

The pressure is on Go for a better steel

UDDEHOLM HIGH PERFORMANCE STEEL FOR SHAFTS

The pressure is on

Shafts are some of the most important components there are. They transfer torque and carry loads – the very foundation of efficient, reliable production. Uddeholm High Performance Steel has a broad programme even for the very toughest conditions. Thanks to superior steel properties, the shafts last longer and withstand stress and strain in the best way. So choose your shafts with care, they're under a lot of pressure.

Production time is money. Using Uddeholm steel for shafts, you can minimise stoppages and increase productivity. Uddeholm High Performance Steel offers more advanced steels that last longer and produce better results. They are more expensive than standard engineering steels, but they pay in the long run – through higher quality, better availability, more efficient production and shafts you can rely on.

Go for a better steel

Success comes from taking a different approach, not from doing what you've always done. Uddeholm High Performance Steel is a new concept in the world of steel, with new areas of application for Uddeholm's quality steels.

Uddeholm High Performance Steel is a concept whereby the superior properties of tool steel are harnessed and used in contexts other than pure tool applications. Thanks to improved strength and wear resistance, the steels have a longer life span. That means a better overall economy for you, your company and your customers. Go for a better steel. It pays.

Some of the steels in Uddeholm's range are delivered in prehardened condition. Products made from prehardened steel can be used directly after machining with no subsequent heat treatment, thus saving time. The steels have many areas of application. By choosing a steel type and supplementary heat treatment, you can optimise each application.



● UDDEHOLM DIEVAR
Ø 25.4-712 mm
Soft annealed to: 160 HB
Potential hardness: 48-52 HRC

● UDDEHOLM ORVAR SUPREME
Ø 10-550 mm
Soft annealed to: 180 HB
Potential hardness: 48-52 HRC

● UDDEHOLM THG 2000 HT
Ø 16.2-110 mm
Prehardened to: 39-43 HRC

● UDDEHOLM NIMAX
Ø 35-670 mm
Prehardened to: 360-400 HB

● UDDEHOLM IMPAX SUPREME
Ø 12.7-800 mm
Prehardened to: 300-330 HB

Most of Uddeholm's steels
are delivered premachined.



UDDEHOLM DIEVAR



UDDEHOLM IMPAX SUPREME



UDDEHOLM NIMAX

EXTREME STRAIN WON'T BREAK UDDEHOLM DIEVAR

When strength is vitally important, Uddeholm Dievar is an excellent steel. After machining, the steel is hardened and tempered to the right hardness and thereby strength for the specific requirement. One application example is the crankshaft in a 1000+ hp Super Twin Top Fuel engine.

UDDEHOLM ORVAR SUPREME – LASTS SIX TIMES LONGER

Uddeholm Orvar Supreme is successfully used as a drive shaft for track racing and rallycross. Good heat treatment properties mean stability with only minor changes in dimensions. A major advantage in precision work. Kenneth Hansen, 11-time European Champion, uses the steel for the drive shaft in his rallycross car. The results speak for themselves – six times the life span!

FOUR TIMES THE LIFE SPAN WITH UDDEHOLM THG 2000 HT

The four shafts in a hammer mill for fragmentation are subjected to some serious abuse in the recycling process. Uddeholm THG 2000 HT is an extremely strong, tough steel. This means excellent results with shafts that last up to four times longer than other traditional steel. The steel is stocked prehardened for production of finished components, with no need for subsequent heat treatment.

UDDEHOLM NIMAX – A TOUGH UNIVERSAL STEEL

Uddeholm Nimax is the latest steel to be stocked in prehardened condition. It is an easily processed, universal steel, its main hallmarks being high toughness, excellent cutting properties and weldability. If greater wear resistance is needed, Uddeholm Nimax can be nitrided.

LARGE DIMENSIONS WITH UDDEHOLM IMPAX SUPREME

Uddeholm Impax Supreme can be used in a wide range of applications. It is stocked in prehardened condition, is available in thick dimensions and can be used without subsequent heat treatment. Nitriding further enhances wear resistance while increasing corrosion resistance. Uddeholm Impax Supreme is a very clean steel which, like our other steels, is ultrasonically tested.

