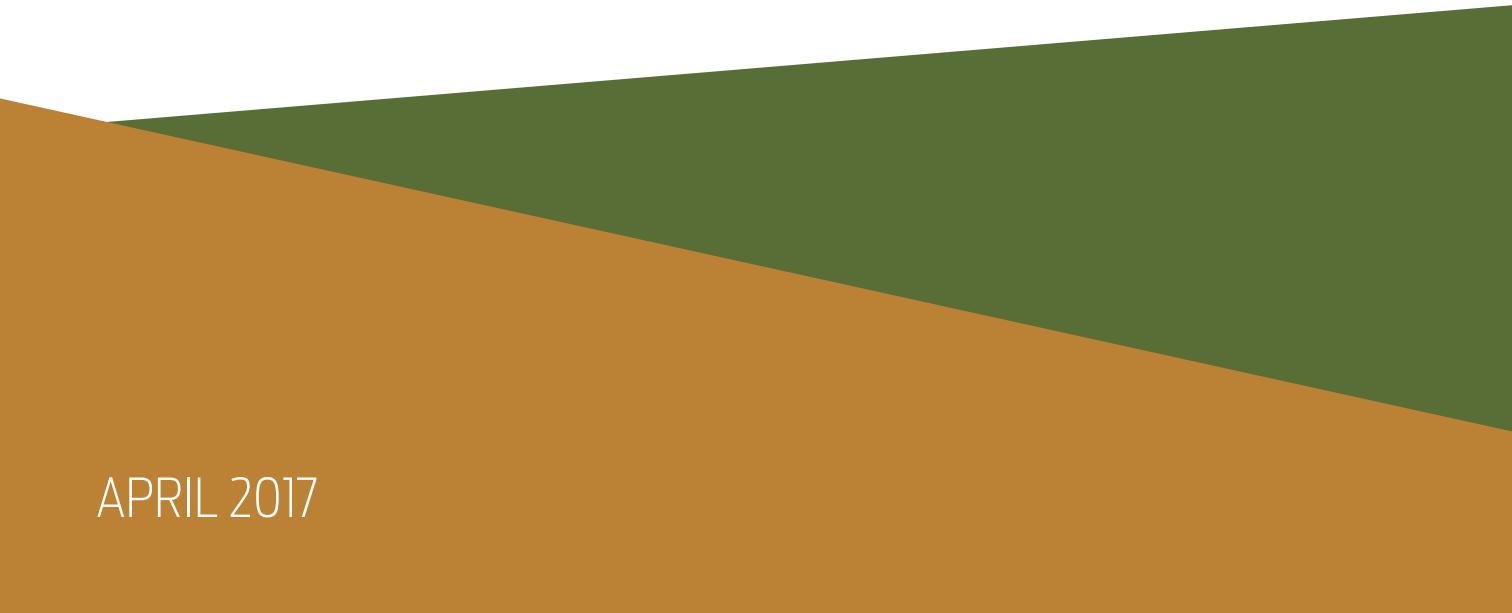


GRAFISK MANUAL

TiSurf®
TitaniumSurfaceTechnology



APRIL 2017

INLEDNING

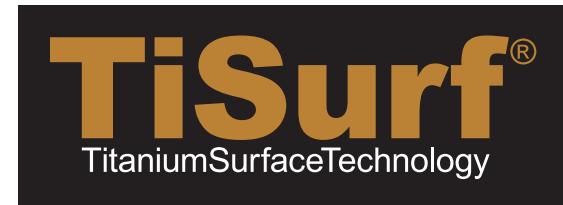
För att varumärket TiSurf® alltid ska ge samma intryck är det viktigt att vi alltid använder oss av samma uttryck. För att vi ska få genomslag och uppfattas som trovärdiga och professionella måste vi uppträda konsekvent med en tydlig grafisk profil.

I den här manualen beskrivs delarna i TiSurf®'s grafiska identitet — logotyp, typografi, bildspråk, grafiska element och färger — samt hur de kan och ska fungera tillsammans.

