

Experience the groundbreaking
performance of stainless stamina

VANAX SUPERCLEAN

**FOR TOUGH CONDITIONS
AND EXTREME DEMANDS**





PIONEERING POWDER METALLURGY

INTRODUCING A STAINLESS SOLUTION THAT LASTS

When and where nothing else works, Vanax SuperClean will rise to the occasion. The joint forces of innovative metallurgy, thorough development and testing have resulted in the optimal problem solver for extreme conditions. Its unique property combination opens doors and offers new opportunities. To make it wear resistant, hard and stainless we created a highly nitrogen-alloyed powder metallurgical steel grade. Vanax SuperClean delivers game-changing performance when it matters.

"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.

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SUPREME STEEL FOR TOUGH CONDITIONS

THE UNPRECEDENTED SOLUTION FOR SPECIAL DEMANDS

Vanax SuperClean is the long-awaited response to the market's need for steel that is both strong and stainless. Combining the corrosion resistance of austenitic stainless steel such as AISI 316L, with a hardness of 60 HRC and the wear resistance of a cold work tool steel, opens up new opportunities. Where no previous materials suffice, this powder metallurgical steel grade offers resistance in the most corrosive environments possible. From start to finish, its unique material properties provide reliable performance in the most extreme conditions and for the most demanding working materials.

01



**NEW
OPPORTUNITIES**

03



**UNIQUE
PROPERTIES**

02



**FIRST MOVER
ADVANTAGE**

04



**STAINLESS
WITH STAMINA**

05



**LONG-LASTING
HIGH PERFORMANCE**

THE ESSENTIAL PROBLEM SOLVER

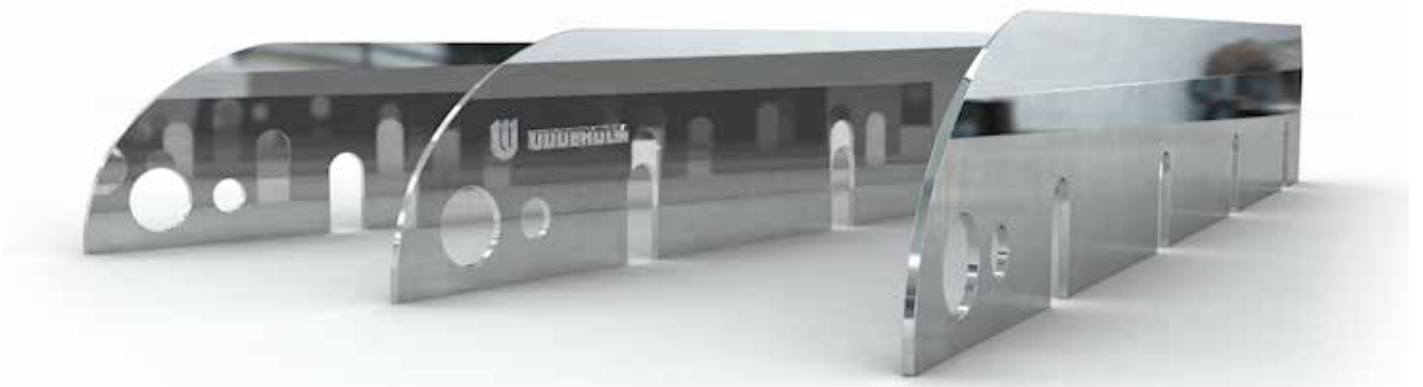
STAINLESS WITH HIGH STRENGTH AND STAMINA

Powder metallurgical tool steel from ASSAB enables safe and efficient production with minimal downtime. Vanax SuperClean is the superior answer to demands on productivity in challenging environment.

STEEL WITH NO WEAK POINTS

Powder metallurgical steel guarantees high hardness, edge stability and an edge angle that is paramount for industrial knives and blades. The cleanliness of the steel minimizes both edge rolling and impact damage, and allows the steel to be ground to a sharper angle.

With our newest solution we are raising the standards in the manufacturing industry. The complex and powerful properties of Vanax SuperClean ensure peak performance that raises production levels, in combination with less downtime and lower maintenance costs.



