



# **MACHINING SERVICES ADDING VALUE TO YOUR BUSINESS**

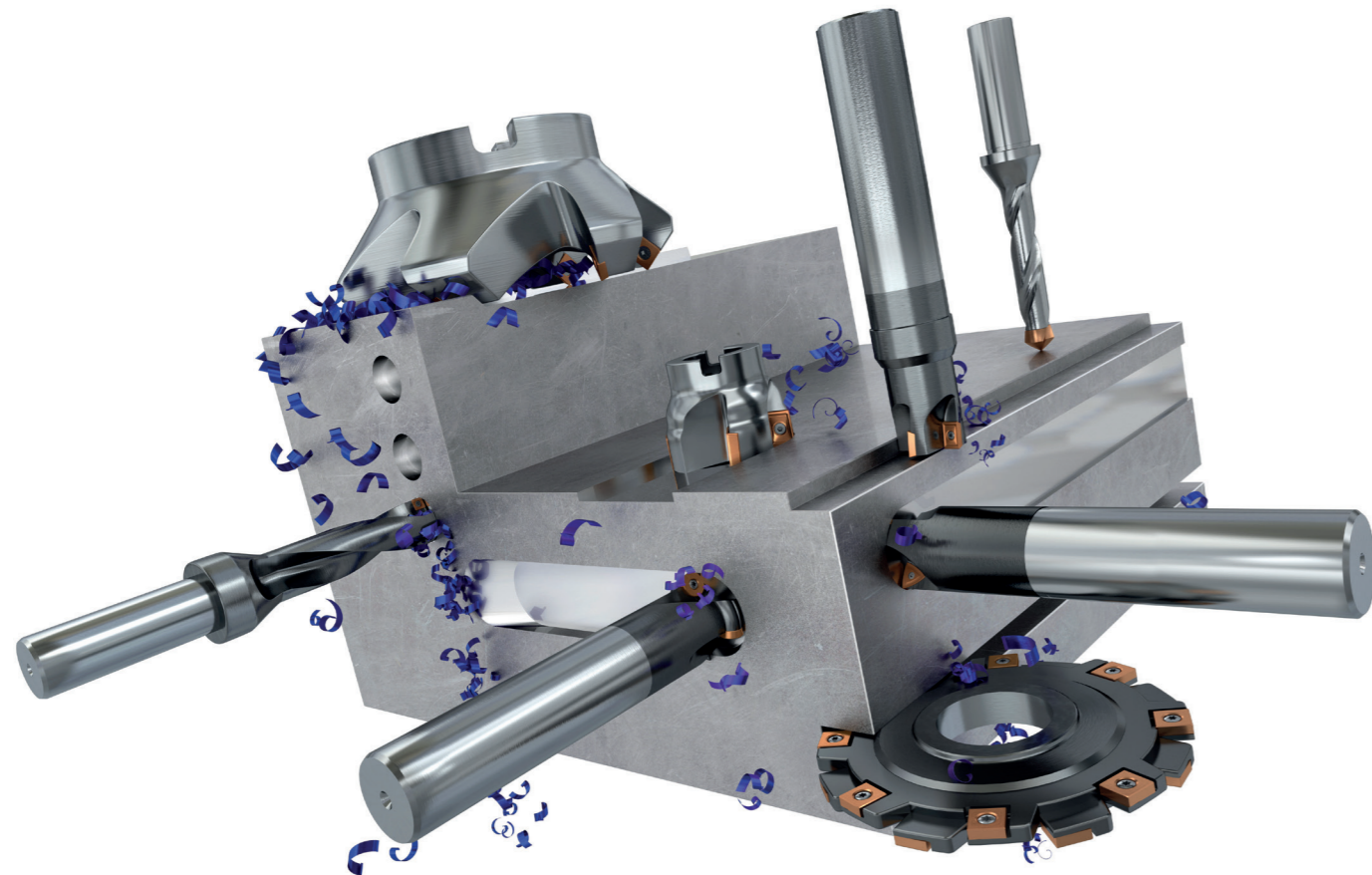
**TAKE THE SHORTCUT TO PRODUCTION**

Uddeholm can deliver significant production planning efficiencies as your single source service provider.

We recognise that the costs related to machining are often the major part of the total production cost, as modern tool steels have become increasingly complicated to machine by a cutting tool. Investing in our own onsite machining facility and applying our expert knowledge in steel grades means we can deliver reduced lead-times and increase your productivity.

Our extensive choice of customer-adapted machining solutions are designed to make your production planning more efficient and cost effective. We add value by offering a range of solutions from black steel to finished components. We also offer machining recommendations for all our steel grades.

Take a short cut to production with smarter production planning.



**TECHNICAL CONSULTATION**

The selection of tool steel has an impact on the tool's performance and your profitability. Book an onsite consultation with one of our experts to evaluate the steels that best suits your application.



