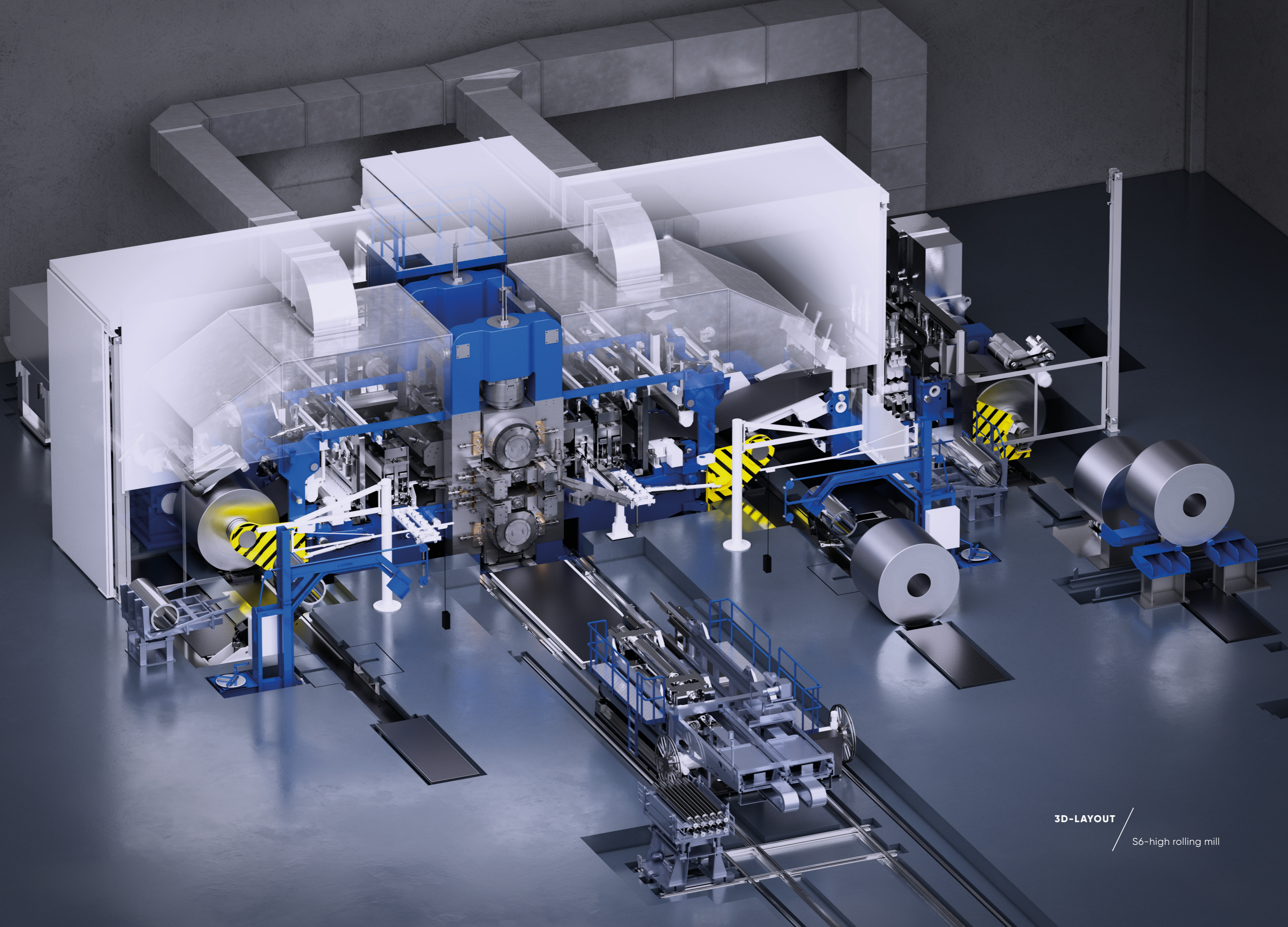




HIGHEST REDUCTIONS FOR CHALLENGING PRODUCTS

Sundwig S6-high cold rolling mill

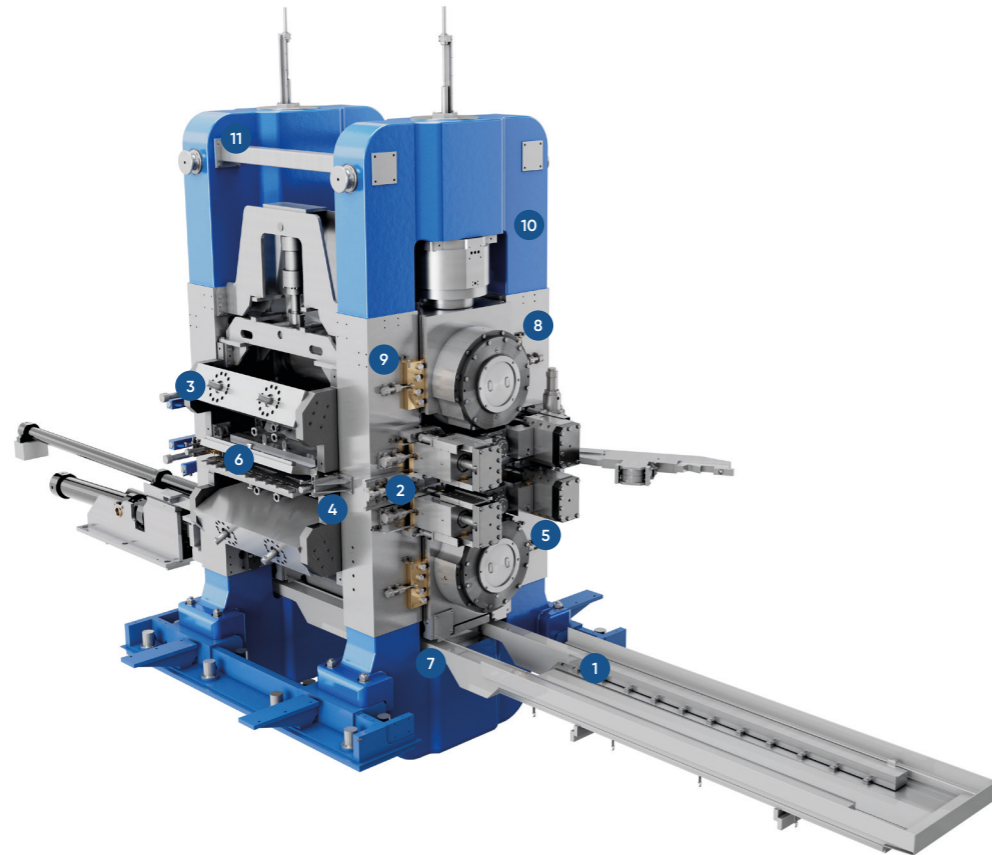
ANDRITZ



3D-LAYOUT

S6-high rolling mill

Your benefits



- 1 Fully automatic roll-changing device; work rolls and intermediate rolls can be changed automatically
- 2 Small work rolls with big diameter range reduce operating costs
- 3 Hydraulically position-controlled adjustment of the side support cylinders for work roll suspension provides a long stroke and fast adjustment
- 4 Separation of intermediate rolls and side-support cassettes absorb high horizontal forces, extending the lifespan of the side support cassettes
- 5 Easy rolling of higher-yield strength material: the small work roll diameters reduce the required rolling forces and increase the possible reductions
- 6 Cost savings thanks to high strip cooling performance and high energy efficiency; the impingement jet nozzle system achieves excellent cooling performance. Less circulating coolant reduces operating costs.
- 7 Exact passline adjustment: proven wedge-type passline adjustment system
- 8 Quick and easy maintenance: best accessibility due to wide opening of the roll gap and side support ensures fewer production breakdowns
- 9 Flexibility by using S6-high / 4-high solution (option): combination of reduction rolling for different material strengths and possibility of temper rolling
- 10 Best strip shape results: roll tilting, intermediate roll bending, and shifting for consistent strip shape
- 11 High degree of automation: possible thanks to optimized and simple mill design

WATCH THE VIDEO
and find out more
about the S6-high
rolling mill!



