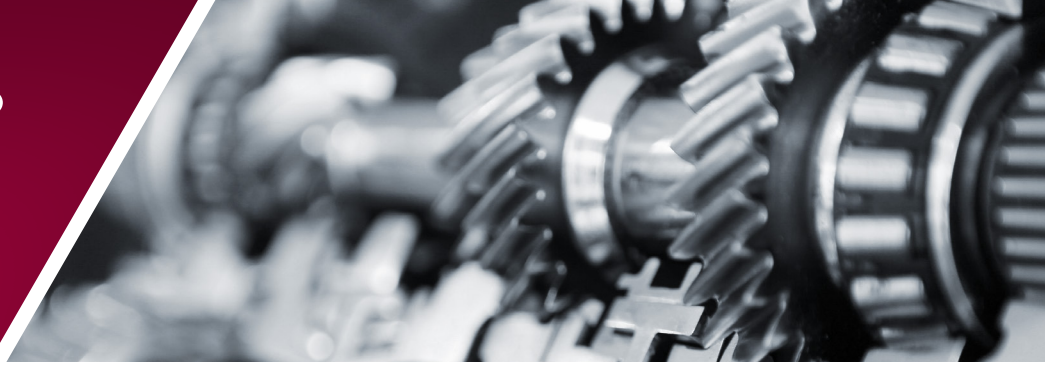
SIQUAL
QUALITY STEEL



BRAND OVERVIEW

STEEL FOR PRESSURE VESSELS AND BOILERS

Steel for cryogenic applications (down to –196 °C)

ADVANTAGES
- Excellent mechanical properties
- High impact toughness at low operating temperatures
- Cost-effective solution for structures at low temperatures due to smaller wall thickness

APPLICATIONS:
LNG storage and transportation tanks

GRADES:
SIQUAL 5663

Steel for applications at moderate temperatures (0 to 400 °C)

ADVANTAGES
- Good weldability
- High toughness

APPLICATIONS:
Tanks in the oil & gas industry

GRADES:
SIQUAL 0425
SIQUAL 0473
SIQUAL 5415

Steel for applications at elevated temperatures (up to 600 °C)

ADVANTAGES
- High strength at elevated temperatures
- Good heat conductivity
- High creep resistance

APPLICATIONS:
Tanks in the oil & gas industry

GRADES:
SIQUAL 7335
SIQUAL 7336
SIQUAL 7380
SIQUAL 7362
SIQUAL 7386
SIQUAL 4903

SIJ ACRONI d.o.o.
Cesta Borisa Kidriča 44,
4270 Jesenice, Slovenija, EU

+386 4 58 41 000
marketing@acroni.si
sij.acroni.si/en

sij | acroni

SPRING STEEL

SIQUAL spring steels are intended for products expected to have high strength, good toughness, and high yield strength after final heat treatment. They are used for vibration-resistant moving parts. The products are formed in the annealed or spheroidization-annealed condition, but the desired properties are obtained by quenching and tempering made by the customer. By special agreement, delivery in quenched and tempered condition is also possible.

ADVANTAGES
- High strength
- High yield strength after final heat treatment

APPLICATIONS:
Springs

GRADES:
SIQUAL 1231
SIQUAL 1248
SIQUAL 1260
SIQUAL 7102
SIQUAL 8159

STEEL FOR QUENCHING AND TEMPERING

These steel grades must be quenched and tempered to achieve the desired strength and plasticity. Depending on the cross-section and the amount of alloying elements, they need to be cooled in water, oil, or air after austenitisation. These steel grades are mostly delivered in the annealed condition. This makes it easy for the customer to perform the mechanical processing and final quenching and tempering to achieve the required mechanical properties. Alternatively, some grades are also available as quenched and tempered quarto plates.

ADVANTAGES
- High strength
- Good plasticity
- High hardness after final heat treatment

APPLICATIONS:
Machines, machine parts, constructional engineering

GRADES:
SIQUAL 0913
SIQUAL 1170
SIQUAL 1151
SIQUAL 1191
SIQUAL 1203
SIQUAL 1221
SIQUAL 6510
SIQUAL 6582
SIQUAL 7218
SIQUAL 7220
SIQUAL 7225
SIQUAL 7227

CASE-HARDENING STEEL

These steel grades can be directly surface quenched or enriched with carbon to achieve the desired high surface hardness and a tough centre. Our products are typically delivered in the annealed condition. After the final heat treatment, the end product can achieve a final surface hardness of over 60 HRC.

