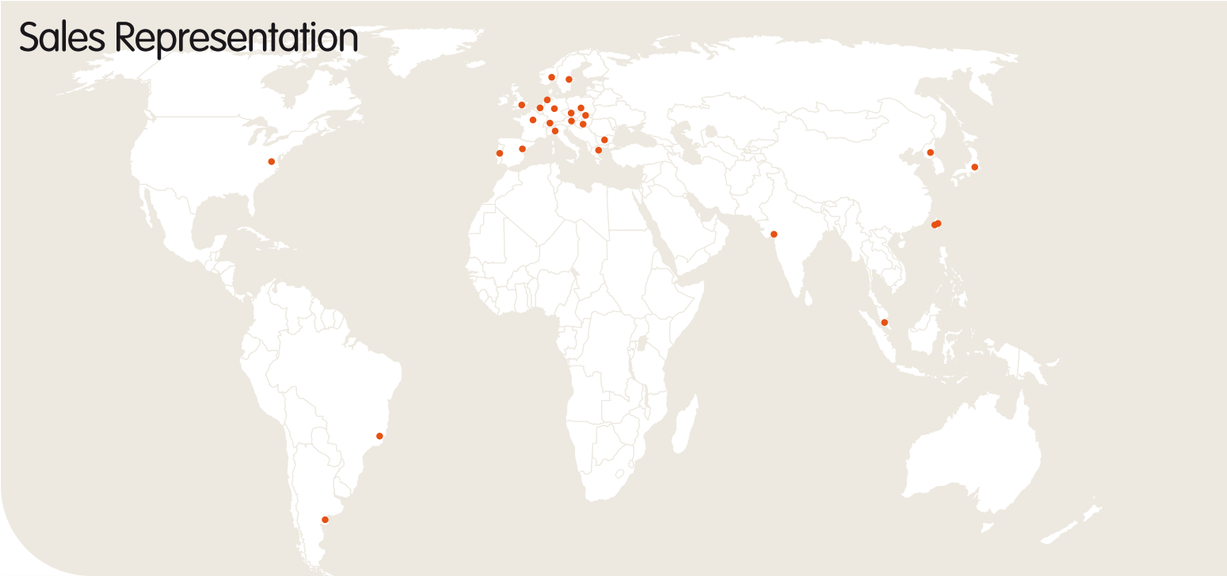
Sales Representation



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Other available specialties:

- Welding grades
- Controlled expansion grades
- Magnetic grades
- Resistance grades
- Cold heading grades

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Stainless & Nickel Alloys

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Corrosion and Oxidation Resistant Alloys Wire Rods