Vanax SuperClean

- Excellent corrosion resistance
- Very high wear resistance
- Very high compressive strength
- High adhesive wear resistance
- Good toughness
- Good anti-galling properties
- Good machinability



A PERFECT FIT FOR HIGHLY EXPOSED COMPONENTS

Vanax SuperClean is perfect for applications and environments where an excellent corrosion resistance in combination with high wear resistance and compressive strength are necessary. Examples of such areas and industries





















are pumps and bearings in marine environments, extrusion of plastics, plastic injection tooling, high-pressure fuel injection systems and several applications within the meat processing industry.



INNOVATIVE SOLUTIONS

METALLURGY WITH POWERFUL RESULTS

PROPERTY COMPARISON

	Vanax SuperClean	AISI 316L	AISI 420	AISI 440C	Stainless PM
WEAR RESISTANCE					
CORROSION RESISTANCE					
COMPRESSIVE STRENGTH					
CHIPPING AND CRACKING (RESISTANCE)					

Vanax SuperClean is a highly nitrogen-alloyed steel. By replacing carbon with nitrogen the stainless properties can be paired with a high wear resistance. Together they form a unique combination and the optimal solution for demanding environment and tough conditions.

Chemical composition

N	C	Cr	Mo	V
1.55	0.36	18.2	1.1	3.5



KEEPING YOU ONE STEP AHEAD

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

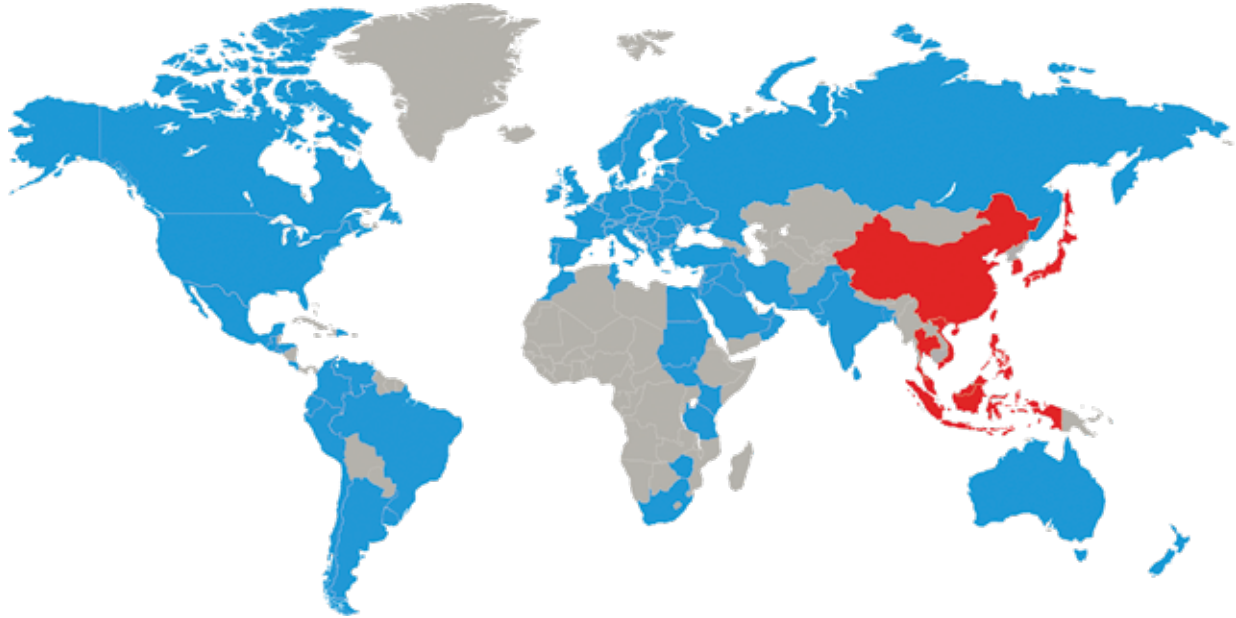
SUPERIOR TOOLING SOLUTIONS

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 value-added 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