**TAILOR-MADE SOLUTIONS**

Our expertise in High Performance Metals counts in applications where general engineering steels are deemed insufficient. We hold the UK's largest stock in our award-winning stock facility.



**COMPONENT SERVICES**

Our experience in the tooling industry is now being applied to components. We provide solutions which reduce high maintenance costs and minimise production downtime.



**MACHINING SERVICES**

Our onsite machining and cutting facility, expert knowledge in steel grades and comprehensive stockholding ensures we deliver reduced lead-times and increase your productivity.



**STOCK FACILITY**

All high performance engineering steel stock is held in our new purpose-built warehouse facility in the Midlands. The new Kasto system is the tallest in the UK and one of the largest in Europe.



**STEEL APPS**

Two easy to use Apps created to support the selection and specification of our high performance special steels. Review our range of tool steels to find the most suitable for your application.

**FLEXIBLE SERVICE TO SUIT YOUR PRODUCTION**

Value Added Services give our customers access to cutting, machining, bevelling, testing and other services providing turnkey customer solutions. This includes an onsite testing service, used when customers require additional certification to that supplied by the Mill.

Our expansive range of capabilities allows us to handle simple jobs such as cutting/milling lengths and widths, to bespoke services, which includes machining to your specific requirements with the option to include heat treatment and surface coatings.

We have one of the most comprehensive machining facilities in the UK, all located at our central warehouse and distribution facility in Oldbury, West Midlands. Our team of specialists are ready to provide rapid, cost effective solutions to your machining requirements.



**CAPABILITIES**

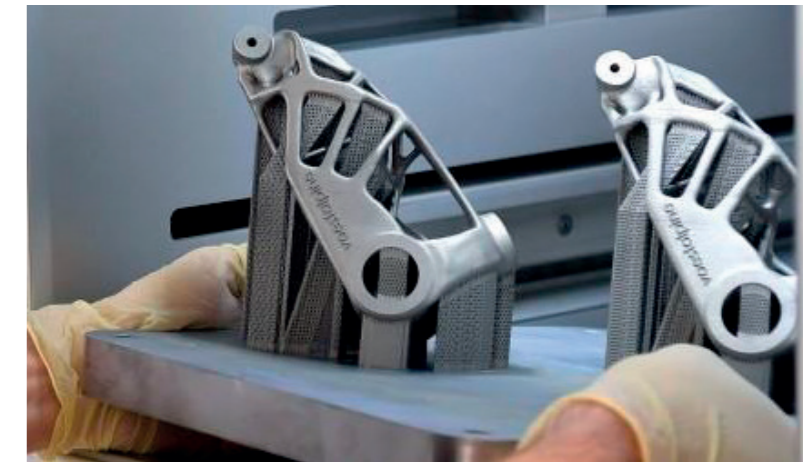
- Rough Milling
- Fine Milling
- Precision Grinding
- Drilling & Tapping
- Rough Contours
- Rough Pockets
- Chamfering
- Turning Small Pieces

	DAH-LIH MCH800	XYZ 2010 HD VMC - with Microloc fixture system	AMADA THV 430 Twin head	XYZ 1100HD	HELLER	SNOW GRINDERS		XYZ CT65
<b>X Axis</b>	10mm - 1000mm	10mm - 2000mm	20mm - 430mm	10mm - 1000mm	10mm - 1000mm	10mm - 2000mm	<b>Diameter</b>	5mm - 150mm
<b>Y Axis</b>	50mm - 800mm	10mm - 1000mm	20mm - 430mm	10mm - 600mm	10mm - 600mm	10mm - 830mm	<b>Length</b>	5mm - 300mm
<b>Z Axis</b>	50mm - 800mm	10mm - 600mm	10mm - 150mm	10mm - 300mm	10mm - 300mm	10mm - 400mm	<b>Tools</b>	12
<b>Tolerance</b>	+/- 0.05mm	+/- 0.05mm	+/- 0.05mm	+/- 0.05mm	+/- 0.05mm	+/- 0.01mm	<b>Tolerance</b>	+/- 0.01mm

**ADDITIVE MANUFACTURING PRINTING SERVICE**

As a new and flexible way to produce parts, Additive Manufacturing is offering new possibilities in producing tooling parts. Complex designs, small production runs and the ever increasing demand for shorter lead times makes additive manufacturing a smart solution.

Our ability to develop new printable metal materials and provide a complete printing service ensures we can work with you to fulfil your tooling needs in the most cost effective and efficient way for your business application.



**LABORATORY AND ONSITE TESTING**



Our specialist laboratory facility located at our UK Head Office and warehouse facility in Oldbury, enables the rapid testing of samples to your specifications.

For example, chemical analysis, tensile, charpy, and Positive Material Identification (PMI) for all grades can all be done onsite.

