

OIL & GAS

SPECIFICATION SHEET

SIJ Metal Ravne belongs with its 1.000 employees and almost 80.000 ton annual production to the group of mini mills at the global level. Therefore, we found our opportunity in the niche production which is characterized by specific knowledge and experience, larger flexibility and higher added value. We produce steel in an electric arc furnace, melt is vacuum treated in VD or VOD ladle, casted into the ingots and rolled or forged into quality long steel products. For the most challenging conditions we use ESR (Electroslag remelting) process. Our own Steel Plant, Forging Shop, Rolling Mill and a wide range of heat treatment and machining processes enable us to produce a rich pallet of more than 200 steel grades in different dimensional shapes.

SIJ Metal Ravne is a member of SIJ Group – Slovenian Steel Group.

Oil&Gas industry is a high-tech industry where products with high added value involving a lot of expertise and special knowledge are used. SIJ Metal Ravne steels are mainly produced under brand names SINOXX (stainless steels) and SIQUAL, and have already been used in various applications in Oil&Gas industry for several years.



STEEL GRADES

AUSTENITE

SIJ BRAND	W.Nr.	AISI	ASTM	CHEMICAL COMPOSITION
SINOXX ^{***} SINOXX 4301	1.4301	304	A276, A479	C max. 0.08 Si max. 1.00 Mn max. 2.00 Cr 18.00-20.00 Ni 8.00-10.50
SINOXX ^{***} SINOXX 4305	1.4305	303	A582	C max. 0.15 Si max. 1.00 Mn max. 2.00 Cr 17.00-19.00 Ni 8.00-10.00 S min. 0.15
SINOXX ^{***} SINOXX 4401	1.4401	316	A276, A479	C max. 0.08 Si max. 1.00 Mn max. 2.00 Cr 16.00-18.00 Ni 10.00-14.00 Mo 2.00-3.00
SINOXX ^{***} SINOXX 4550	1.4550	347	A276, A479	C max. 0.08 Si max. 1.00 Mn max. 2.00 Cr 17.00-19.00 Ni 9.00-12.00 Nb min. 10xC-1.1
SINOXX ^{***} SINOXX 4980	1.4980	660	A453	C max. 0.08 Si max. 1.00 Mn max. 2.00 Cr 13.50-16.00 Mo 1.00-1.50 Ni 24.00-27.00 Ti 1.90-2.35 V 0.10-0.50 B 0.003-0.010
SINOXX ^{***} SINOXX 5490		S21800	A276, A479	C max. 0.10 Si 3.50-4.50 Mn 7.00-9.00 Cr 16.00-18.00 Ni 8.00-9.00 N 0.08-0.18

PH GRADES

SIJ BRAND	W.Nr.	AISI	ASTM	CHEMICAL COMPOSITION
SINOXX ^{***} SINOXX 4542	1.4542	17-4 PH	A564	C max. 0.07 Si max. 1.00 Mn max. 1.00 Cr 15.00-17.50 Ni 3.00-5.00 Nb 0.15-0.45 Cu 3.00-5.00

QUENCHED AND TEMPERED STEEL

SIJ BRAND	W.Nr.	AISI	ASTM	CHEMICAL COMPOSITION
SINOXX ^{***} SINOXX 4006	1.4006	410	A276, A479	C 0.08-0.15 Si max. 1.00 Mn max. 1.00 Cr 11.50-13.50
SINOXX ^{***} SINOXX 4057	1.4057	431	A276	C max. 0.20 Si max. 1.00 Mn max. 1.00 Cr 15.00-17.00 Ni 1.25-2.50
SINOXX ^{***} SINOXX 4903	1.4903	F91	A182	C 0.08-0.12 Si 0.20-0.50 Mn 0.30-0.50 Cr 8.00-9.50 Mo 0.85-1.05 V 0.18-0.25 Nb 0.06-0.10 N 0.035-0.070
SIQUAL ^{***} SIQUAL 0460	1.0460	LF2	A105 A350	C max. 0.030 Si 0.15-0.30 Mn 0.60-1.05
SIQUAL ^{***} SIQUAL S130	1.6562	4340	A29	C 0.38-0.43 Si 0.20-0.35 Mn 0.70-0.90 Cr 0.70-0.90 Ni 1.65-2.00 Mo 0.30-0.40

QUENCHED AND TEMPERED STEEL

SIJ BRAND	W.Nr.	AISI	ASTM	CHEMICAL COMPOSITION
SIQUAL ^{***} SIQUAL 6580	1.6580			C 0.26-0.34 Si max. 0.40 Mn 0.40-0.60 Cr 1.80-2.20 Ni 1.80-2.20 Mo 0.30-0.50
SIQUAL ^{***} SIQUAL 6582	1.6582			C 0.30-0.38 Si max. 0.40 Mn 0.50-0.80 Cr 1.30-1.70 Ni 1.30-1.70 Mo 0.15-0.30
SIQUAL ^{***} SIQUAL 6958	1.6958	SA723GR3	A723	C max. 0.40 Si max. 0.35 Mn max. 0.90 Cr 0.80-2.00 Ni 3.30-4.50 Mo 0.40-0.80
SIQUAL ^{***} SIQUAL 7225	1.7225	4140	A29	C 0.38-0.43 Si 0.15-0.35 Mn 0.75-0.90 Cr 0.90-1.10 Mo 0.15-0.25
SIQUAL ^{***} SIQUAL 7362	1.7362	501, F5	A182	C 0.10-0.15 Si max. 0.50 Mn 0.30-0.60 Cr 4.00-4.60 Mo 0.45-0.60
SIQUAL ^{***} SIQUAL 7380	1.7380	F22	A182	C 0.05-0.15 Si max. 0.5 Mn 0.30-0.60 Cr 2.00-2.50 Mo 0.87-1.13
SIQUAL ^{***} SIQUAL 7386	1.7386	F9	A182	C max. 0.15 Si 0.50-1.00 Mn 0.30-0.60 Cr 8.00-10.00 Mo 0.90-1.10

Melting route: all steel grades are available as airmelted + VD/VOD or airmelted + VD/VOD + ESR

QUALITY SYSTEM MANAGEMENT

- EN/AS 9100
- ISO 9001
- ISO 14001
- OHSAS 18001
- ISO/IEC 17025

➤ PRODUCT RANGE AVAILABILITY:

Rolled bars:

ROUND: \varnothing 7-105 mm, SQUARE: 25-75 mm, FLAT: width 40-150 mm with thickness 7-65 mm, width 150-255 mm with thickness 7-50 mm. Length: 3000-6000 mm. PEELED & POLISHED: \varnothing 16-80 mm, length: 2500-6000 mm. GROUND&POLISHED: \varnothing 7-80 mm, length: 2000-4000 mm.

Forged bars:

ROUND: ϕ 90-950 mm, length: 2000-10000 mm. FLAT: from 80 × 70 mm to 260 × 120 mm or 261 × 80 mm to 1600 × 550 mm. SQUARE: 80-850 mm. Length for flat and square: 2000-7000 mm.

Surface:

Black, sandblasted, milled, peeled, ground.

Additional offer:

We also supply different open-die machined forgings and round profiles for oil&gas as well as for other industry sectors (energy, mechanical engineering, automotive, etc.)

➤ DISCLAIMER

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