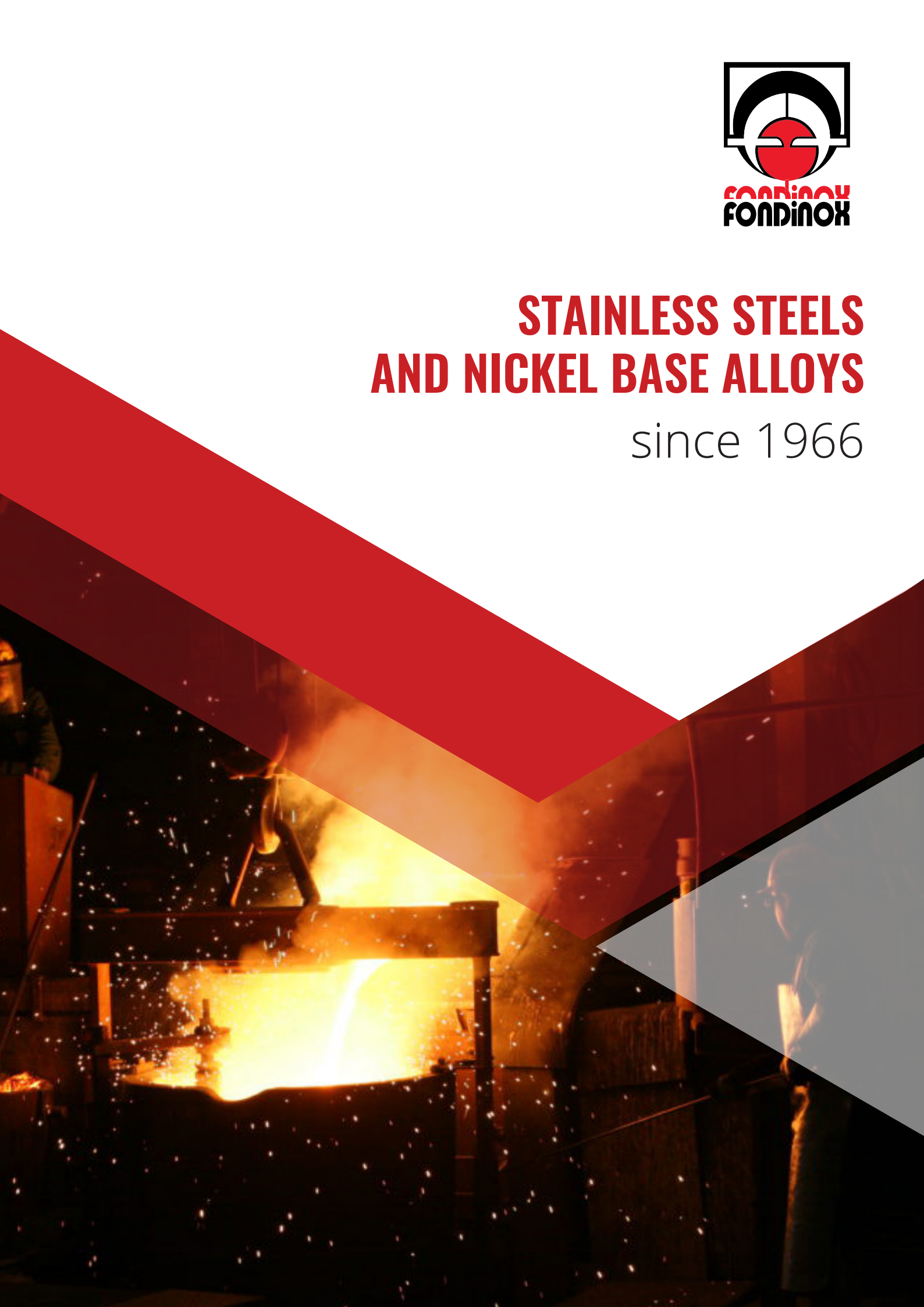
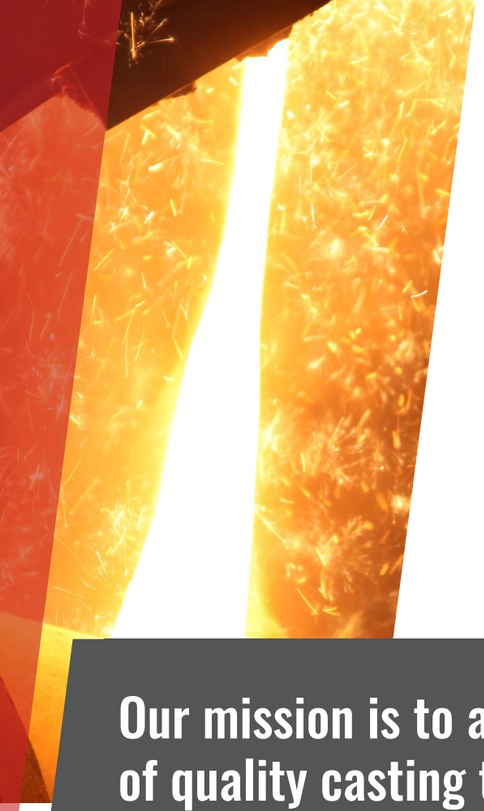
FONDINOX

