

+

Steel.

One material.

Two specialists.

Infinite potentials.



Dillinger and Saarstahl - maximum competence in steel for demanding applications

Steel from Dillinger and Saarstahl can be found in iconic architectural structures, high-speed trains and most of the cars on the roads of Europe.

Industry needs dependable materials – and dependable partners. Dillinger and Saarstahl are bywords for ultimate quality and sustainable conduct.

Together, we are driving the transformation of the steel industry into the future. Our objective: CO₂-neutrality in the production of steel by 2045. The transformation motto Pure Steel+ focuses not only on the climate-friendly conversion of production. "We are Pure Steel+. We are shaping the future" is, at the same time, our leitmotif for innovation, achievement and orientation around solutions.

We deliver top-level quality and service – practically orientated, industry-specific and, in the future, CO₂-neutral.

Cooperating with our specialised subsidiaries, we can supply a comprehensive portfolio, ranging from high-quality flat and long-steel products, via forgings, motor-vehicle components and monopiles, up to and including semi-fabrication solutions and sophisticated logistical concepts.

What makes us special? Centuries of experience, an unequivocal commitment to sustainable conduct and the will to shape the future together.

Two specialists. One aim: A competence in steel that you can build on.

Pure Steel+
We are shaping the future.

We are Dillinger, we are Saarstahl, we are the SHS Group.
Together we are achieving great things and shaping the infrastructure of the future with our steel.

We are enthusiasts for change. We evolve unique solutions for our customers with high-level commitment and constant innovative power.

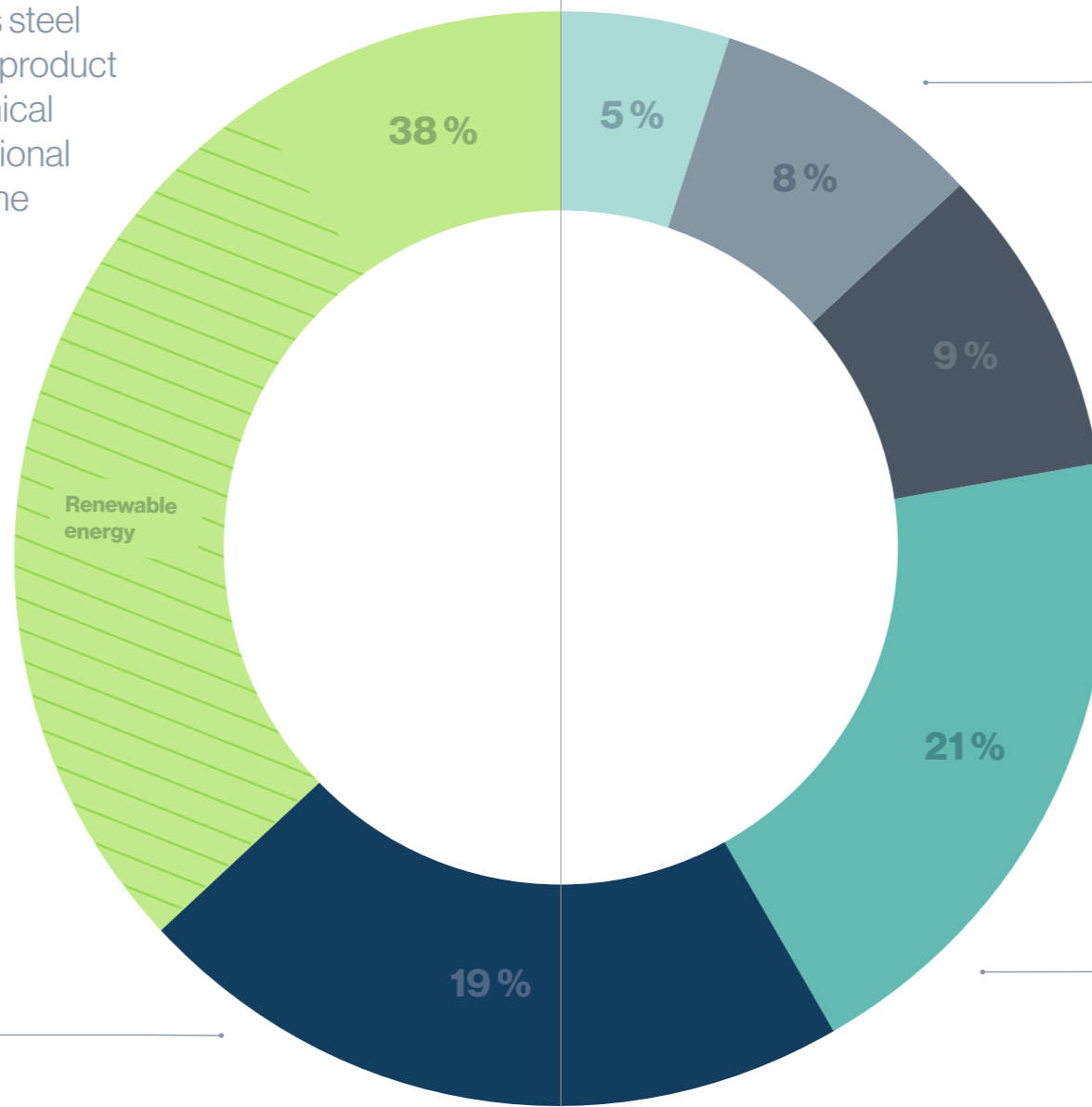
Here we are. For the people with whom we work, for the region in which we live and for a sustainable world.