ADVANTAGES
- Excellent wear-resistance
- Excellent fatigue resistance
- Good toughness
- Resistance to quench-cracking
- Good dimensional stability
- Easy grinding and polishing

APPLICATIONS:
Knives, agricultural and mining machinery, safety-relevant parts in the automotive industry, gears, high-stressed components

GRADES:
SIQUAL 0503
SIQUAL 5531
SIQUAL 6566
SIQUAL 7016
SIQUAL 7131
SIQUAL 7147

NON-ALLOYED STRUCTURAL STEEL

Non-alloyed structural steel is characterised by moderate strength and high elongation. At the same time, it retains good formability and weldability.

ADVANTAGES
- Moderate strength
- High elongation
- Good formability and weldability

APPLICATIONS:
Machine parts, bridges, and agricultural machinery parts

GRADES:
SIQUAL 0577
SIQUAL 0553
SIQUAL 0045
SIQUAL 0596

SIJ ACRONI d.o.o.
Cesta Borisa Kidriča 44,
4270 Jesenice, Slovenija, EU

+386 4 58 41 000
marketing@acroni.si
sij.acroni.si/en

WEATHERING STEEL

Compared to non-alloyed steel, weathering steel has increased resistance to atmospheric corrosion. These steel grades are alloyed with copper, chromium, nickel, and phosphorus, which form a protective oxide layer on the steel surface under different weather conditions.

ADVANTAGES

- Resistance to atmospheric corrosion
- High strength

APPLICATIONS:

Different types of structures, facades, bridges, fences, sculptures, and roof tiles

GRADES:

SIQUAL 8946
SIQUAL 8965

DIMENSIONS

	Quarto plates
Thickness [mm]	6–110
Width [mm]	1000–2500
Length [mm]	2000–12500
Weight [kg]	max. 9600

	Hot-rolled strip	Hot-rolled sheets	Cold-rolled strip	Cold-rolled sheets
Thickness [mm]	3–6	3–6	0.5–3	0.5–3
Width [mm]	100–1000	1000	30–1000	1000
Length [mm]	-	2000–6000	-	2000–6000
Weight [kg/mm width]	7–9	-	6–8	-
Internal coil diameter [mm]	610	-	508	-

DELIVERY AND SURFACE CONDITIONS

QUARTO PLATES

- As-rolled
- Normalised rolled
- Normalised
- Annealed
- Normalised + tempered
- Quenched and tempered

Surface: shot-blasted or unscaled

HOT-ROLLED

- As-rolled, unscaled
- Annealed, shot-blasted

COLD-ROLLED

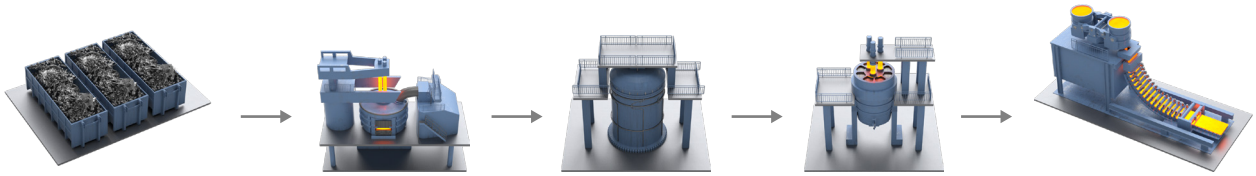
- Annealed, skin-passed
- Spheroidization annealed
- Hardened

