and capability has strengthened Sherwood’s competitive position:

“Their ability to customise tooling quickly, their technical support, and their willingness to work alongside us rather than just sell to us” sets Quickgrind apart from other suppliers.

Innovation Partnership

“They’re more than a supplier—they’re a strategic partner who helps us find better ways of doing things.”

THE TECHNOLOGY BEHIND THE SUCCESS

Alligator Range Performance

The Alligator range delivered exceptional results in aluminium machining through:

- Optimised geometries for non-ferrous materials
- Advanced coatings for extended tool life
- Superior chip evacuation for clean cutting
- Consistent performance across varied applications

Custom Tool Engineering with Infinite Possibilities

Quickgrind's bespoke solutions addressed specific challenges through:

- Application-specific geometries
- Tailored coatings for particular materials
- Multi-functional tools reducing operation count
- Optimised cutting parameters for maximum efficiency

Technical Support Excellence

The partnership benefits from comprehensive technical support including:

- Application engineering expertise
- Rapid prototyping and testing
- Continuous optimisation based on performance data
- Training and knowledge transfer programmes



FUTURE GROWTH AND DEVELOPMENT

Continuing Innovation

“Continuing to develop tooling that allows us to machine more efficiently, explore new materials, and meet the evolving needs of the market,” describes Burkitt’s vision for the ongoing partnership.”

Market Adaptation

As automotive manufacturing continues to evolve, particularly with the growth of electric vehicles, the partnership provides Sherwood with the agility to adapt quickly to new requirements.

“Automotive manufacturing moves quickly, and if your tooling partner can’t keep up, you’ll fall behind,”

KEY SUCCESS FACTORS

Collaborative Partnership Approach

The success of the Sherwood-Quickgrind partnership demonstrates several critical factors:

Trust and Transparency: Built through facility visits, open communication, and consistent delivery on promises.

Technical Excellence: Combining proven standard solutions with innovative custom developments.

Responsive Service: Quick turnaround on samples, adjustments, and urgent requirements.

Knowledge Sharing: Training programmes that enhance customer capabilities and understanding.

Continuous Improvement: Ongoing dialogue and development to optimise performance further.



INDUSTRY RECOGNITION AND VALIDATION

When asked what he would tell another machine shop considering Quickgrind, Burkitt's response was unequivocal: "That they're a partner who'll listen, adapt, and deliver." This endorsement reflects the transformation achieved through strategic partnership rather than simple supplier relationships.

INFINITE POSSIBILITIES REALISED

Quickgrind's ethos of 'Infinite Possibilities' has proven more than marketing rhetoric for Sherwood. "Without question. They've helped us unlock machining approaches we hadn't considered before, which opens up new possibilities for our production and our customers," confirms Burkitt.

The partnership demonstrates how strategic tooling decisions can transform manufacturing operations, delivering:

- Exceptional performance improvements (65% cycle time reduction)
- Enhanced competitive positioning
- New market opportunities
- Sustainable operational excellence
- Strategic partnership value beyond tool supply

For manufacturers facing similar challenges of increasing precision demands, tight lead times, and competitive pressure, Sherwood's experience provides a blueprint for success through strategic tooling partnerships.

ABOUT

Quickgrind specialises in high-performance solid carbide cutting tools, offering both standard ranges and bespoke solutions engineered for specific applications. With advanced manufacturing facilities in Tewkesbury and a commitment to 'Infinite Possibilities', Quickgrind partners with manufacturers across automotive, aerospace, medical, and precision engineering sectors to deliver total cost of ownership improvements and operational excellence.

Ready to discover how Quickgrind can transform your machining operations? [Contact our technical team](#) to discuss your specific challenges and explore the possibilities for your business.