We are the future. We work profitably and, together, we are successful.



Outstanding solutions in steel for our customers

Steel convinces with its strength, flexibility and outstanding working characteristics. These are properties that make this material predestined for the most diverse applications and the most impressive designs. Its 100% recyclability makes steel unbeatable for sustainability. We develop outstanding product solutions for key industries like energy supply, mechanical engineering, consumer durables, national and international infrastructure, rail technology and infrastructure, and the automotive sector.



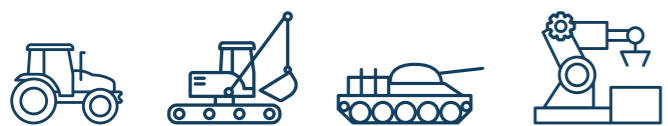
Energy supply

Steel is the backbone of the energy turnaround. Whether for offshore foundations, power-transmission cables, nuclear fusion and hydropower – our steel products are the driving force: robust, efficient, versatile.



Mechanical engineering

We deliver high-precision, load-resistant solutions in steel for complex mechanical engineering applications – in linear, safety and rolling-mill technology, for example.



Consumer durables

Our material is also used in a large range of other sectors and functions: from white goods applications up to and including solutions for the furniture industry.



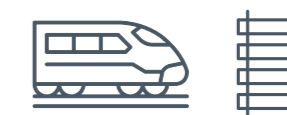
Infrastructure

Safe and robust with steels from Dillinger and Saarstahl. Our solutions in steel are implemented in the construction industry and for a whole range of infrastructure projects.



Rail technology and infrastructure

The tried-and-proven quality of Dillinger and Saarstahl is incorporated into the most modern trains and rail lines to attain maximum speed, reliability and safety.



Automotive

Whether for the running gear, the engine, the steering or the suspension – our steel can be found in almost every area of the vehicle and is there to ensure performance and safety. We set standards in e-mobility, in particular: innovative solutions in steel for motor-vehicle suspension springs and still other key components for the further development of battery-electric vehicles.



Energy supplies

Renewable energy

Classic energy



Renewable energy is accompanied with the growth of the importance of wind power – especially in the offshore sector. Materials which assure not only high durability but also ultra-high quality and precision are needed for the foundations of offshore wind-energy facilities.



The energy turnaround confronts industry, politics and consumers with great challenges. Our solutions in steel enable us to support the low-CO₂ generation of energy – ranging from offshore foundations, via wind-power components, up to and including essential structural parts for gas-fired and hydroelectric power plants.

Renewable energy

Our heavy-plate materials have been setting standards since the very beginnings of offshore wind power – tailored to an exact fit for monopiles, jackets & Co. In addition, our large stock of thermomechanically rolled plates and offshore grades assures rapid availability. In the field of hydropower-plant engineering, we supply many safety-relevant components – pressure pipes and penstocks, pipe branches and load-bearing structural-steel engineering components and housings, including such for turbines.

Highly durable threaded fastenings are indispensable for the fixing of tower segments. This is where our long-product input material is used: we supply steel bar and rolled wire for the production of screws and bolts. Welding wire electrodes for monopiles are also included in our repertoire.

And our prestressing steel is also to be found in onshore tower construction, assuring strength and robustness, and convincing users with its ultra-high quality, reliability and durability.

Our portfolio is augmented by forgings for wind and hydro-power – in steam turbines, for example.