SIJ ACRONI d.o.o.
Cesta Borisa Kidriča 44,
4270 Jesenice, Slovenija, EU

+386 4 58 41 000
marketing@acroni.si
sij.acroni.si/en

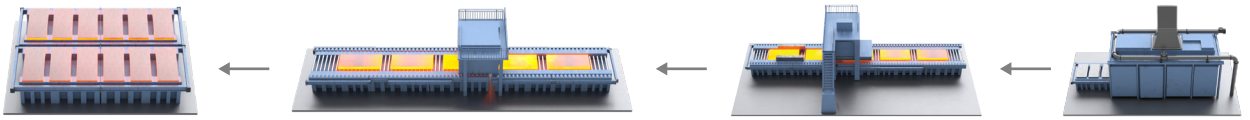
PRODUCTION PROCESS

Steel Mill



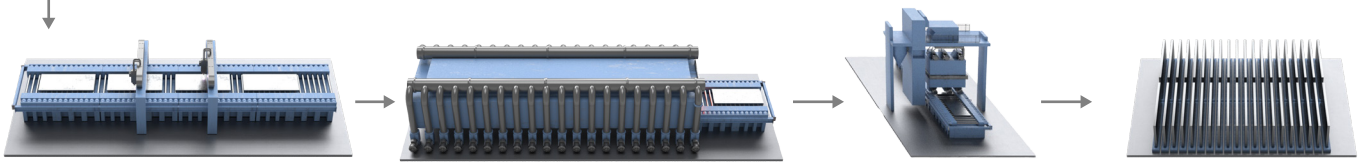
Recycled steel scrap → Electric arc furnace → VOD → Ladle furnace → Continuous casting

Hot Rolling Mill



Pusher type furnace → Plate mill → Hot leveler and shears → Cooling beds

Quarto Plate Department



Plasma cutter → Heat treatment furnace → Shot blasting machine and cold-leveller → Plates or coils

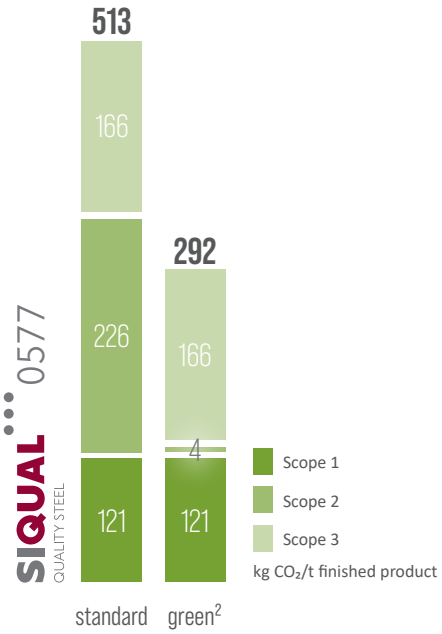
Approvals, standards and certificates

Scan • Click

SIJ ACRONI d.o.o.
Cesta Borisa Kidriča 44,
4270 Jesenice, Slovenija, EU

+386 4 58 41 000
marketing@acroni.si
sij.acroni.si/en

green²



Recycled content

Green² steel is made from recycled steel scrap, without the use of iron ore.

100 % renewable electricity

Green² steel is made with 100 % renewable electricity.

Single site production

Green² steel is produced entirely in one location avoiding unnecessary emissions from transporting semi-finished products.

SIJ Acroni is the largest steel producer in Slovenia, specializing in producing hot- and cold-rolled flat steel products. We are among the leading European producers of stainless-steel quarto plates and one of the most important producers of tool, electrical, wear-resistant and high-strength structural steels. SIJ Acroni guarantees a constant level of quality by focusing on continuous development and improvement of processes and materials. We are certified according to IATF 16949, ISO 9001, ISO 14001, ISO 45001, ISO 50001, EN ISO/IEC 17025 and ResponsibleSteel. SIJ Acroni is a member of the vertically integrated group SIJ – Slovenian Steel Group.

Living Circular Economy

We value flexibility and sustainability, which is why we make small batches of high-quality steel products with high added value and a low CO_2 footprint for niche markets. SIJ Acroni is proud to have one of the lowest carbon footprints in the industry.

- 100% of our steel is made from recycled steel scrap in an electric arc furnace. We use magnetic separation to purify and increase the quality of scrap. This helps us reduce our environmental impact and increase the quality of the final product.
- 98% of waste generated during our production process, such as steel scrap and slag, is recycled or otherwise reused.

Responsible Steel™
CERTIFIED SITE ACE/2024/108799.1

SIQUAL-mapa-web_1/5-2026

SIJ ACRONI d.o.o.
Cesta Borisa Kidriča 44,
4270 Jesenice, Slovenija, EU

+386 4 58 41 000
marketing@acroni.si
sij.acroni.si/en

sij | acroni