Riktlinjerna som presenteras är tänkta att underlätta för de som arbetar med TiSurf®'s grafiska identitet, både internt och externt, och vara en vägledning och ett stöd i arbetet med att göra TiSurf® synligt och tydligt.

LOGOTYP

Logotypen är den viktigaste byggstenen i utformningen av varumärket TiSurf®. Vår logotyp består av en ren och tydlig ordbild och är guldfärgad med antingen svart eller vit undertext. Överdriv inte storleken vid användande av logotypen då den lätt kan bli för dominerande. God kontrast är viktigare än storlek.



Svart eller vit

Vit logotyp används alltid som avsändare i sidfoten (se sida 6). Svart eller vit logotyp används då färgåtergivning inte är möjlig.



KONCERNBOLAGEN

Koncernbolagens logotyper är viktiga avsändare och ska nästan uteslutande användas i sidfoten (se sida 6). Behöver logotyperna placeras på annat sätt ska de vara i svart eller vitt.

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TYPOGRAFI

För att skapa igenkänning är en konsekvent användning av vår typografi viktig. Typsnitten Calibri och AntennaCond används i all producerad information, såväl internt som externt, både i tryckta och digitala media.

Exempel:

RAE VENTO

**Ant evenimus, qui omnistium doles-
cid quidus aut dolorem quis custo-
alia evelest, ut provid magnis.**

Us net verspinto dolloreptis ut es aut
quisinu Iparchil inctotaque doluptus
pedit, ut eniminusdae as pratem
sequibus volendit alibusc ienitat iasse-
quides ea ea sit eum ipsum est, cones
qui optatium id que evellupta coriandi
ullibust, simod quasper eperum.

Voloreicatis sequo blatqui totatiorum
excOmnihicimus reperibus et aut aut
odium ut omnitia tescips amenite.

Ingress

Calibri Bold

ABCDEFGHIJKLMNOPQRSTUVWXYZÅÄÖ
abcdefghijklmnopqrstuvwxyzåäö
1234567890

Brödtext

Calibri Light

ABCDEFGHIJKLMNOPQRSTUVWXYZÅÄÖ
abcdefghijklmnopqrstuvwxyzåäö
1234567890

Rubrik (*i första hand*)

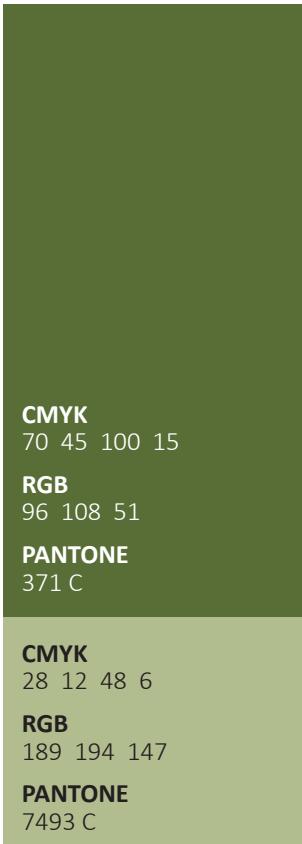
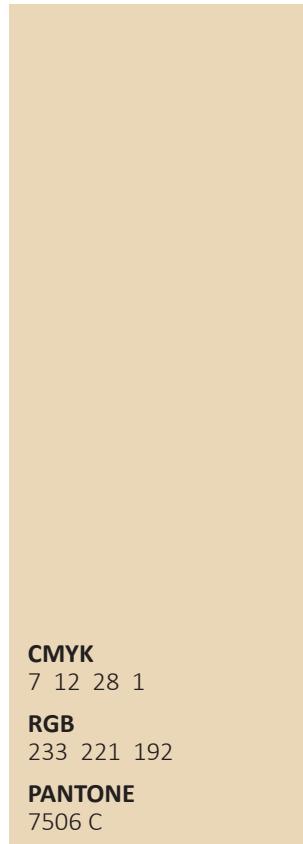
ANTENNACOND EXTRALIGHT
ABCDEFGHIJKLMNOPQRSTUVWXYZÅÄÖ
1234567890