Classical energy

Our heavy-plate products, certified in conformity to API 5L, ISO 3183 and DNV-OS-F101, secure in the offshore sector the production of natural gas and oil – even from great depths. At the same time, our wire products assure safe and uninterrupted transmission of electricity across great distances. Our rolled wire is frequently selected for special applications such as pipe cladding and as stranding wire for platform anchoring in the oil and gas industry. Our welding wire electrodes are also used in the construction of pipelines.

Our forgings are known around the world as the standard in power-plant technology – from fossil, via nuclear, up to and including other industrial applications. From cryogenic, high-temperature creep resistant and extra high-temperature steels, up to modern nickel-based alloys:

Our materials make possible ultra-precision components for generators, gas turbines and steam turbines. Our extra high-temperature steels, in particular, raise efficiencies in demanding operating temperature ranges – to assure a more sustainable energy future. Above and beyond these applications, we supply forgings for future-orientated technologies, such as energy from nuclear fusion.

Maximum demands are made on design and material whenever pressure, temperature and/or aggressive fluids enter the equation. Our plates for pressure-vessel engineering – whether fixed or mobile – meet these requirements even in the case of large component dimensions and/or complex geometries. Our non-alloy and low-alloy special steels fulfil both international standards and individual requirements. Thanks to above-average dimensions, we enable cost-effective fabrication even for the very largest pressure vessels. Our product portfolio also includes materials for use in extremely low-temperature (cryogenic) applications, whether cut-to-shape, edge-machined and/or bent to a specific radius, as well as ready-to-install vessel shell sections.

Pipelines transmit gas under maximum safety requirements. For this reason, our pressure-vessel steels meet maximum quality standards and specific approvals. Whether deep under the surface of the ocean, or in high-pressure systems – our steels bear the necessary responsibility. For safety. For assured supply. For the future.

For extreme conditions – sour-gas-resistant piping, thick-walled deep-sea pipelines and arctic-weather applications – we supply tailor-made pipemaking plates. With more than 30 years of experience paired with ultra-modern production technology and rolling stands, we make possible maximum degrees of deformation even in the case of extremely thick continuous-cast slabs of up to 600 mm in thickness. In combination with our high-performance cooling line, plates with an especially fine-grained structure, excellent strength and toughness are created – and possess outstanding weldability. Whether thermomechanically rolled, normalized or water quenched and tempered: We give you everything you need to meet your requirements.





Strong steel for green electricity:
Dillinger supports the energy turnaround with some
94,000 tonnes of heavy plate for the Gemini offshore
wind farm.

Mechanical engineering

General mechanical engineering



The demands made on our steels are just as diverse as our customers' machines. The range of our products thus covers the entire bandwidth of mechanical engineering – from thin plates for large-format formwork panels up to and including thick plates for press frames. It also extends from wires and quenched and tempered steel bar for connecting elements up to special-alloy welding wire electrodes.

Whether heavy presses, precise linear technology or highly stressed hydraulic components – our carefully tailored solutions assure precision, loadability and efficiency. As your dependable partner, we stand for zero-compromise quality and technological know-how.

Our tool and forming steels – and our DIMO plate grades – are first choice for plastics forming and precast-concrete blocks. They score with excellent erodibility, polishability and geometrical stability.

Thanks to continuous investments, we produce plates of up to 25 tonnes item weight and welded components of up to 180 tonnes, including chamfer machining, flame cutting, large formats and vibratory stress relief.



Our rolled steel wire and steel bar material are in demand wherever maximum precision and loadability matter – in welding applications, linear technology, connecting elements or high-pressure hydraulics, for example. We offer our customers product innovations such as the double-thermomechanical rolling process (DTM), Maraform® technology and products blasted for superior surface characteristics.

Our forgings are well established in mechanical engineering – in press construction, rolling-mill technology, ship-building and in foundry equipment. We can produce components of more than 20 metres in length and individual item weights of over 100 tonnes.

For the agribusiness sector, we supply long products for engines, gearboxes and power trains, rods for round balers and parts for hydraulic systems.

Mechanical engineering

Earth-moving machines and mining



Anyone who works under extreme conditions needs uncompromising quality. Our products set benchmarks in this field – with performance figures that go well beyond the widely applicable industry standards.