UDDEHOLM UNIMAX – A NEW STEEL WITH THE OPTIMUM PROPERTIES

Uddeholm Unimax is a newly developed, extremely tough steel with the capacity to achieve hardnesses of up to 58 HRC. If strength needs to be above and beyond Uddeholm Orvar Supreme and Uddeholm Dievar, Uddeholm Unimax is the obvious choice.

UDDEHOLM ORVAR SUPREME



Opel Team Sweden – winners of the STCC final 2007 at Mantorp Park raceway

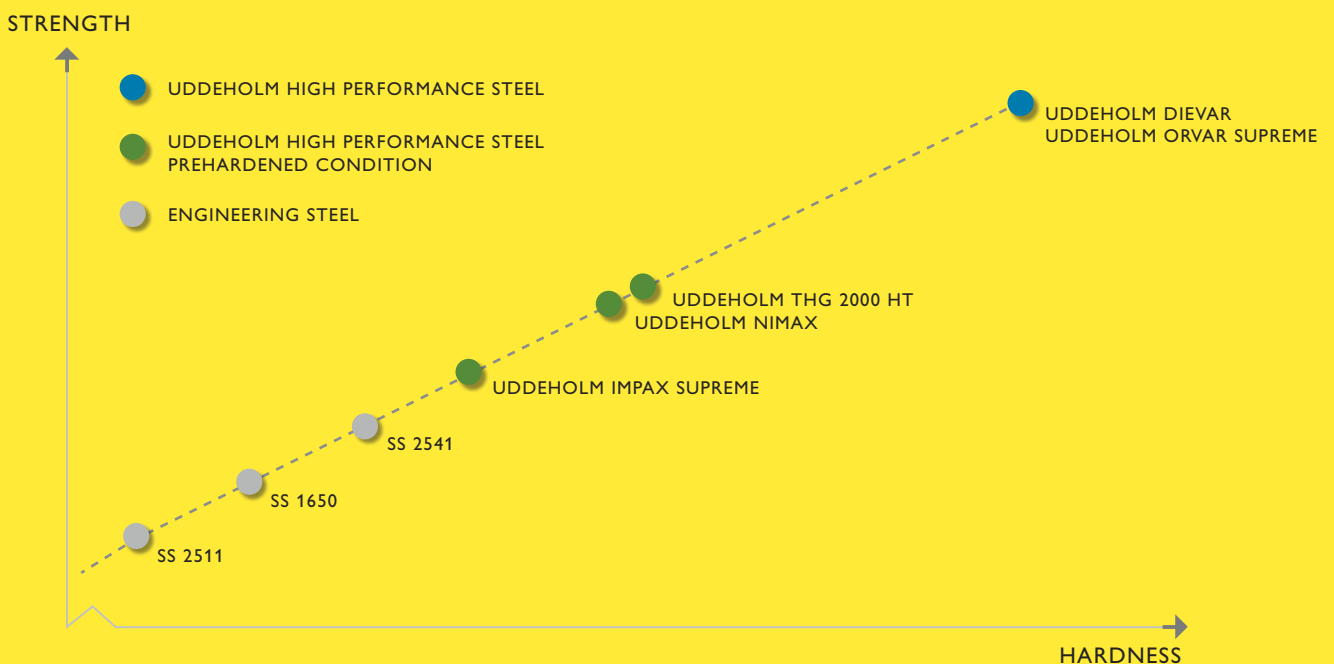
“High operational reliability is paramount to us in Opel Team Sweden. Quite simply, we have to have shafts that do their job. By working with Uddeholm we now have drive shafts that last at least twice as long as shafts made from standard engineering steel. For us to stay on top, the car has to be light. Thanks to Uddeholm High Performance Steel we can use as little material as possible yet still have shafts that can take tremendous stresses and strains.”

Göran Olsson, Team Manager, Opel Team Sweden

“A major customer of ours in Finland has used Uddeholm steel for shafts in a particularly exposed area and is very pleased with the results. Switching to Uddeholm High Performance Steel has meant a vast improvement in results and competitiveness compared to other materials.”

Lars Lindfors, Director Sales, Uddeholm Finland

Uddeholm High Performance materials can undergo nitride hardening as well as flame and induction hardening to increase the shaft's wear resistance. In some instances case hardening may also be recommended.*



* UDDEHOLM NIMAX cannot be induction or flame hardened.

