Changing the game with cutting edge technology



ASSAB Tool Holder Concept YOUR FASTEST WAY TO FIRST PLACE



Developed specially for the extreme working conditions of drilling, milling and turning applications.

"ASSAB" and the logo are trademark registered. The information contained herein is based on our present state of knowledge and is intended to provide general notes on our products and their uses. Therefore, it should not be construed as a warranty of specific properties of the products described or a warranty for fitness for a particular purpose. Each user of ASSAB products is responsible for making its own determination as to the suitability of ASSAB products and services.s. Edition 20200101

SPECIALISED STEEL GRADES WITH SUPERIOR QUALITY MACHINING MADE EASY

The products in the ASSAB Tool Holder Concept are the profitable guarantee for time-saving efficiency when shaping your tool bodies and chucks.

FOR YOUR BENEFIT

The driving force behind our research and development is always to enhance your competitiveness and strengthen your business. Our close collaboration with leading tool and tool holder manufacturers has had one clear goal in mind from the start. To provide the market with a new generation of unique, specialised steel grades that last longer and lower production costs.



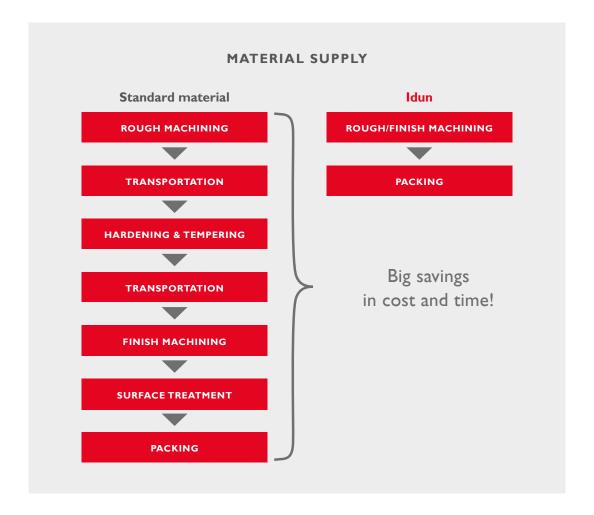
IDUN

MEET OUR NEWEST SHINING STAR

Idun is the world's first patented corrosion resistant tool holder steel. It is delivered in pre-hardened condition and provides the possibility to start machining the finished part directly.

WHEN TIME IS WHAT MATTERS REVOLUTIONISING THE TOOL HOLDER MARKET

Idun shares the superior qualities that always accompany the members of the ASSAB Tool Holder Concept - meeting your requirements on durability while still being good to machine. Now we offer you even more: a possibility to change the game with a corrosion resistant steel grade that is delivered in pre-hardened condition. Making production a one-stopshop where heat treatment and coatings will no longer be necessary. A safe and reliable fast forward button to your finished product.





PROFITABLE SOLUTIONS IMPROVING TOTAL TOOLING ECONOMY

With our specialised steel grades we offer a beneficial shortcut that makes a big difference for your business.

All the products in the ASSAB Tool Holder Concept meet your requirements on durability while still being good to machine - a key factor in production with high demands. The combination of the best cutting tool materials on the market and the leading tool holder steel grades makes it possible for your customers to increase productivity and be confident that their tools will last longer. A new bid to satisfy the demand for superior quality, easy-to-machine tool holder materials.

A CORROSION RESISTANT FAST FORWARD BUTTON

Idun is the world's first patented corrosion resistant tool holder steel. It is delivered in pre-hardened condition and provides the possibility to start machining the finished part directly. With Idun you can skip the long and costly process of hardening, surface treatment and the transportation in between that is normally required with standard materials. It shortens tool making lead time and improves tool holder durability. It is perfect for custom made tool holders, cutters and drills.

IDUN IN SHORT

- $\sqrt{}$ First corrosion resistant tool holder grade on the market
- $\sqrt{}$ Very high dimensional stability
- $\sqrt{}$ No heat treatment needed
- $\sqrt{}$ No corrosion protective surface treatments needed
- $\sqrt{\text{Good machinability}}$
- $\sqrt{}$ High wear resistance

DESIGNED TO SHORTEN LEAD TIMES BURE

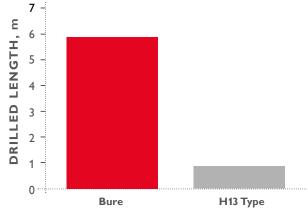
Bure has been setting the standard in tool holder steel for over a decade. This superior high-strength steel both shortens tool making lead times and improves tool holder durability in severe working conditions. With its combination of excellent machinability and very good mechanical properties at elevated temperatures, the steel is particularly suited for induction hardening and can be PVD-coated without reducing the hardness of the tool.