Our heavy-plate portfolio – ranging from the standardised grades up to such proprietary steels as DILLIMAX and DILLIDUR – meet maximum demands, including special specifications of up to 300 mm thickness and 4,500 mm width. The moving of enormous loads depends not only on strength but also on weight: the lighter the design, the more cost-efficient the component in service. Minimal deviations in thickness are a genuine must in the case, in particular, of mobile cranes with large jibs and booms – so put your faith in our DILLIMAX proprietary steel.

DILLIDUR is used everywhere where powerful machines exposed to severe wear are needed in the context of demolition work, recycling and the mining of mineral resources.

Our products are thus used in, for example, dumper trucks, mechanical excavators, cranes, lifting equipment and com-

minution machinery, such as shredders.

Together with our Steel Service Centers, we supply DILLIMAX and DILLIDUR steels from stock, complete with flame cutting services, chamfer machining and welded components. To meet maximum requirements, we provide vibratory stress relief to assure dimensional stabilisation in welded parts, precision-tailored stocking concepts and just-in-time delivery solutions.

In addition, bar products, wire products and forgings are also part of our portfolio: welding wire electrodes for repair welds, or for hardfacing of excavator shovels, steel wire for screen meshes, chain steels and drill steels. Our material is frequently selected for hydraulic systems, for press sockets and hydraulic blocks, for example. Our forgings are used, for instance, in shafts for gyratory crushers, discs and shafts for roller crushers, forged rings for tunnel boring machines (TBMs) and rollers and shafts for briquetting presses.



The most extreme forces are in action in earth-moving machines and in mining, combined with extreme wear each and every day. Downtimes and material defects cause high costs. Our steels for these demanding applications prove themselves every day under the most adverse conditions conceivable.

Mechanical engineering

Defense



+ Security steels protect human life in armoured vehicles and buildings, long-product steels make possible precision in defense. We bear responsibility for quality, integrity and pioneering technology.

Security systems signify protection – with no compromises and under all conditions. And both for civilian and military applications: Our tailor-made solutions deliver protection where it is most important – in armoured vehicles, buildings and cash/valuables-in-transit (CVIT) vehicles.

We have developed our DIFENDER steel plates specifically for protection against ballistic and explosive attack. They combine maximum protective effect with minimum weight – a decisive advantage in the case of mobile applications, such as armoured vehicles, and no less in stationary building safety. DIFENDER steels are available in a range of different types, either directly ex-works or, flexibly, from stock, and even with semi-fabrication if desired. They bear TL 2350-0000 qualification and are approved both by customers and by the relevant authorities.

In cooperation with our Steel Service Centers, we can guarantee for you rapid and flexible access to a broad range of DIFENDER grades, along with supplementary welded components.

Our high-quality plate and bar products are used in numerous applications, including, inter alia:

- Submarines
- Ballistically protected land vehicles
- Ballistically protected buildings/containers
- Naval ships
- Building security
- Armoured vehicles
- Shooting ranges, shooting galleries
- Rifle components and barrels
- Munitions
- Armoured track bolts for tracked vehicles
- Welding wire electrodes for hardfacing of vehicles
- Fixed/mobile security facilities

Rail technology and infrastructure



+ At speeds of above 300 km/h, every component matters. There is no room for compromises in this league – only absolute precision and dependability suffices. And this is why the manufacturers of ultra-modern trains and rail routes put their faith in the know-how and tried-and-proved quality of Dillinger and Saarstahl.

Whether for robust bogies, high-strength plates for coach and wagon construction, long-lasting springs, heavily loaded wheel studs and/or complex components for motors, drive-train and gearing systems – we deliver materials that withstand the extreme demands of rail transport. In addition, our product solutions are available in the form of parts cut-to-size by flame cutting – inter alia via our Steel Service Centers.

In the course of the 'green transformation' and the concomitant intensified expansion of public transport, the CO₂-reduced manufacture of rails is increasingly gaining in importance. In this field, we make our active contribution to the mobility turnaround. We, the only European producer of rails from electric-furnace steel, put our faith consistently on 100% recycled steel scrap – and this includes life-expired rails and other rail network components. To achieve the Circular Economy, we are reducing emissions by up to 70%.

Our rails are available in lengths from 6 to 108 metres and are suitable for applications such as:

- High-speed routes
- Freight traffic
- Conventional rail routes
- Tram systems

Our products are also in demand for the rail infrastructure – for rail clamps (spring steel), concrete sleepers and railway sleeper rods (prestressing steel), for instance, or for sleeper bolts (cold-heading grades).