Rubrik (*i andra hand, där extralight blir för tunn*)

ANTENNACOND LIGHT
ABCDEFGHIJKLMNOPQRSTUVWXYZÅÄÖ
1234567890

FÄRGPALETT

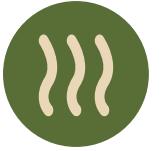
TiSurf®s färgpalett består av beige, guld och grönt och är viktiga identitetsbärare. Tillsam-
mans med den vita yta som papperet ger ska dessa färger användas för att profilera TiSurf®.



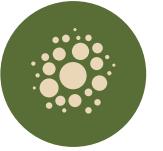
GRAFISKA ELEMENT

Piktrogram

Piktogram har fördelen att de kommunicerar snabbt, enkelt och visuellt. Vi har tagit fram ett antal symboler vars syfte är att lättä upp kommunikationen i bl.a. trycksaker, presentationer, utskick och på webben.



Heat



Corrosion



Hardness



Cost



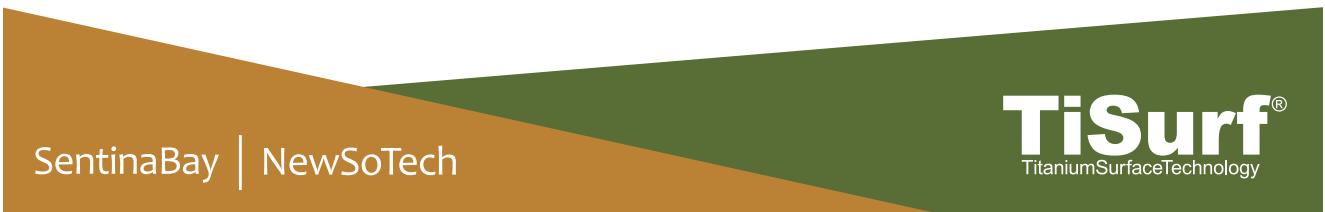
Friction



Weight

Sidfot

För att hålla ihop de tre möjliga avsändarna finns även en sidfot som en grafisk komponent. Text och objekt ska alltid vara vita och grundregeln är att koncernbolagens logotyper placeras till vänster i den guldfärgade delen och Tisurfs logotyp i det gröna till höger. Men vem huvudavsendaren är kan variera så vi måste vara flexibla så länge de grafiska riklinjerna hålls. Huvudavsendarens logotyp ska alltid placeras till höger och vara större än det som placeras i det guldfärgade fältet till vänster. Webadress och adressinformation ska vid behov placeras i det sistnämnda. (För exempel se korrespondensmaterialet på sida 8-11.)



BILDSPRÅK

Bilder är av viktiga i TiSurfs kommunikation. De ska inte enbart användas som utsmyckning utan förmedla och komplettera textinnehållet. Guld och grönt. Modernt och stilrent. I framkant!

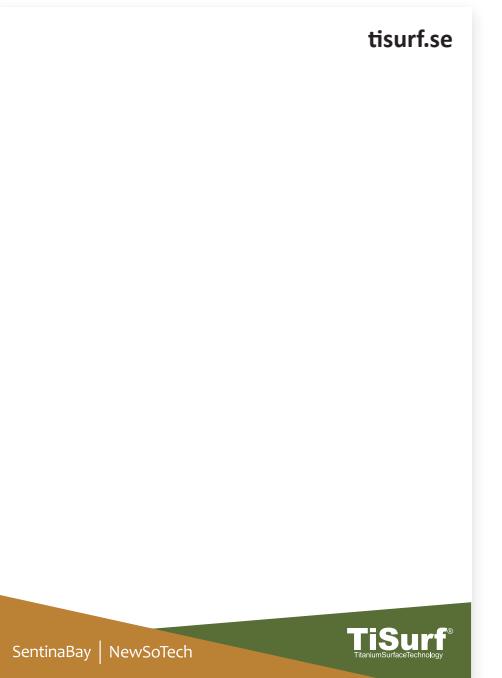


KORRESPONDENSMATERIAL

Korrespondensmaterialet fungerar som en representant för TiSurf® när ingen person är närvarande. Därför är det viktigt att det är tydligt vem som är avsändare och att korrespondensmaterialet ger ett enhetligt, sympatiskt och trovärdigt intryck. Konsekvens, typografi, tryckkvalitet, läsbarhet och pappersval är alla delar som tillsammans bidrar till en god helhetsupplevelse.