STAINLESS STEELS AND NICKEL BASE ALLOYS

since 1966





STAINLESS STEEL AND NICKEL ALLOYS FOUNDRY

Experience and innovation, combined with continuous research and development, have led us to become the undisputed leader in the production of corrosion-resistant alloys castings, setting the standard for quality and reliability worldwide.

Our mission is to act as a leader supplier of quality casting through:

CONSTANT RESEARCH ACTIVITY AND ALLOYS DEVELOPMENT
PROCESS IMPROVEMENT AND OPTIMIZATION
TECHNICAL SUPPORT FOR OUR CUSTOMERS

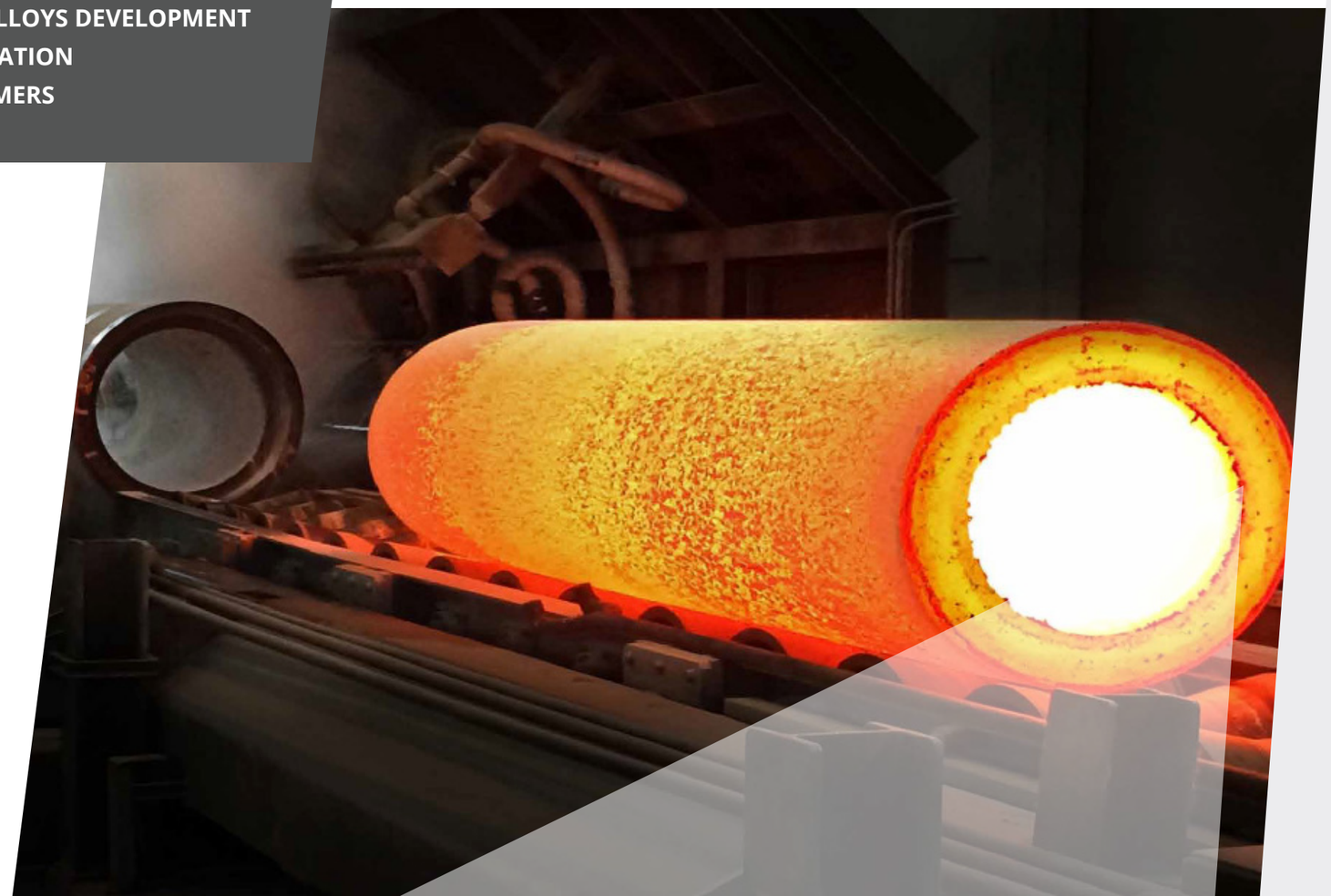
Facilities at customer full service

Nine induction furnaces, including **vacuum capability**, allowing quick alloy changes and optimal batch management in producing nickel-based corrosion resistant alloys. Backed by in-house testing and **Magmasoft® simulation**, we guarantee consistent **quality and optimized performance**.

Our integrated mechanical workshop ensures **full process control** and **high flexibility** in production. Internal machining enables fast turnaround, dimensional accuracy, and reliable alignment with customer specifications and project requirements.

We operate under **ISO 9001** and **ISO 14001** certifications and offer extensive qualification coverage, including **NORSOK** and other industry-specific standards, ensuring trusted compliance for the most demanding sectors worldwide.

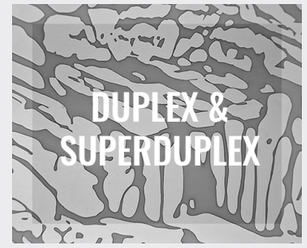
Sustainability drives our operations. Innovative systems for melting, molding, filtration, and handling reduce CO_2 emissions, aligning with ESG principles while enhancing environmental efficiency across every phase of our process.

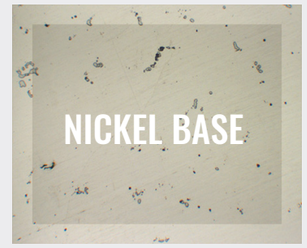


REFERENCE SECTORS

- OIL & GAS APPLICATIONS
- CHEMICAL AND PETROCHEMICAL INDUSTRY
- ENERGY PRODUCTION
- WASTE TREATMENT
- SEPARATION AND FILTERING PLANTS
- SEA WATER DESALINATION
- PROCESS INDUSTRY
- FOOD AND DAIRY INDUSTRY
- SHIPBUILDING CONSTRUCTIONS

OUR ALLOYS





Full table of alloys at the end of the brochure

