

# SCHMOLZ + BICKENBACH

Comprehensive range of  
stainless steel solutions





## Our star products dedicated to the most stringent markets

### Aerospace

- » AERODUR®, UGI® AIR for the requested cleanliness in stainless steel

### Automotive:

- » UGIMA® and NIRO-CUT® improved machinability grades
- » EXHAUST® F1, ferritic welding wire for exhaust lines
- » MAGNADUR®, ACIDUR®, CORRODUR® and ELECTRODUR® 4105 range of stainless steel
- » UGIPERM® with optimized magnetic properties
- » UGIPURE® for high-performance springs
- » UGIWELD® for optimized results in welding

### Medical

- » ACIDUR® 4441, UGIPURE® 4441, for implantable medical devices
- » CORRODUR® 4021, UGI® 4197, UGI® 4542 martensitic and austenitic steels for ancillary products and surgical instruments
- » Metallic powder steel products

### Mining

- » UGICHROM® hard chromium plated bars for hydraulic systems

### Electronics

- » Ultra fine wires from Sprint Metal

### Architecture Building and Construction

- » ACIDUR® 4362, UGIGRIP® stainless steel rebars
- » UGISHAPE® for architectural applications

### Mechanical Engineering

- » UGICHROM® hard chromium plated bars for piston rod applications
- » UGIMA®, NIRO-CUT® for improved machinability
- » UGIPLEX® for a full range of duplex grades

### Oil & Gas

- » UGI® 4418, UGI® 4542, ACIDUR® 4418 mod., ACIDUR® 4542, ACIDUR® 4501 acid resistant steel
- » CORRODUR® 4006, CORRODUR® 4021 corrosion resistant steel
- » MAGNADUR® 501, CORRODUR® 601 nonmagnetic steel for multidirectional drilling
- » UGISHAPE® simple to highly complex shaped wires for filtration applications
- » UGIALLOY® nickel alloy for welding wires and drawn wires

### Food industry

- » ACIDUR® 4404, ACIDUR® 4462, ACIDUR® 4521 for water management
- » ACIDUR® 4460, ACIDUR® 4462 for fishing industry

### Marine

- » Long bars for propeller shafts
- » PYRODUR® 4718 for marine valves

*Our steels satisfy the highest technical requirements such as extreme resistance to corrosion, mechanical load, high strength, strain values and very high thermal resistance.*



## SCHMOLZ + BICKENBACH Group

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The SCHMOLZ + BICKENBACH Group is fully integrated, from melting to worldwide distribution including hot rolling, cold processing and forging.

This is why we can guarantee the highest quality level and a complete traceability all along the production, processing and distribution. Deutsche Edelstahlwerke and Ugitech, our state of the art production plants rank among the leading manufacturers of stainless steel and acid- and heat-resistant steels in the world with the most innovating production technologies and the most powerful R&D centers for stainless steel long products.

### **Corporate culture**

**Thanks to our technical expertise, innovativeness and our worldwide service centers , we are the benchmark for special steel solutions.**

Considering our customers as partners allows us to understand their needs and act flexibly to meet their expectations. Striving for excellence, we continuously improve our production technologies, our worldwide distribution network and our product portfolio.

Because we believe our people are our greatest asset, we value our employees protecting them with the highest safety standards. We put emphasis on constantly reducing environmental impact through a continuous development of processes dedicated to the following environmental matters: air pollution, energy efficiency, recycling, climate, and waste of water.

We value our competences expanding our skills and experience to embrace the market changes. Being customer oriented, we proactively cooperate with our customers to meet their needs and expectations. Our entrepreneurship spirit is what drives us to achieve performances in offering tailor made special steel solutions. We are dedicated to bring the most technical products on the market, this is why innovation is a group corner-stone.

### **Sales & Services division, being close to our customers, worldwide, at all times**

With more than 70 locations in 30 countries, our global presence gives us the opportunity to deliver our high-tech products to your doorstep and allows us to become your reliable local partner providing technical support, processing work such as cutting and chamfering, and just-in-time deliveries. Such a service approach based on our state-of-the-art product range leads to long lasting relations with our customers who value us as partners in their development.

Our grade range is very large, we count around 300 grades in our offering, this is why you can contact us for any special need you require in your development and your innovation processes.