Visitkort 84x53 mm



Korrespondenskort 105x148



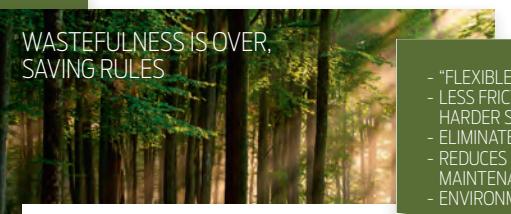
Brevpapper A4



Kuvert C5

POWERPOINT

CHANGING THE FUTURE WITH TiSurf® TITANIUM TECHNOLOGY



Titanium is a green material as soon as it enters its cycle, from beginning to end. The TiSurf® process contributes positively to the overall life cycle of titanium details by extending the life of the end product, decreasing the need for lubricants and maintenance.

Reducing energy efficiency often requires higher temperatures and pressure, and it is therefore the material that sets limitations to a large degree. TiSurf® withstands high temperatures and greater loads than steel, and its performance is better at lower temperatures.

The annual cost of corrosion and wear worldwide is over 3% of the world's GDP, and both corrosion and wear has a strong contribution to the life span of a product, chemically hybrid feature provides better wear resistance. In addition, TiSurf® does not possess the negative health impact of steel products, such as 3D printing a 20% lighter part which reduces energy consumption, including less material waste and reduced traffic. The automotive industry aims to begin production of parts made of titanium in the next few years, as well as enhanced thermo-mechanical properties.

Production suits titanium/TiSurf® excellently.

- "FLEXIBLE" CERAMIC
- LESS FRICTION AND HARDER SURFACE
- ELIMINATES CORROSION
- REDUCES NEED FOR MAINTENANCE
- ENVIRONMENTALLY FRIENDLY

FEATURES

- Oxo-hardenable titanium
- Chemical conversion of titanium surface to ceramic (TiN)
- Surface is 3x harder than chrome
- Excellent tribological properties
- Excellent mechanical properties
- High wear resistance
- High strength-to-weight ratio
- Excellent corrosion resistance
- Biocompatible
- Heat resistant
- Non magnetic

COMPONENTS

- Shafts
- Tubes
- Fixings
- Bearings
- Pistons
- Bolts and nuts
- Cylinders
- Valves
- Hydraulic systems
- Prostheses

ADVANTAGES

- Lower energy consumption
- Less maintenance
- High corrosion resistance
- Ultra-low friction
- Lower weight
- Low noise applications
- Lower demands on lubricants
- Greener life cycle



SENTINABAY
*- Changing the future with
 TiSurf® Titanium Technology*

Sentinabay's mission is commercialization of TiSurf® through licensing of technology, and sales and marketing of components and products developed on behalf of environmentally friendly low-energy applications.

Sentinabay is open to partnership, joint venture, co-owned companies and partial ownership.

The company is headquartered in Sandviken, Sweden. Major equity owners are NewSoTech, Alm Invest, and Sandvik Investors.