Grades	Werkstoff	UNS	AISI	C	Ni	Cr	Mo	Fe	Cu	Co	Cb	Others	Type of Alloy	Main properties	Main utilizations / applications
SY 80A	2.4631 2.4952	N07080		< 0,10	75	19,5		< 1,5				Ti 2,3 - Al 1,4	Ni - Cr alloy age-hardenable (Ti & Al content)	Good corrosion and oxidation resistance, high tensile and creep resistance at elevated temperatures	Fasteners, bolts, springs, when high-temperature strength and fatigue resistance under severe conditions are required
SY 90	2.4632 2.4969	N07090		0,095	60	20				16		Ti 2,5 - Al 1,5	Ni - Cr alloy age-hardenable (Ti & Al content)	Good corrosion and oxidation resistance, high tensile and good creep resistance at elevated temperatures	Fasteners, bolts, springs, when high-temperature strength and fatigue resistance under severe conditions are required
SY 625	2.4831	N06625		< 0,030	63	22	9	< 1,0			3,5		Ni - Cr - Mo alloy with Nb	High strength, excellent resistance to pitting and crevice corrosion Excellent resistance to stress-corrosion cracking and to corrosion-fatigue	Chemical processing, waste treatment, sea water treatment Nuclear Processing, Oil and gas production (bolts,filters)
SY 276	2.4886 2.4819	N10276		< 0,020	57	16	16	5,5				W 3,7	Ni - Cr - Mo alloy with W	Excellent resistance to pitting and crevice corrosion Excellent resistance to a wide range of severe environment	Chemical and petrochemical processing Waste treatment, Paper industry
SY X	2.4665	N06002		< 0,10	47	22	9	18		1,5		W 0,6	Ni - Cr - Mo alloy with Co	Combination of oxidation resistance and high temperature strength, resistance to stress-corrosion cracking	Components in aircraft and gas turbine engines, industrial furnace equipment, chemical process industry
NY 600	2.4816 2.4817	N06600		< 0,10 < 0,025	75	15		8					Ni - Cr - Fe alloy	Good oxidation resistance at elevated temperatures, high resistance to stress-corrosion cracking (chlorine gas). Very good resistance to nitriding and carburization	Nuclear engineering, Chemical processing Food processing, Paper industry, Furnace components
NY 601	2.4851	N06601		< 0,10	60	23		15				Al 1,4	Ni - Cr - Fe alloy with addition of Al	Very high resistance to oxidation. High mecanical properties at elevated temperatures Good carburization resistance	Furnace components, Conveyor belts Petrochemical industry
SY 617	2.4627	N06617		0.05 0.10		22	9	3		13		Ti 0,4 - Al 1,2	Ni - Cr - Co alloy with Mo	High temperature strength up to 950°C Excellent resistance to a wide range of high temperature corrosive environments	Combustion cans, transition liners, nitric acid production, catalyst support
SY 718	2.4668	N07718		< 0,08	53	18,5	3	18			5	Ti 0,9 - Al 0,5	Ni - Cr - Fe alloy with Mo & Nb age-hardenable	Corrosion resistance Excellent creep rupture strength at elevated temperatures	Nuclear engineering, gas turbines, cryogenic industry, bolts, oil industry
SY 750	2.4669	N07750	688	< 0,08	73	15,5		7			0,9	Ti 2,5 - Al 0,7	Ni - Cr - Fe - Nb alloy age-hardenable (Ti & Al content)	Good corrosion and oxidation resistance High tensile and creep-rupture properties at elevated temperatures	Fasteners, bolts, springs, nuclear engineering, gas turbines
SY 825	2.4858	N08825		< 0,010	42	22	3	30	2			Ti 0,9	Ni - Fe - Cr alloy with Mo, Cu & Ti	Excellent resistance to stress-corrosion cracking, to pitting and crevice corrosion Resistance to acid and alkaline solutions	Acid production and pickling equipment Oil and gas well components, Waste treatment
NY 845				< 0,10	42	23		33				Si 1,5	Ni - Fe - Cr alloy with Si	Excellent resistance to stress-corrosion in oxidizing or reducing environment	Furnace components, conveyor belts
SY 706		N09706		< 0,060	41	16		Bal.			3	Ti 1,8	Ni - Fe - Cr alloy with Cb, Ti & Al age-hardenable	High strength maintained at temperatures higher than for SY 286 Characteristics similar to SY 718 with better cold heading and machinability capabilities	Fasteners, bolts, springs for high-temperature application (aerospace & automotive industries, industrial gas turbines)
SY 286	1.4944 1.4980	S66286	660	< 0,05	25	15	1,2	Bal.				Ti 2,1 - V 0,3	Fe - Ni - Cr alloy with Mo , Ti , V	Good mechanical properties and corrosion resistance at high temperature Remelting for high cleanliness	Fasteners, bolts, springs for high-temperature application Good stainless properties and high yield strength at room temperature
SY 926	1.4529	N08926		< 0,020	24,5	19,5	6,5	Bal.	1				Fe - Ni - Cr alloy with Mo & Cu	High resistance to pitting and crevice corrosion	Oil and gas production, chemical processing, paper industry sea water treatment, off shore
NY 811	1.4876 1.4959	N08811		< 0,10	30,5	20		Bal.				Ti 0,5 - Al 0,5	Fe - Ni - Cr alloy with higher Al & Ti	High creep strength at elevated temperatures (700 - 1000 °C)	Furnace components, conveyor belts Catalytic equipment
NY 330	1.4886	N08330	330	< 0,050	35	19		Bal.					Fe - Ni - Cr alloy with Si	Resistance to carburizing and oxidizing atmosphere	Furnace components Conveyor belts
NY 330Cb	1.4887			< 0,08	35	20		Bal.			1,2		Fe - Ni - Cr alloy with Nb	Resistance to carburizing and oxidizing atmosphere	Furnace components, conveyor belts
PHY 218		S21800		< 0,10	8,5	17		Bal.				Mn 8 - Si 4 N 0,15	Fe - Ni - Cr alloy with Mn and N	Anti-galling and wear resistance, high temperature oxidation resistance	Conveyor belts, fasteners, fittings, shafts, pins, bearings, wear rings
PHY 400	2.4360	N04400		0,03	66			1	32				Ni - Cu alloy	Excellent corrosion resistance (sea water, hydrofluoric and sulfuric acids, alkalies)	Fasteners, marine engineering, Chemical processing, sea water treatment
SY 35N		R30035		< 0,03	35	20	10			35			Co base alloy	Excellent resistance to sulfidation, to high temperature corrosion and to stress corrosion cracking High mechanical properties up to 400°C	Springs and fasteners for chemical, oil and aerospace engineering, parts for medical application
PHYNOX	2.4711	R30003		< 0,07	15	20	7	Bal.		40			Co base alloy	Excellent corrosion resistance, passive behavior in contact with human tissus High mechanical properties up to 450°C, exceptional fatigue and relaxation resistance	Springs for chemical, oil and aerospace engineering Springs and parts for medical application