

Experience the groundbreaking
performance of stainless stamina

Uddeholm Vanax SuperClean

**FOR TOUGH CONDITIONS
AND EXTREME DEMANDS**



SUPREME STEEL FOR TOUGH CONDITIONS

THE UNPRECEDENTED SOLUTION FOR SPECIAL DEMANDS

Uddeholm 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.

PIONEERING POWDER METALLURGY

INTRODUCING A STAINLESS SOLUTION THAT LASTS

When and where nothing else works, Uddeholm 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. Uddeholm Vanax SuperClean delivers game-changing performance when it matters.

01 
**NEW
OPPORTUNITIES**

03 
**UNIQUE
PROPERTIES**

02 
**FIRST MOVER
ADVANTAGE**

04 
**STAINLESS
WITH STAMINA**

05 
**LONG-LASTING
HIGH PERFORMANCE**

THE ESSENTIAL PROBLEM SOLVER

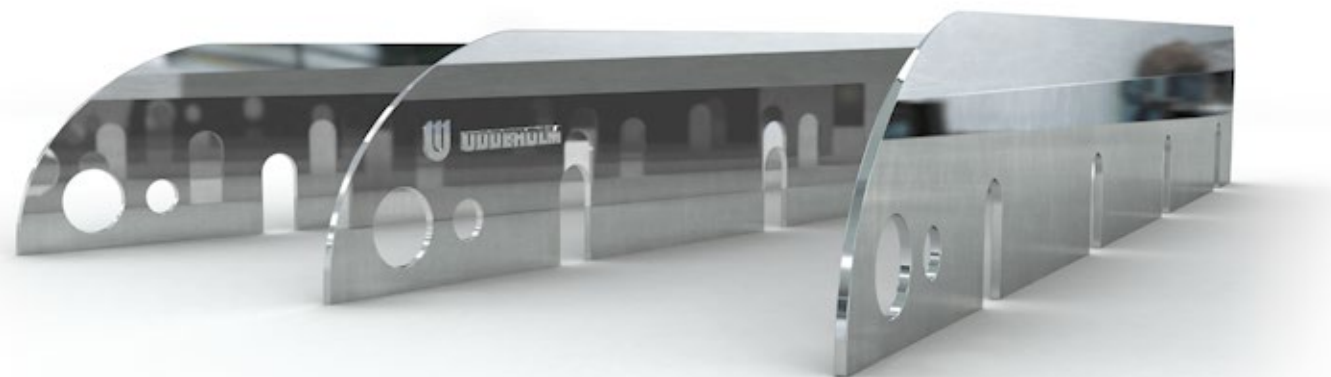
STAINLESS WITH HIGH STRENGTH AND STAMINA

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

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 Uddeholm Vanax SuperClean ensure peak performance that raises production levels, in combination with less downtime and lower maintenance costs.



Uddeholm 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

Uddeholm 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

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

Uddeholm 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 environments and tough conditions.

Chemical composition

N	C	Cr	Mo	V
1.55	0.35	18.2	1.1	3.5



KEEPING YOU ONE STEP AHEAD

With pioneering research and development, innovative thinking and deep commitment, Uddeholm offers 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.

This information is based on our present state of knowledge and is intended to provide general notes on our products and their uses. It should not therefore be construed as a warranty of specific properties of the products described or a warranty for fitness for a particular purpose. Classified according to EU Directive 1999/45/EC.



SS-EN ISO 9001
SS-EN ISO 14001

#1 IN HIGH PERFORMANCE TOOL STEEL

Since 1668 we have been providing a wide range of innovative cutting-edge solutions for our customers in demanding segments. Our dedicated employees work in almost ninety countries and together we deliver improved competitiveness to clients worldwide. Welcome to Uddeholm, #1 in high performance tool steel.