# Our stainless, acid and heat-resistant steel grades

- » From 1 meter diameter forged bars to ultra fine wires of 13 microns, we offer more than 300 grades dedicated to the most specific applications. We are covering all the stainless steel families: austenitic, ferritic, martensitic and duplex grades including high machinability versions (UGIMA® and NIRO-CUT®), heat-resistant steel, creep-resistant steel, non-magnetic and magnetic steel.
- » Thanks to the our state of the art Research and Development centers, we can also work in collaboration with our customers to develop new products for special steel needs.

Material EN Number	EN Symbolic designation	AISI, ASTM
<b>MARTENSITIC STAINLESS STEEL</b>		
1.4003	X2CrNi12	
1.4006	X12Cr13	410
1.4005	X12CrS13	416
1.4024	X15Cr13	410
1.4021	X20Cr13	420
1.4028	X30Cr13	420
1.4029	X29CrS13	420F
1.4031	X39Cr13	420C
1.4034	X46Cr13	420
1.4035	X46CrS13	420F
1.4037	X65Cr13	
1.4120	X20CrMo13	
1.4903	X10CrMoVNb9-1	F9
1.4913	X19CrMoNbVN11-1	
1.4922	X20CrMoV11-1	
1.4923	X22CrMoV12-1	
1.4122	X39CrMo17-1	
1.4117	X38CrMoV15	
1.4116	X50CrMoV15	
1.4125	X105CrMo17	440C
1.4313	X3CrNiMo13-4	F6NM
1.4418	X4CrNiMo16-5-1	
1.4057	X17CrNi16-2	431
1.4044	X15CrNi17-3	
1.4197	X22CrNiMoS13-1*	
1.4731	X40CrSiMo10-2*	
1.4718	X45CrSi9-3	
<b>CHROMIUM FERRITIC STAINLESS STEEL</b>		
1.4016	X6Cr17	430
1.4511	X3CrNb17	
1.4512	X2CrTi12	409
1.4601	X6CrNb12*	409Cb
1.4509	X2CrTiNb18	441






















Material EN Number	EN Symbolic designation	AISI, ASTM
1.4521	X2CrMoTi18-2	443 / 444
1.4105	X6CrMoS17	430F
1.4104	X14CrMoS17	430F
1.4113	X6CrMo17-1	434
	X12CrS13+Si*	416Si
1.4105 Si*	X6CrMoS17	430FR
1.4106*	X2CrMoSiS18-2-1*	
1.4114*	X6CrMoS19-2*	434F
<b>STRUCTURALLY HARDENED STAINLESS STEEL</b>		
1.4542	X5CrNiCuNb16-4	630
1.4545	X5CrNiCu15-5*	
1.4548	X5CrNiCu17-4*	630
1.4980	X6NiCrTiMoVB25-15-2	660
<b>AUSTENITIC-FERRITIC / DUPLEX STAINLESS STEEL</b>		
1.4062	X2CrNiN22-2	
1.4362	X2CrNiN23-4	
1.4410	X2CrNiMoN25-7-4	F53
1.4460	X3CrNiMoN27-5-2	329
1.4462	X2CrNiMoN22-5-3	F51
1.4501	X2CrNiMoCuWN25-7-4	F55
1.4507	X2CrNiMoCuN25-6-3	F59
<b>AUSTENITIC STAINLESS STEEL</b>		
1.4301	X5CrNi18-10	304
1.4307	X2CrNi18-9	304L
1.4306	X2CrNi19-11	304L
1.4311	X2CrNiN18-10	304LN
1.4310	X10CrNi18-8	301
1.4305	X8CrNiS18-9	303
1.4303	X4CrNi18-12	305
1.4570	X6CrNiCuS18-9-2	
1.4567	X3CrNiCu18-9-4	304Cu
1.4541	X6CrNiTi18-10	321
1.4550	X6CrNiNb18-10	347