SAND CASTINGS

PROCESS AND PLANTS

CASTING DESIGN
Continuous collaboration between FONDINOX foundry technicians, metallurgists, customer, universities and industry associations; Process simulation with Magmasoft since 2010. This is one of our company strengths

PATTERN CONSTRUCTION
Collaboration with a number of qualified & specialized pattern makers; each dedicated to specific geometries, sizes and applications allowing for specialization & also short lead times

MOULDING
Four (4) molding lines to cover a wide product range from 5 kg to 8.000 kg net using a thermal process recovery of silica sand to reduce waste and to allow separation of chromite

POURING
Nine (9) induction furnaces to guarantee production capacity, flexibility and avoid contamination between castings; One 2,5 metric tons state of the art vacuum induction furnace allowing high quality melts providing castings with improved mechanical properties for certain steel alloys

FINISHING
Deburring activity outsourced to qualified suppliers organized by geometric sizes offering short production lead times; In-house welders with numerous qualifications managed by an International Welding Engineer.

HEAT TREATEMENT
NORSOK qualified treatment furnaces which can reach temperatures of 1350°C allowing optimal solubilization.

FINAL INSPECTIONS
Qualified in-house personnel with 2nd level VT, PT, RT certifications complemented with an internal laboratory equipped for mechanical, corrosion and metallographic tests and T controlled room for dimensional examinations.

PRODUCTION RANGE: from 5 to 8000kg

SAND CASTING PRODUCTS

Ball, gate, globe, check valves, sliding gate, butterfly, control valves, plug, criogenic, strainer and level check valves.

Centrifugal, axial, vertical, alternative pumps, multistage pumps for oil&gas and energy industry, recirculating pumps, rotary and metering pumps, pumps for special applications

Realization of special alloys castings with all geometries, only limited by designers' imagination.