Our heavy plates, with their high geometrical stability and resistance to dynamic loads, are used in railway points (switches) construction. This ensures durable and safe track guidance.

Infrastructure



Tomorrow's infrastructure must be robust, safe and sustainable. Raising traffic levels and ageing structures demand the innovative high-performance materials supplied by Dillinger and Saarstahl, materials that meet the very highest quality standards and permit future-safe, long-lasting designs and construction.

In the fields of bridge and transport route engineering, we supply around the globe the basic essentials wherever safety, strength and robustness matter. In this field, we are the leaders throughout Europe, due to the fact that our steels perform dependably even under extreme conditions.

Our long-product solutions are used in welding technology for structural-steel designs, in the tie rod façades of modern architecture, in tie-bar systems in coastal, river and canal engineering with steel (e.g. harbour facilities) and in high-rise steel engineering (e.g. construction of stadia).

In the context of the global underwater fibre-optics network, our wire material protects the data links of the future for one of the world's leading suppliers of submarine telecommunications systems, among many others. For this purpose, the most diverse wire-diameter variants are combined and thus meet even the most demanding requirements in deep-sea communications.

Rolled wire from Saarstahl protect what connects: In submarine cables (so-called 'umbilicals') and in flexible piping systems they serve – flat-section or round-section – as sheathing, protecting the supply lines against mechanical damage.

Cable railways are increasingly gaining in importance in modern mobility concepts – both urban and alpine. Thanks to their homogenous microstructure, clean surface and uniform strength properties, our high-strength zinc-plated wire meets strict safety requirements.

Width, thickness and quality are the criteria in bridge engineering: Around the globe, our multiply approved heavy plates assure maximum strength and robustness in railway and trough bridges, as well as in no few of the world's tallest buildings and structures.

Our proprietary steels, such as DIWETEN, DI-MC and DILLIMAX, overfulfill many requirements set down in standards. They have been systematically developed for modern structural-steel engineering. Within our range of dimensions, we produce heavy plates precisely matched to our customers' needs. Our strengths in this field can be seen in large formats: Heavy, long, wide and thick.

A highlight of our products are our plates with a variable thickness profile across plate length, known for short as 'longitudinally profiled plates'. These plates permit tangible cost-savings and optimised fatigue-strength performance in the component. Up to five different segments with an up to 10 mm increase in thickness per metre can be implemented. The results take the form of real cost-savings and optimised fatigue-strength behaviour in the component.

Thanks to more than 100,000 tonnes of storage capacity, we assure, in cooperation with our Steel Service Centers, maximum availability from stock of high-quality steel solutions combined with precision flame cutting, chamfer machining and a large range of thermomechanically rolled plates of up to 150 mm in thickness.



+ Dillinger supplied high-strength steel in thicknesses of 16 to 80 mm, optimised for ultra-high structural analysis requirements, for the striking arch structure of the Raymond-Barre bridge in Lyon, France.

Automotive

Combustion engine, hybrid, electric drive



With the challenges of electromobility, sustainability and climate protection, the automobile industry is standing at a crossroads. We make an active contribution to the solution and drive on today's and the future's mobility in practically every car and truck – often invisibly, but always indispensably.

Every year, we supply more than one million tonnes of our rolled wire and steel bar for a global more than 90 million vehicles. Our products, such as strip, bright bar and drawn steel are vital elements for the automotive industry. They can be found in virtually every part of the vehicle and provide a decisive contribution to the mobility turnaround.

As one of the leading manufacturers of rolled wire for tyres, our products form the basis for applications in which absolute precision is needed – for the production of steel cord (SKD) and bead wire. Since tyre wire is drawn to extremely fine diameters – as little as 0.12 mm – maximum oxide purity and process reliability are paramount. We have consistently optimised our production processes to achieve this.

Wherever safety and ride comfort are emphasised, vehicle manufacturers around the world put their faith in our materials. Statistically, every vehicle produced in Europe contains an axle with springs made of our feed material. Our spring steels are also used in a large range of safety-relevant components, such as:

- Suspension springs (cold or hot formed)
- Clutch springs
- Brake-reservoir springs
- Springs in boot-opening systems
- Engine valve springs and
- Stabilisers

We are shaping the mobility of the future with our innovative processes such as Mechanical Soft Reduction (MSR), (double) thermomechanical rolling (TM/DTM) and systematic alloying adjustment – especially in the field of electromobility, where ultra-high strength and lightweight construction are decisive.

