High-end Moulds for highest surface requirements
PVD coating is possible
For lenses, transparent and decorative parts

Consumer products are differentiated by their design.
> prominent surface properties required

The mould steel needs to provide high wear resistance, good polishability and an extremely homogenous structure through the whole block.

SWGs solution: OPTI N+
A corrosion resistant steel with a very low carbon content and a high hardness due to the addition of nitrogen.

OPTI N+ is tailored to your needs. This new high-end development in the tool steel industry allows you to thrive your product to the top level.

Applied to:
> high-end moulds for highest surface requirements
> PVD coating is possible
> for lenses, transparent and decorative parts

Properties:
- High purity and mirror polishability
- High wear resistance
- Corrosion resistant for e.g. PVC processing
- Vacuum homogenizable to approx. 57 HRC
- Extremely homogeneous through intern balls and therefore a very even hardness distribution all over the block
- Low distortion

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Tailored to your needs!

 OPTI N+ MADE FOR EXCELLENCE
exceeding performance you can rely on

01.2083 ESR
CRMHP ESR
OPTI N+

Place

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Toughness

Wear resistance

Corrosion resistance

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As one of the leading suppliers of tool steels, working in close collaboration with customers - we are constantly developing new possibilities to meet the challenges of tomorrow. Our aim is to satisfy the specific requirements of our customers flexibly and efficiently. This is reflected in the broad spectrum of applications - ranging from the automotive, aerospace and pharmaceutical sectors to high-tech industry. Based on our long-term experience in making first class plastic mould steel we have developed a new and advanced special grade OPTI N+.

OPTI N+® should be your steel of choice if you are looking for a mould which fulfills the highest surface requirements, a long life-time cycle with the target of highest corrosion and wear resistence including the best polishing ability.

Top of the top!

Extremely homogeneous through the steel block and therefore a very even hardness distribution over the entire block. This leads to very low distortions after heat treatment.

Our advanced technology enables us to produce this new steel grade with a special remelting technology to ensure the uncomparably high quality you will experience due to the lifetime of your mould.

Applications

For optics

- High purity, mirror polishability can reach 4/0. The best material option for high surface requirements, for very difficult applications and CIP applications.
- High wear resistance, hardness up to 57HRC
- Better corrosion resistance than 1.2083ESR
- Low Distortions (Sub-zero treatment)
- Extremely homogeneous through the steel block and therefore a very even hardness distribution over the entire block. This leads to very low distortions after heat treatment.

For medical area

- High wear resistance, vacuum hardenability up to 71HRC
- Super purity, mirror polishability can reach 4/0
- Better corrosion resistance than 1.2083ESR
- Low Distortions (Sub-zero treatment)

For moulds requiring high wear resistance

- High wear resistance, vacuum hardenability up to 71HRC
- Super purity, mirror polishability can reach 4/0
- Better corrosion resistance than 1.2083ESR
- Low Distortions (Sub-zero treatment)

For very high surface quality

- High purity, mirror polishability can reach 4/0
- Super purity, mirror polishability can reach 4/0
- Better corrosion resistance than 1.2083ESR
- Low Distortions (Sub-zero treatment)

For other high-end application please do not hesitate to contact us.