

High-performance materials

HSM[®]

- Your purchase
- Your stock
- Your machine
- Your logistic
- Your problem solver
- Your steel specialist



Special materials

High-performance materials are our vocation. As a system service provider, HSM® offers you all materials and working materials at all processing stages for your production and all technical applications. Our product range includes all steel products and Non-ferrous metal alloys in all forms and all possible batch sizes.

More than standard

We are your specialist for special materials. As more specific you need, as greater our enthusiasm. No challenge is too big for us. Especially in the field of special goods and high-performance materials, we have the necessary know-how to meet your specific needs fulfill.

Whether high or low temperatures, extreme loads or aggressive chemicals, for each area, we find the appropriate special steel or the special material. Ask you directly to us with a non-binding inquiry.

We support you with a wide range of standards and approvals:

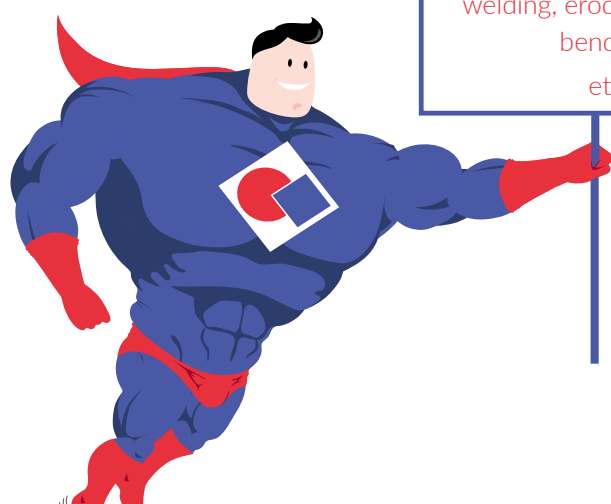
- DIN / EN
- ASTM
- AISI
- B.S.
- AFNOR
- and much more ...
- QTR Norsok
- Llyods Register
- RINA
- DNV GL SE
- TÜV Rheinland Group

Dimensions / delivery spectrum

The dimensions that we can offer you, are very comprehensive. For this reason, we don't show you a page - wide list of forms and dimensions! Your advantage is that you don't have to search for the the dimensions in the program

Use your time here more meaningfully! Ask you simply us with the appropriate guidelines and wishes and we take care of them for us!

- CNC turning, milling, boring machines, boring mills
- Internal, round flat, profil and centre less grinding
- Honing, clearing, slotting, ...



Additional service:
welding, eroding, cutting,
bending
etc.

Stainless steel RSH

Beside the special resistance to chemical influences and the resulting for a variety of industries, stainless steels are often used because of their temperature resistance.

- heat resistant
- corrosion resistant
- acid resistant

Extract of our portfolio stainless steel RSH heat resistant

No.	Labeling EN	No.	Labeling EN
1.4713	X10CrAlSi7, X10CrAl7	1.4876	X10NiCrAlTi32-20
1.4828	X15CrNiSi20-12	1.4878	X8CrNiTi18-10
1.4835	253MA	1.4913	X19CrMoVNbN11-1
1.4841	X15CrNiSi25-21	1.4923	X22CrMoV12-1,
1.4845	X8CrNi25-21	1.4980	X6NiCrTiMoVB25-15-2

Extract of our portfolio stainless steel RSH corrosion resistant

No.	Labeling EN	No.	Labeling EN
1.4000	X6Cr13	1.4305	X8CrNiS18-9
1.4006	X12Cr13	1.4362	X2CrNiN23-4
1.4016	X6Cr17	1.4410	X2CrNiMoN25-7-4
1.4021	X20Cr13	1.4462	X2CrNiMoN22-5-3
1.4112	X90CrMoV18	1.4501	X2CrNiMoCuWN25-7-4

Extract of our portfolio stainless steel RSH acid resistant

No.	Labeling EN	No.	Labeling EN
1.4906	X12CrMoWVNbN10-1-1	1.4944	X6NiCrTiMoV26-15
1.4910	X3CrNiMoBN17-13-3	1.4948	X6CrNi18-10
1.4913	X19CrMoVNbN11-1	1.4959	X7NiCrAlTi33-21
1.4923	X22CrMoV12-1	1.4974	X12CrCoNi21-20
1.4938	X12CrNiMoV12-3	1.4988	X8CrNiMoVNb16-13

- MAG, MIG and laser welding
- Laser, plasma, water jet and flame cutting
- Gearing technology, thread rolling, ...

High performance materials

We are your expert for all kinds of high alloy special steels and titanium (all grades) with the necessary know-how to meet your needs. No matter whether high temperatures, extreme mechanical stress or aggressive chemicals, we have the passed special steel.

Extract of our portfolio high performance materials

No.	Labeling EN	No.	Labeling EN
1.3813	X40MnCrN19	2.4605	Alloy 59
1.3912	Ni36	3.5632	EN-MA21150
3.1924	EN AW-2618A	2.4668	Alloy 708
3.2315	EN AW-6082	2.4816	Alloy 600
2.4360	Alloy 400	2.4856	Alloy 625

Nickel base alloys

Nickel base alloys exist mainly - as the name already says - from nickel. By means of a fusion process, elements, giving it particular characteristics:

- Corrosion resistance
- High / low temperature resistance
- Magnetic properties (strongly magnetic or completely non-magnetic)

In addition to the nickel alloys, we also procure superalloys for you. Of their particular composition are superalloys particularly suitable for high temperature applications.

We are already supplying these special materials to the chemical industry, automotive industry as well as the energy sector.