For highly stressed connecting elements, such as screws, bolts, nuts and punch rivets, we can supply especially resistant cold-heading grades. Thanks to continuous further technological refinement, we are setting standards in quality, workability and performance with processes such as double-thermomechanical rolling (DTM), our Maraform® technology and blasted products.

For maximum tightness requirements – as in Common Rail diesel injection systems or in hydraulics components – we use our pressure-tight proprietary materials, so called HD steels, and grades featuring high oxide cleanliness. These are produced using a special metallurgical process that minimises oxidic non-metallic inclusions. You can find our products in many other automotive components, including crankshafts, gearboxes, differentials, piston rods, axles, roller-bearing rings and camshafts. We have a broad product range and supply high-quality steels for your automotive needs.



Consumer durables



+ Everyone has already touched the hidden, made-of-wire heroes without knowing that it is steel from Saarstahl: in bicycle-wheel spokes, shopping trolleys and springs for upholstery.

The use of steel in bridges and wind-energy farms is obvious, whereas its contribution to numerous everyday objects often remains unnoticed. Across a range of industries, many things we need in our everyday world would simply not work without steel.

Our wire products can be found in innumerable household appliances in the form of grill inserts and dishwasher baskets, as well as in furniture, where steel springs, turnings and sections assure comfort and robustness. In industry, our steel is greatly appreciated in electrical tools – like drills and chainsaws – and equally in bar-grids, fences and relays for building automation and a range of different industrial applications.

Little helpers in the household and in the office, such as paper clips, staples and safety pins, would be inconceivable if there were no steel. We are also present in the world of sport: bicycle-wheel spokes are also manufactured using Saarstahl wire, as are elements for darts boards and sections for steel ski edges.

Dimensions and types



Our joint portfolio covers a broad range of dimensions and types – whether it be long products, heavy plates or forgings. The tables below show the dimensions obtainable from, respectively, Saarstahl, Dillinger and Saarschmiede, subdivided by product sectors.

The data shown is orientated around the applicable standards and/or the technical potentials of our facilities. Please contact us if you have requirements beyond those shown below – in many cases, it can be made possible!

Saarstahl Wire rod

| Format | Dimensions | Coil weights* | Coil diameter/height* | Tolerances |
|-----------|----------------------------------|------------------------|---|--|
| Round | 4.50 – 53.00 mm | min. 1.0 t, max. 3.0 t | Coil height depends on dimensions (approx 0.5 – 1.0 m/t) | EN 10108B |
| Square | 14.00 – 37.00 mm | min. 1.0 t, max. 3.0 t | Coil diameter: inner diameter approx. 900 mm, outer diameter approx. 1,250 mm | EN 10108A |
| Hexagonal | 14.00 – 42.50 mm | min. 1.0 t, max. 3.0 t | Coil diameter: inner diameter approx. 900 mm, outer diameter approx. 1,250 mm | Various national and foreign standards |
| Flat | 14.00 – 38.00 x 12.00 – 38.00 mm | max. 2.0 t | Coil diameter: outer diameter approx. 1,250 mm, coil height max. 1,600 mm | +/- 0.50 x (+/- 0.25 resp. +/- 0.35)** |

* coil weights and heights depend on dimensions | ** depending on the combination of dimensions

Steel bars

| Format | Dimensions | Bundle weight | Lengths | Remarks |
|-----------|--|--|---------------------|---|
| Round | 15.00 – 108.00 mm | approx. 3.0 t, max. 10.0 t | min. 3.0 m – 27.0 m | Infinitely variable rolling |
| Round | 108.00 – 181.20 mm | approx. 3.0 t, max. 10.0 t | min. 3.0 m – 27.0 m | Rollable within dimensional range |
| Square | 14.00 – 114.00 mm | approx. 3.0 t, max. 10.0 t | min. 4.0 m – 15.0 m | > 30 mm infinitely variable rolling |
| Hexagonal | 15.00 – 81.00 mm | approx. 3.0 t, max. 10.0 t | min. 3.0 m – 16.0 m | Infinitely variable rolling |
| Flat | 14.00 – 130.00 x 11.00 – 78.00 mm 102.00 – 200.00 x 45.00 – 100.00 mm | approx. 3.0 t, max. 5.0 t (production specific) | min. 4.0 m – 15.0 m | Special dimensions and lengths on request |