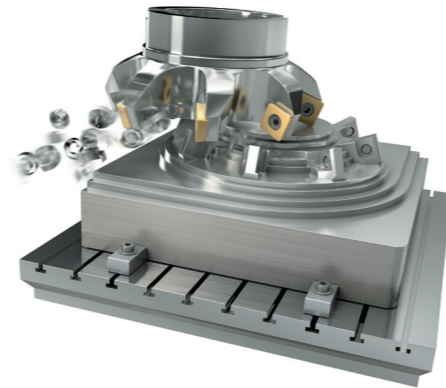
# EFFICIENT EXECUTIONS

## TOTAL MACHINING ECONOMY

First stage machining can be an expensive and time-consuming task, absorbing the resources of skilled machinists on basic operations. Uddeholm offer a complete and comprehensive selection of products in a variety of pre-machined finishes from simple milled faces to precision ground pieces.

Our breadth of capabilities allows us to handle a wide dimensional range. We are able to offer three standard options or, if required pieces can be machined to your bespoke requirements with the option to include heat treatment and surface coatings.

As pressures to reduce costs continue to increase, our state of the art machines can produce parts in a fraction of the time it would take via conventional machining, saving time, resources and money.



SERVICE LEVEL	HEIGHT	WIDTH	LENGTH	EDGE
<b>Standard</b>	rough milled 10mm – 600mm -0.00 / + 0.25mm	sawn 20mm – 1000mm	sawn 20mm – 2000mm	deburred/chamfering *
<b>Fine</b>	fine milled 10mm x 600mm -0.0mm / + 0.1mm	fine milled 10mm x 1000mm -0.0mm / + 0.1mm	fine milled 20mm - 830mm -0.0mm /+ 0.1mm	deburred/chamfering *
<b>Precision</b>	precision ground 10mm – 400mm -0.0mm / + 0.05mm	fine milled 20mm – 830mm -0.0mm / + 0.1mm	fine milled 20mm - 830mm -0.0mm / + 0.1mm	deburred/chamfering *
<b>Unique</b>	Bespoke service designed for your application			deburred/chamfering *

\* chamfering available on request



The tolerances above provide a guide on our local capabilities, however we are not restricted to the size of the work piece and work with our customers on their specific requirements, case by case.

Our group network means we can support you with added machining services such as gun drilling, lifting holes and steam circuits etc.

Contact our sales team today to see how we can support you with machining to help you reduce manufacturing lead times and costs.

# PRE-MACHINED STANDARDS

## SHORTER LEAD TIMES

Uddeholm's fine machine steel service provides a safe and reliable solution to fast forward to your finished product. By raising production rates and shortening lead times, our broad range of market leading grades improves business from start to finish.



### VALUE ADDED BENEFITS

- Shorter time to market
- Prepared for production
- Over 1300 dimensions available
- Bespoke service to customise products

### STANDARD PROGRAMME: 4-SIDED MACHINED

EXECUTION			TOLERANCE		
Thickness	Width	Length	Thickness	Width	Length
<b>Milled or segment ground</b>	Milled	Saw cut	+0.4mm / +0.65mm <sup>1</sup>	+0.4mm / +0.8mm <sup>2</sup>	+3mm / +8mm
			-0.0mm / +0.2mm	-0.0mm / +0.4mm	+3mm / +8mm
<b>Line ground</b>					

<sup>1</sup> For Uddeholm UHB 11 and Uddeholm Formax -0.0mm / +0.2mm

<sup>2</sup> For Uddeholm UHB 11 and Uddeholm Formax -0.0mm / +0.4mm

### SPECIAL PROGRAMME: 4-SIDED MACHINE

EXECUTION	TOLERANCE WIDTH <sup>1</sup>			DIMENSIONS, POSSIBLE COMBINATIONS MIN-MAX <sup>1</sup>		
	Thickness	Width	Length (saw cut)	Thickness	Width	Length
<b>Milled</b>	0.1mm - 0.2mm		2mm - 5mm	4mm - 220mm	50mm - 315mm	750mm - 4400mm
				4mm - 100mm	10mm - 40mm	400mm - 1400mm
<b>Line ground</b>	0.05mm - 0.1mm			4mm - 220mm	50mm - 600mm	1200mm - 4400mm

### SPECIAL PROGRAMME: 6-SIDED MACHINE

EXECUTION	TOLERANCE WIDTH <sup>1</sup> (thickness width and length)	DIMENSIONS MIN-MAX <sup>1,2</sup>		
		Thickness	Width	Length
<b>Milled</b>	0.1mm - 0.2mm	6mm - 600mm	10mm - 1200mm	10mm - 1200mm
<b>Line ground</b>	0.05mm - 0.1mm	4mm - 300mm		

<sup>1</sup> variations can occur depending on combination

<sup>2</sup> Max diagonal length 1400mm

**#1 IN HIGH  
PERFORMANCE  
TOOL STEEL**

Uddeholm UK,  
A Division of voestalpine High Performance Metals UK Ltd  
European Business Park, Taylors Lane,  
Oldbury, West Midlands, B69 2BN



+44 (0)121 552 5511  
sales@uddeholm.co.uk  
www.uddeholm.co.uk