FULLY AUTOMATIC ROLL-CHANGING DEVICE

The proven, automatic roll-changing device has been used for decades in nearly all ANDRITZ rolling mills. With the roll-changing unit, the work rolls, driven intermediate rolls, and side support cartridges in the S6-high mill can be changed automatically, preventing roll damaging with exact positioning of the rolls.

SMALL WORK ROLLS WITH WIDE ROLL DIAMETER RANGE

The relatively small diameters reduce the required rolling forces and increase the possible reductions. Smaller work rolls also require less energy than comparable rolling operations. Due to the wide diameter range of the work rolls, the lifespan of the rolls is longer and great flexibility for cold rolling of materials with different yield strengths is ensured.

HYDRAULICALLY POSITION-CONTROLLED ADJUSTMENT OF THE SIDE SUPPORT CYLINDERS FOR WORK ROLL SUSPENSION

Due to the mill's fixed system, big side support cylinders can be used; these provide great support. The hydraulic, position-controlled adjustment ensures a long stroke and fast adjustment of the side support cassettes.

SEPARATION OF INTERMEDIATE ROLLS AND SIDE SUPPORT CASSETTES

The S6-high mill has separate intermediate rolls and side support cassettes. Each of the four S6-high side support cassettes has a big side support roll and two big support bearing rows arranged behind it, which enables the absorption of high horizontal side forces.

EASY ROLLING OF HIGHER-YIELD STRENGTH MATERIAL

Because of the small work rolls, the S6-high mill can easily roll materials with higher yield strengths. The S6-high mill can achieve low final thicknesses thanks to its small work roll diameters. Conventional rolling mills of 4-high or 6-high design do not operate economically in the range of material yield strengths above 1000 MPa and their ability to achieve lower final thicknesses is limited by their larger work roll diameters.

COST SAVINGS DUE TO HIGH STRIP COOLING PERFORMANCE AND HIGH ENERGY EFFICIENCY

In addition to all the technical advantages of the S6-

high mill, improved heat transfer due to the impingement jet nozzles is an additional economic advantage for the mill operator. It reduces coolant volume by about 30% for the same production program. Since there is less coolant on the strip, it is easier to clean. Therefore, less pumping capacity is required, as there is less coolant volume to be circulated. This energy savings reduces operating costs.

EXACT PASSLINE ADJUSTMENT

After roll changing, an exact passline can be ensured thanks to high-accuracy wedge-type adjustment. The long stroke of passline adjustment covers the full range of roll diameters.

QUICK AND EASY MAINTENANCE

Maintenance of the S6-high rolling mill is optimal due to the wide opening of the roll gap and its good accessibility. For maintenance work, the side support cassettes can be moved behind the bending blocks, which allows an open and thus large access area in the mill stand.

FLEXIBILITY OF USING S6-HIGH / 4-HIGH SOLUTION (OPTION)