Continuous cast blooms

| Square formats | Min. lengths | Max. lengths | Tolerances |
|----------------|--------------|--------------|------------|
| 300 x 365 mm | 3,000 mm | 10,000 mm | +/- 50 mm |
| 265 x 340 mm | 3,000 mm | 12,500 mm | +/- 50 mm |
| 240 x 240 mm | 3,000 mm | 12,500 mm | +/- 50 mm |
| 180 x 180 mm | 6,000 mm | 13,000 mm | +/- 100 mm |
| 150 x 150 mm | 8,000 mm | 17,500 mm | +/- 100 mm |
| 125 x 125 mm | 16,000 mm | 22,000 mm | +/- 200 mm |

Semi-finished products

| Format | Dimensions | Bundle weight* | Lengths* |
|------------------------------|--------------------|----------------|--------------|
| Square with rounded edges | 46.90 – 120.00 mm | 3.0 – 10.0 t | 3.0 – 27.0 m |
| Square with rounded edges ** | 120.01 – 205.00 mm | 3.0 – 10.0 t | 3.0 – 27.0 m |

* related to dimensions and workstep | ** in dimensional range

Dimensions and types

Dillinger Heavy plate

| Delivery condition | Normalized | TM-rolled | Quenched and tempered |
|----------------------|------------|-----------------|-----------------------|
| max. plate thickness | 510 mm | 150 mm (170 mm) | 300 mm |
| max. plate weight | 42 t | 42 t | 42 t |
| max. plate width | 5,200 mm | 4,650 mm | 4,500 mm |



These specifications are for guidance only. Our delivery program shows you the wide range of steel grades and dimensions you can order from Dillinger.

Saarschmiede Sales segment: Power engineering

| Product group | Shaft-shaped components | Disc-shaped components | Shaft ends |
|---|---|---|---|
| Typical materials in EAF, ESR, VOD, VIM/VAR | 1.6957, 1.6948, 1.6945, 1.6946, 1.4902, 1.4906, 1.4926 | 1.6957, 1.6948, 1.6962, 1.6963, 1.4939, 1.4906, 1.4313, 1.4418 | 1.6957, 1.6948, 1.7218, 1.6580, 1.6749, 1.6931 |
| max. diameter | 2,600 mm | 3,600 mm | 3,200 mm |
| max. length | 26,000 mm* | 3,200 mm* | On request* |
| Product designation | Generator shafts Steam turbines Hydropower shafts | Gas and steam turbines Compressors Pelton and Francis runners | Gas and steam turbine Components Hydropower Coupling systems for generator/turbine |
| Application segments | Generation of electricity using nuclear power, fossil energy, wind power, hydropower, geothermal energy | | |

* limits may vary depending on geometry and material

Saarschmiede Sales segment: Special materials

| Product group | Corrugated components | Disc-shaped components | Steel bar material |
|--|--|--|--|
| Typical materials in EAF, ESR, VOD, VIM/VAR, VIM/ESR/VAR | 1.4306, 1.4313, 1.4454, 1.4571, 2.4663, 2.4668, 2.4816, 2.4856 additionally on enquiry | 1.4306, 1.4313, 1.4454, 1.4571, 2.4663, 2.4668, 2.4816, 2.4856 additionally on enquiry | 1.4306, 1.4313, 1.4454, 1.4571, 2.4663, 2.4668, 2.4816, 2.4856 additionally on enquiry |
| max. diameter | 3,500 mm | 3,600 mm | 1,600 mm |
| max. length | 15,000 mm* | 3,200 mm* | On request* |
| Product designation | Turbine shafts Drive shafts Compressor shafts Cylinders | Tools Compressors Vessel heads/hemispherical | Steel bar material rough-turned Steel bar material (as-cast) |
| Application segments | Nuclear waste, energy generation, aerospace engineering, chemicals industry, shipbuilding (and many more!) | | |

* limits may vary depending on geometry and material

Saarschmiede Sales segment: Bar material and tool steels

| Product group | Tool steels | As-cast billets | Forged feed material |
|---|--|---|---|
| Typical materials in EAF, ESR, VOD, VIM/VAR | 1.2083, 1.2316, 1.2343, 1.2344, 1.2714, 1.2738, 1.2767 many others on request | 1.6957, 1.6948, 1.6580, 1.6582, 1.6587, 1.7225, 1.7228, 2.4663, 2.4668, 2.4856 many others on request | 1.6957, 1.6948, 1.6580, 1.6582, 1.6587, 1.7225, 1.7228, 2.4663, 2.4668, 2.4856 many others on request |
| max. width/tonnage | 3,500 mm / 100 to | 220 to EAF / 145 to ESU / 30 to VAR | 138 to |
| max. length | 1,500 mm | | on request |
| Product designation | Cold work tool steels Hot work tool steels | A ingots, S ingots, P ingots, ESR ingots, VIM/ESR ingots, VIM/VAR ingots, VIM/ESR/VAR ingots | Forged feed material raw, semi-finished |
| Application segments | Automobile industry, plastics-producing industry, mechanical engineering, wind power, special materials (and many more!) | | |