Sentinabay AB is a subsidiary to

NEWSOTECH

- New Solutions Technology

NewSoTech AB is a materials institute with industry leaders with transformational expertise. One goal is to develop best practices for processing into industrial solutions. Another customers with competitive advantage in the following areas:

- Materials science, CVD and plasma polymer coatings and stains
- Polymers, graphene, hot isostatic sintering, tribology and surface treatment

A HARDENING, NOT A COATING

TiSurf®

- A surface hardening, not a coating
- Becomes "one" with the substrate
- Nitrogen diffuses into the substrates titanium surface and converts the surface to titanium nitride (TiN)
- The result is a compact hybrid material of ceramic and metal

VS OTHER METHODS

PVD, Physical Vapor Deposition

- A physical process where a thin layer of the film material (e.g. TiN) is deposited on the substrate through vaporization
- Result is a layer of coating that has variable strength of ties
- Tendency to flake

CVD, Chemical Vapor Deposition

- CVD is an atmospheric controlled process that creates a thin film coating (e.g. TiN) through reactions between gases and substrates
- The result is a coating with a chemical/metallurgical binding of variable strength
- Tendency to flake

UTSKICK



TiSurf®

Titanium Surface Technology

VS OTHER MATERIALS



TiSurf® is 3 times harder than hard chrome and 10 times harder than the original titanium metal.



Titanium has a high initial cost but a low cost for its entire life cycle, due to its superior durability. It is both economic and environmentally friendly. Never, more efficient manufacturing and production methods combined with higher demand also foresee lower titanium prices.

WASTEFULNESS IS OVER, SAVING RULES

Titanium is a green material as seen over its entire life cycle, from beginning to end. The TiSurf® process contributes positively to the overall life cycle of titanium details by extending the life of the end product, decreasing the need for lubricants and reducing waste.

Increased energy efficiency often requires higher temperatures and pressure, and it is therefore the material that sets limitations to a large degree. TiSurf® withstands higher temperatures and higher loads than steel, and its hardness is very temperature stable.

The annual cost of corrosion and wear worldwide is over 3% of the world's GDP and both corrosion and wear has a

sharp correlation to the life ceramic/metal hybrid parts, wear resistance. In addition reduces the negative h effect.

Net shape engineering (NSE) is a production method which including less material was automotive industry aims 1 3D printing methods, with components with enhanced thermo-mechanical suits titanium/TiSurf® exceed

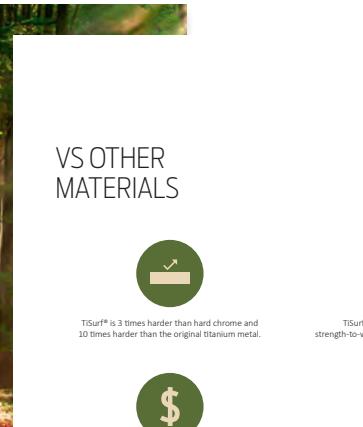


TiSurf® improves titanium's poor tribology features. It provides titanium details with extremely low friction and very high wear resistance. The dry friction of TiSurf® against steel is 0.5μ and 0.4μ against other TiSurf® details.



TiSurf® without chrome is highly temperate and highly durable. It is both economic and environmentally friendly. Never, more efficient manufacturing and production methods combined with higher demand also foresee lower titanium prices.

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TitaniumSurfaceTechnology

WASTEFULNESS IS OVER, SAVING RULES

Titanium is a green material as seen over its entire life cycle, from beginning to end. The TiSurf® process contributes positively to the overall life cycle of titanium details by extending the life of the end product, decreasing the need for lubrication, and reducing energy consumption.

Increased energy efficiency often requires higher temperatures and pressure, and it is therefore the material that sets limitations to a large degree. TiSurf® withstands higher temperatures and greater loads than steel, and its hardness is very temperature stable.

The annual cost of corrosion and wear worldwide is over 3% of the world's GDP, and both corrosion and wear has a

sharp correlation to the life span of a product. TiSurf's ceramic/metal hybrid feature provides extreme corrosion and wear resistance. In addition, TiSurf is biocompatible and does not possess the negative health impact of chrome.

3D printing, also known as additive manufacturing, is a production method which provides environmental benefits including less material waste and reduced transportation. The automotive industry aims to begin producing vehicle parts by 3D printing methods, with the ultimate goal being to produce components with substantial weight reduction as well as enhanced thermo-mechanical properties. Net shape production suits titanium/TiSurf® excellently.

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