Material EN Number	EN Symbolic designation	AISI, ASTM	Material EN Number	EN Symbolic designation	AISI, ASTM
<b>REFRACTORY AUSTENITIC STAINLESS STEEL</b>			<b>1.4436</b>	X3CrNiMo17-13-3	316
<b>1.4828</b>	X15CrNiSi20-12	309Si	<b>1.4439</b>	X2CrNiMoN17-13-5	
<b>1.4841</b>	X15CrNiSi25-21	314	<b>1.4435</b>	X2CrNiMo18-14-3	316L
<b>1.4845</b>	X8CrNi25-21	310S	<b>1.4578</b>	X3CrNiCuMo17-11-3-2	
<b>REFRACTORY FERRITIC STAINLESS STEEL</b>			<b>1.4598</b>	X2CrNiMoCuS17-10-2	
<b>1.4713</b>	X10CrAlSi7		<b>1.4571</b>	X6CrNiMoTi17-12-2	316Ti
<b>1.4724</b>	X10CrAlSi13	405	<b>1.3952</b>	X2CrNiMoN18-14-3*	
<b>1.4742</b>	X10CrAlSi18		<b>1.3964</b>	X2CrNiMn-MoNNb21-16-5-3	
<b>1.4763</b>	X8Cr24*	446	<b>1.4539</b>	X1NiCrMoCu25-20-5	904L
<b>CHROMIUM-NICKEL-MOLYBDENE AUSTENITIC STAINLESS STEEL</b>			<b>1.4529</b>	X1NiCrMoCuN25-20-7	
<b>1.4401</b>	X5CrNiMo17-12-2	316	<b>1.4466</b>	X2CrNiMoN25-22-2	
<b>1.4404</b>	X2CrNiMo17-12-2	316L	<b>1.4909</b>	X2CrNiMoN17-12-2*	316L
<b>1.4406</b>	X2CrNiMo17-11-2	316LN	<b>1.4910</b>	X3CrNiMoBN17-13-3	
<b>1.4429</b>	X2CrNiMo17-13-3	316LN	<b>1.4441</b>	X2CrNiMo18-15-3	316LMV

\*Grades not defined in EN 10088

We have more than 300 grades in our offering, feel free to contact your local experts for any special requirements.

## We provide a range of effective solutions in all dimensions

Ingots, Continuous casting, Semi-finished products	Hot rolled bars	Wire rod/ Drawn wire
<p><b>Ingots</b> 1 - 58 t</p> <p><b>Continuous casting</b></p> <p> 138 mm 150 mm 205 mm 265 mm</p> <p> 475 x 340 mm</p> <p><b>Semi-finished products</b></p> <p> 50 - 320 mm, rising in 1 mm increments</p>	<p> 7 - 250 mm</p> <p> 50 - 160 mm</p> <p> 3 - 60 mm</p> <p></p> <p>Width: 80 - 510 mm Thickness: 24 - 160 mm Width/thickness ratio: 10:1 max</p>	<p><b>Wire rod</b></p> <p> 5 - 32 mm (5 - 13 mm rising in 0,5 mm increments / 13 - 32 mm rising in 1 mm Increments)</p> <p> 12,4 - 28 mm rising in 1 mm Increments</p> <p><b>Drawn wire</b></p> <p> 0,013 - 22 mm Coils, spools, baskets, reels</p> <p><b>Profiles</b> 1 - 60 mm<sup>2</sup> Coils, reels, straightened products</p>
Bright steel	Forged products	Special products
<p> 0,8 - 130 mm</p> <p> 2 - 55 mm</p> <p> 2 - 60 mm</p> <p> 2 - 18 mm</p> <p></p> <p>2 x 1 - 100 x 40 mm 2 x 1 - 15 x 4 mm</p> <p>Bright steel in bars of 2 to 130 mm Bright steel in coils of 0.8 to 22 mm</p>	<p></p> <p><b>Open-die forgings</b>, rotationally symmetrical forgings forged to shape on request up to 50 t single-piece weight</p> <p> 65 - 1100 mm</p> <p> 50 - 750 mm</p> <p></p> <p><b>Single-piece weight up to 23 t</b></p>	<p> <b>Drill collars</b>, diameter up to 280 mm (round), length up to 10 mm</p> <p> <b>Pre-machined</b>, rotationally symmetrical forgings, forged to shape</p> <p><b>Hard chromium plated bars</b>, 12 - 110 mm, diameter tolerance isof7</p> <p><b>Rebars:</b> <b>Cold ribbed bar</b>, 6 - 25 mm (length up to 12 m) <b>Cold ribbed coil</b>, 6-14 mm (weight up to 2T)</p>



SCHMOLZ + BICKENBACH GROUP

**Production**

Deutsche Edelstahlwerke  
Finkl Steel  
Steeltec  
Swiss Steel  
Ugitech

**Sales & Services**

SCHMOLZ + BICKENBACH International  
More than 70 locations  
in over 30 countries worldwide

Divisions:

📍 Sales & Services 📍 Production

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## Sales & Services division

From semi-finished products to ready-to-use components at your door, worldwide.

**1300** employees

**70** locations

**5** continents

**30** countries

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Our range of local services includes:

- » Local supply chain services
- » Just in time deliveries
- » Cutting
- » Chamfering
- » Technical support

# Your local contact worldwide

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