Subsidiaries



Structural steels up to 250 mm in thickness, pressure-vessel steels in special dimensions and high-strength DILLIMAX and wear-resistant DILLIDUR – also available in XXL formats of up to 4,000 mm width and 20 m length. This flame-cutting company is certified in accordance with EN 1090 and is one of the leading facilities in Germany, offering services such as chamfering, blasting and, with associates, more extensive semi-fabrication.



Efficient export logistics and an excellently stocked warehouse, which extends to structural steels, shipbuilding grades, one of the largest stocks of offshore plates, TM grades up to 120 mm thickness, high-strength DILLIMAX and sour-gas-resistant DICREST. The flame-cutting facility convinces customers with oxy-fuel and plasma cutting, edge machining and blasting potentials.



Structural-steel plates up to 450 mm, slabs up to 650 mm, flame-cut parts and welded components up to 160 t. Plus: Machining, chamfering, annealing and certified welding in conformity to EN 1090.



Largest producer in the western hemisphere of longitudinally-welded large-calibre steel linepipe.



Specialist heavy-plate trader located in the Middle East and India, supplying from stock structural-steel plates, offshore grades, pressure-vessel plates, sour-gas-resistant DICREST, ultra high-strength DILLIMAX and wear-resistant DILLIDUR.



Production of high-quality rail products used in high-speed rail lines and in regional rail transport, and also in heavy goods traffic and for rail points (switches) and crossings.



Supplies all-in production of monopiles and single piece foundations, including all the necessary onshore work and services. Complete range from production up to installation: including coating, installation of secondary steel components and technical internals.



High-quality forgings such as large turbine shafts for power engineering and for the feed material and special materials sectors.



High-quality wire products including prestressing steel in the form of braid wire and bar, commercial and quenched-and-tempered spring-steel wires, stranding wire and shaped conductors, cable-armouring wire, (cable) casing wire and reinforcement wire – in the 0.48 to 22.0 mm dimension range.



Saar Stahlbau supplies all-in products and services in the fields of structural steel, bridge, vessel and piping engineering, also in goods rolling stock and rail vehicle repair, including workshop facilities, component production, locomotive workshop facilities, machining, crane inspection and repair, mechanical engineering and maintenance of steel structures and equipment.



Pipes and adhesive-bonded strip for staples, stitching wire, cardboard staples, brush wire, baling wire, stranding wire, bicycle spokes, surgical masks, mattresses and wire for the automotive industry – for tyres, for example.



The electric steelmaking plant produces CO₂-reduced continuous-cast billets and clogged ingots (in round, square or rectangular formats) in non-alloy and alloyed steels.



Saarstahl Precision Wire

Wire drawn on an unrefined-iron basis (bright, zinc-plated, sectional), PVC/PE wire, cut-to-size bar and cold-drawn heading wire.

Saarstahl Precision Welding

Specialist in hardfacing and spraying. The product range includes weld filler materials for shielded-arc welding, submerged-arc welding, Electrode core wires as straightened cutted rods and also wire for flame spraying in the fields of conventional spraying, also for various processes for spraying of engine cylinder bores (cylinder-bore coating – CBC).

Saarstahl Precision Bright Steel

High-quality products of bright bar material for the automotive industry: cold drawing, peeling, grinding. Heat treatment of feed and finished material, eddy-current and ultrasonic inspection, production of short lengths.

Saarstahl Precision Strip

Leading supplier of cold-strip products for automotive subsuppliers, the electrical industry and the metal-goods industry.

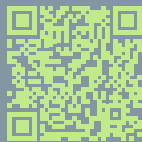


FNSteel has one of the most advanced processing facilities in Europe and specializes primarily in the production of high-quality cold heading steels for customers in the automotive and construction industries.



Dillinger

Find your contact for flat-product solutions.



Saarstahl

Find your contact for long-product solutions.

Edition 01/2026
Print: GBQ Saar mbH