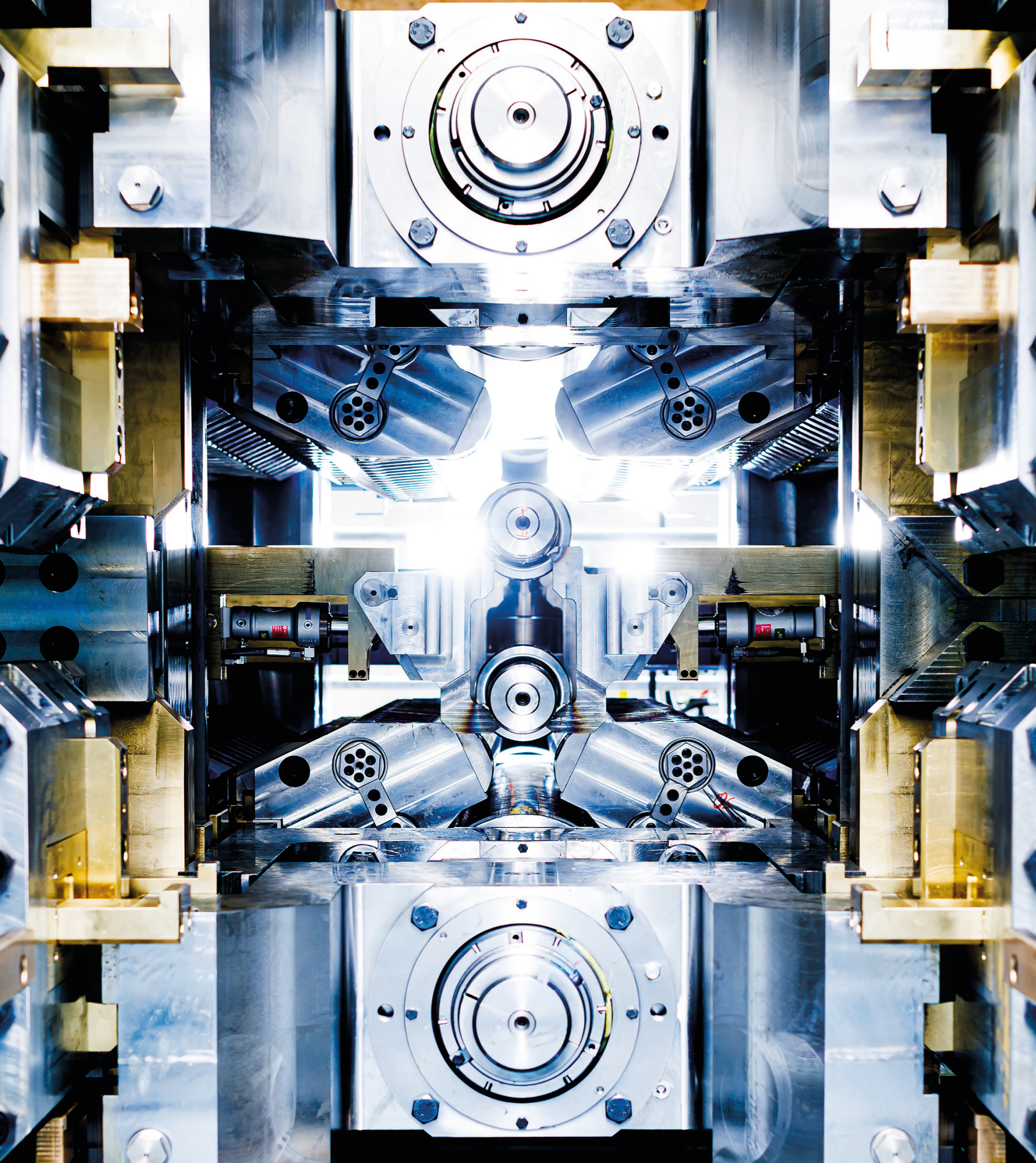
The S6/4-high cold rolling combination mills are intended for high-capacity reduction in the S6-high operating mode for high-strength material grades; in the 4-high operation mode for soft and intermediate material grades; and for skin passing or temper rolling in the 4-high operation mode when it is not economical to have several mills due to quantities.

BEST STRIP SHAPE RESULTS

The S6-high rolling mills are designed with tried and true shape actuators – roll tilting, bending, and shifting, as well as selective intermediate roll cooling.

HIGH DEGREE OF AUTOMATION

The automation of the S6-high rolling mill is possible thanks to its optimized and simple mill design. Less downtime during rolling due to optimized pass schedule calculations, an automated and optimized rolling process, and automated auxiliary processes e.g., roll changing, coolant supply, and filter system, hydraulic system, sleeve handling, paper handling, and pup coil handling.



>333 YEARS

engineered success
made in Germany

>30

S6-high rolling mills in-
stalled

>20 YEARS

of experience and in-
novation in S6-high
design



ANDRITZ METALS

ANDRITZ Metals Processing is a global leader in providing cutting-edge solutions for the production and processing of cold-rolled strip made of carbon steel, stainless steel, aluminum, and other non-ferrous metals. Our innovative technologies and comprehensive services ensure that we support our customers at every stage of the plant life cycle, from initial setup to ongoing maintenance and optimization.

We combine our deep industry expertise with advanced automation and digitalization to help our customers achieve peak performance and sustainable growth. Our service business is dedicated to maximizing the efficiency and longevity of your equipment, ensuring you stay ahead in a competitive market.

ANDRITZ. FOR GROWTH THAT MATTERS.

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