



**Cold heading
steel grades –
quality and reliability**

Changing the world with sustainable steel

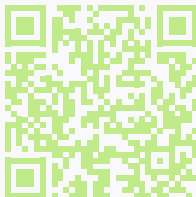
Saarstahl is a global company that always considers the entire value chain during production and our services are consistently geared to the requirements of our customers. Our product portfolio includes the manufacture of wire rod, bar steel and semi-finished products in a variety of grades developed for a wide range of technical applications.

Saarstahl is part of the European steel industry's largest decarbonization project: Power4Steel. Our aim is to achieve carbon-neutrality by 2045. To accomplish this we are focused on using hydrogen, electric steel production and recycling steel scrap. Starting in 2028/29, Dillinger and Saarstahl will be producing up to 3.5 million tons of CO₂-reduced steel per year. We already offer products for the fastener industry through our Saarstahl Ascoval plant that feature almost 100% scrap content and a low carbon footprint.

Below is a selection of CO₂-reduced cold heading steel grades we are already able to offer.

- 23MnB4 / 22MnB4 / 20MnB4 / 37MnB5
- 18B2 / 33B2 / 38B2
- C10C
- 33MnCrB5-2
- C35EC
- 42CrMo4
- 34CrNiMo6

Other steel grades are available
on request



Quality starts from the beginning

With our world leading expertise in melting and rolling technology, we achieve an exceptionally high and consistent level of product quality, verified with our highly advanced testing equipment.

At our two steel works, we produce steel grades according to the specific requirements of each customer. A consistently high level of investment ensures that our melting facilities, secondary metallurgy and continuous casters produce at the highest technical level.

Our rolling mills are equipped with innovative systems such as a loop for (double) thermo-mechanical rolling, which gives our wire rod exceptional properties. We also have the latest (free-size) precision rolling lines. This is the only method that can achieve the tightest dimensional tolerances.



Innovative technologies – to your advantage

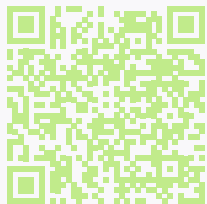
Use of (double) thermomechanically rolled wire rod can increase the efficiency of cold forging by improving the deformation behaviour of the wire rod. This means that cost-intensive annealing or even +C+AC treatment of the wire rod can often be eliminated.

We offer an effective alternative to conventional quenching and tempering with our MARAFORM® quenching and tempering process for wire rod coil, eliminating the final quenching and tempering process on the component prevents dimensional distortions from occurring and significantly improves dimensional accuracy, lowering transport and handling costs.



Innovative materials for secure fastenings

Saarstahl supplies first-class cold heading steel grades for high quality fastening systems such as screws, bolts and nuts, as well as for high-demand cold forged parts. These are used worldwide in sectors such as the automotive and construction industries, in the construction of wind turbines, and in the manufacture of electronic household appliances. Our product range includes alloyed, unalloyed and boron-alloyed special steels – always tailored to your individual requirements.



Unsurpassed standards – also for processing

Quality is a priority throughout the entire production process and this is why we also apply the highest quality standards to our post-treatment lines. Continuous investment ensures technological excellence – from annealing, pickling and coating (SAG-Protect, SAG-Composite) to shot blasting and optimized storage of annealed and/or surface-coated wire rod in our fully automated high-bay warehouse.



Shot blasting offers sustainability

Our new shot blasting technology is an environmentally friendly alternative to pickling that offers numerous advantages; it improves processing during the drawing process, promotes better cold forging and extends tool life.



Superior processing capabilities – **SAG-Composite**

We developed SAG-Composite to fulfil the toughest demands in cold forging. This lubricant system provides optimal lubrication behaviour and maximum pressure stability in all applications and at any temperature, improving cooling during the production process.



A product portfolio with maximum diversity

Our state-of-the-art wire rod and bar mills can manufacture all common dimensions – including imperial measurements – customized products and advanced materials, in wire rod diameters starting from **4.5 mm**. A ring weight of up to **3 tons** can be tailored to specific customer requirements. The flexibility and high productivity of our facilities let us respond quickly and precisely to your requests.

We also supply a wide range of steel grades to individual customer analyses and all current international standards.



Saarstahl – pure reliability

You can trust Saarstahl to deliver customized solutions and premium quality to meet your requirements and achieve a sustainable future. Contact us today!



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