Extract of our portfolio nickel base alloys

No.	Labeling EN	No.	Labeling EN
1.3981	X3NiCo29-18 / Alloy K	2.4360	Alloy 400
1.4876	Alloy 800	2.4050	Alloy 270
2.4068	Alloy 201	2.4603	Alloy G30
2.4602	Alloy C22	2.4683	Alloy 188
2.4665	Alloy K	2.4880	Alloy HR160

Rapid availability of resources, which are very difficult to obtain at national level.

HSM® assumes European or world-wide procurement.

Titanium and titanium alloys

Whether sheets, plates, strips, wires, rods, tubes, profiles, special profiles, rings, or other special dimensions, we will help you with your specific needs.

From the semi-finished product to the installed part according to your drawing / specification.

Extract of our portfolio titanium

No.	Grade	No.	Grade
3.7024	Grade 1	3.7114	Grade 6
3.7035	Grade 2	3.7235	Grade 7
3.7055	Grade 3	3.7194	Grade 9
3.7065	Grade 4	3.7105	Grade 12
3.7164	Grade 5	3.7165	Grade 23

Titanium processing

HSM® is your extended workbench. Besides the collection of titanium, we take you also the processing of the material. The hard titanium material is difficult to machine and only a few companies can carry out appropriate processing and production to lead. HSM® takes care of the machining of high-performance materials - fast and flexible from one source.

Contact your customer service representative for this service.



High-grade steel and high-quality structural steel

Depending on the requirements, as ductility, toughness or grain size, we have passed steels in the program.

Unalloyed or alloyed case-hardening steel or heat treatable steel. We also procure special varieties for heat treatment or special surface hardening, up to nitriding steel.

- high-grade steel
- case-hardening steel
- heat treatable steel
- high-quality structural steel
- hard chromium plated piston rods
- hard-mangan-steel
- Heat-resistant steel
- ball and roller bearing steel
- spring steel
- nitriding steel

Extract of our portfolio

No.	Labeling EN	No.	Labeling EN
1.6580	30CrNiMo8+QT	1.7218	25CrMo4
1.6582	34CrNiMo6+QT	1.7258	24CrMo5
1.6587	18CrNiMo7-6	1.7335	13CrMo4-5
1.7131	16MnCr5+A	1.7709	21CrMoV5-7
1.7147	20MnCr5+A	1.8507	34CrAlMo5-10

Heat treatment

For your request, everything is included. You get from us the completely machined semitrailer or delivered directly to your production so you can get started right away.

- stress relief annealing
- tempering
- hardening and tempering
- nitriding

We can offer you all kinds of quality acceptance tests as per 3.1 or 3.2. Furthermore we have the acceptance for restamping by ourselves.

Tool steel in best quality (also in ESU)

For the manufacture of tools and molds, have to have tool steel, required in various grades. We supply unalloyed and alloyed cold work steels, hot work steels, precision flat steels and high-speed steels.

- Unalloyed and alloyed cold work steel
- Hot working steel
- Precision flat steel
- High-speed steel also available in many special grades
- Powder metallurgical steel („PM steel“)
- Plastic molding steel
- Corrosion resistant steel
- Martensite-hardenable steel
- also as plates and round bars dressed to size, eroding blocks and much more.

Extract of our portfolio tool steel

No.	Labeling EN	No.	Labeling EN
1.2085	X33CrS16	1.2367	X38CrMoV5-3
1.2311	40CrMnNiMo8-6-4	1.2767	45NiCrMo16
1.2344	X40CrMoV5-1	1.2885	X32CrMoCoV3-3-3
1.2358	60CrMoV18-5	1.4034	X46Cr13
1.2363	X100CrMoV5	1.7131	16MnCr5





HSM® - YOUR ADVANTAGE



Forms and Dimensions

We are specialized in unusual needs and procure rods, plates, sheet metal, bands, pipes, profiles and forged parts in various materials, grades, dimensions and forms.

Production according to customer drawings

We handle quickly and accurately the manufacturing according drawing or prefabrication of semifinished products. The experts of HSM® - engineering team take care of your request and try everything to implement your desires.

Quality

Quality is a consistently implemented concept at our company. The successful implementation, continuation and improvement of a quality management system certified according to DIN EN ISO 9001:2008 confirms this. We are also audited by major companies.



Quality certifications:

- DIN EN ISO 9001:2015
- DIN EN 9120:2016 (Aerospace engineering)
- KTA 1401 (nuclear standard)



Management System
ISO 9001:2015
EN 9120:2016

www.tuv.com
ID 9105025049

Effectiveness for your production

You can concentrate on your main business and we solve your difficulties:

- **HSM® is your purchase**
Functioning as the extended arm of purchase of our customers we manage to solve even tough purchasing problems.
- **HSM® is your stock**
You receive the needed semi finished/ finished products at short notice and on schedule right at your machine.
- **HSM® is your machine**
We support our customers as extended work bench both with simple processing and with complex finished parts.
- **HSM® is your logistic**
Whether it is air freight, special freight, urgent deliveries or courier carriage, we supply the material for our customers at the correct time to the correct place.
- **HSM® ist your partner**
We help you with any kind of needs. To provide our customers service at it's best you have a solid contact person who cares about all of your requirements.



HSM Stahl- und Metallhandel GmbH

Breitenloher Weg 12

91166 Georgensgmünd

Tel.: +49 9172 69 00 - 0

Fax: +49 9172 69 00 -20

E-Mail: hsm@hsm-stahl.de

www.hsm-stahl.de