It is perfectly suited for indexable insert drills, milling cutters, chucks and tool tapers.

BURE IN SHORT

- $\sqrt{}$ Very good machinability
- $\sqrt{\rm Good}$ high-temperature strength and fatigue resistance
- $\sqrt{}$ Good resistance to abrasion at high and low temperatures
- $\sqrt{\rm Good}$ through-hardening characteristics, can be air hardened
- $\sqrt{}$ Very little distortion during hardening
- $\sqrt{}$ Good ductility and toughness

GUN-DRILLING OF COOLING CHANNELS IN SOFT ANNEALED MATERIAL



HIGH PERFORMANCE FROM START TO FINISH BALDER

Balder is the ultimate tool steel for products with high demands on strength and resistance. For tool users it brings the benefits of lower costs and a longer, more predicable tool life. Balder is supplied in pre-hardened condition and offers a reliable way to shave valuable time off your production process. Its superb machinability paired with excellent mechanical properties guarantees both longer and better performance. It is the optimal steel choice for both milling cutters, drills and tool tapers working with demanding materials and applications.

BALDER IN SHORT

- $\sqrt{}$ Excellent machinability in hard conditions
- $\sqrt{}$ Superb high-temperature strength
- $\sqrt{}$ Very good tempering resistance
- $\sqrt{}$ Good fatigue resistance
- $\sqrt{}$ Good resistance to abrasion at both low and high temperatures
- $\sqrt{}$ Good toughness and ductility
- $\sqrt{}$ Suitable for coating



CHANGING THE GAME DEVELOPED WITH THE PURPOSE TO SAVE TIME

The specialised steel grades in the ASSAB Tool Holder Concept are your fastest way to first place.

ASSAB TOOL HOLDER CONCEPT PROPERTY COMPARISON

	Bure	Balder	Idun	Р20 Ту ре	Н13 Туре
FATIGUE & HOT STRENGTH					
WEAR RESISTANCE					
MACHINABILITY PRE-HARDENED					
DIMENSIONAL STABILITY AND COATING SUITABILITY					
CORROSION RESISTANCE					
TIME TO MARKET					\bigcirc

AWARD-WINNING PROBLEM SOLVERS

With pioneering research and development, innovative thinking and deep commitment, ASSAB and Uddeholm offer business-enhancing steel solutions to premium clients all over the world.

What started as a small iron mill in 1668 has now become the world's leading provider of tool steel, with business and operations in 90 countries.

Always with the promise to deliver solutions that enhance competitiveness and create added value for our customers.

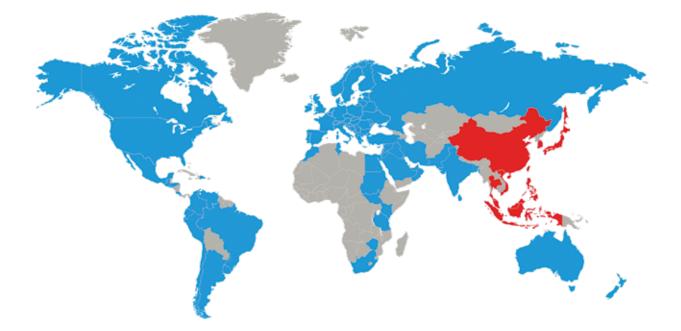
ASSAB SUPERIOR TOOLING SOLUTIONS A ONE-STOP SHOP





ASSAB is unmatched as a one-stop product and service provider that offers superior tooling solutions. In addition to the supply of tool steel and other special steel, our range of comprehensive valueadded services, such as machining, heat treatment and coating services, span the entire supply chain to ensure convenience, accountability and optimal usage of steel for customers. We are committed to achieving solutions for our customers, with a constant eye on time-to-market and total tooling economy.





Choosing the right steel is of vital importance. ASSAB engineers and metallurgists are always ready to assist you in your choice of the optimum steel grade and the best treatment for each application. ASSAB not only supplies steel products with superior quality, we offer state-of-the-art machining, heat treatment and surface treatment services to enhance steel properties to meet your requirement in the shortest lead time. Using a holistic approach as a one-stop solution provider, we are more than just another tool steel supplier.

ASSAB and Uddeholm are present on every continent. This ensures you that high quality tool steel and local support are available wherever you are. Together we secure our position as the world's leading supplier of tooling materials.

For more information, please visit www.assab.com