CENTRIFUGAL CASTINGS

PROCESS AND PLANTS

MOULD PREPARATION
Availability of molds to cover dimensional ranges from 85 mm to 1400 mm OD, from 100mm to 5000 mm length, thicknesses up to 250mm and unit weights up to 6000kg

CENTRIFUGAL CASTING
Eight (8) centrifugal machines: Each dedicated to various size ranges guaranteeing flexibility and short production lead times

HEAT TREATMENT
NORSOK qualified treatment furnaces which can reach temperatures of 1350°C allowing optimal solubilization.

FINAL INSPECTIONS
Qualified in-house personnel with 2nd level VT, PT, RT certifications complemented with an internal laboratory equipped for mechanical, corrosion and metallographic tests.

PRODUCTION RANGE: from 5 to 6000kg

CENTRIFUGAL CASTING PRODUCTS

Hydraulic and oleodinamic cylinders, Cylinders for accumulators, Cylinders for pistons.

Balls and flanged bodies for high pressure valves, Valves cages, Seats, Seal and Wear rings, Flowmeters components.

Process industry rolls, Conveyors rolls for heating furnaces, Radiant tubes, Gas turbines components, High pressure filter housings.

Cones for decanters, HP filters cages.

Mechanical line pipes, Tubes for chemical plants and offshore platforms.

PRODUCED ALLOYS

TYPE	ALLOY	UNS/DIN Castings	UNS/DIN/OTHER Hot Finisched Equivalent	STANDARD CHEMICAL COMPOSITION (wt%)				
				C	Cr	Ni	Mo	Others
MARTENSITIC	A743 CA 15	J91150\1.4011	S41000\1.4006\410	0.10	12.5	<1.0	<0.5	
	420	J91153\1.4027	S42000\1.4021\420	0.20	13.0	<1.0	-	
	431	J91651\1.4059	S43100\1.4057\431	0.22	17.0	1.5	-	
	A743 CA6NM	J91540\1.4317	S41500\1.4313\13-4	<0.06	12.5	3.7	0.6	
	A747 CB7Cu-1	J92180\1.4540	S17400\1.4548\17-4PH	<0.06	16.5	4.0		3.0Cu, 0.25Nb
	16.5.1	1.4405	1.4418	<0.07	16.0	5.2	1.2	
AUSTENITIC	A351 CF8	J92600\1.4308	S30400\1.4301\304	<0.08	19.5	9.5	<0.5	
	A351 CF3	J92700\1.4309	S30403\1.4306\304L	<0.03	19.5	9.5	<0.5	
	A351 CF8M	J92900\1.4408	S31600\1.4401\316	<0.08	19.5	10.5	2.3	
	A351 CF3M	J92800\1.4409	S31603\1.4404\316L	<0.03	19.0	11.0	2.3	
	A351 CF8C	J92710\1.4552	S34700\1.4550\347	<0.08	19.5	10.5	<0.5	Nb>8x%C
	316Nb	J92971\1.4581	S31640\1.4580\316Nb	<0.08	19.5	10.5	2.3	Nb>8x%C
	316LM	1.4437	1.4430	<0.03	17.0	12.0	2.7	
	A351 CG8M	J93000	S31700\1.4449\317	<0.08	19.5	11.0	3.5	
	A351 CG3M	J92999	S31703\1.4438\317L	<0.03	19.5	11.0	3.5	
	1.4439	1.4446	S31726\1.4439	<0.03	17.5	13.5	4.5	0.17N
	A351 CK20	J94202\1.4840	S31008\1.4951\310S	<0.20	25.0	20.5	<0.5	
	A351 CG6MMN	J93790	S20910\Nitronic 50	<0.06	22.0	12.5	2.0	5.0Mn, 0.3N, 0.2Nb,0.2V
	A351 CF10SMnN	J92972	S21800\Nitronic 60	<0.10	17.0	8.5	-	8.0Mn, 4.0Si, 0.14N
	316HP	-	-	<0.07	21.0	9.0	2.3	0.12N
	316LHP	-	-	<0.03	21.0	9.0	2.3	0.12N
SUPERAUSTENITIC	1.4500	J95150\1.4500	-	<0.08	20.0	25.0	3.0	2.0Cu, Nb>8x%C
	A351 CN7M	N08007	Alloy 20	<0.07	20.0	29.0	2.5	3.2Cu
	1.4539	1.4584	1.4539\904L	<0.02	20.0	25.0	4.5	1.5Cu
	Sanicro 28	-	N08028\1.4563	<0.03	27.0	31.0	3.5	1.0Cu
	A351 CT15C	N08151\1.4859	N08810\1.4958\Alloy 800H	<0.15	20.0	32.5	-	1.0Nb
	A351 CK3MCuN	J93254\1.4557	S31254\1.4547\F44	<0.025	20.0	18.5	6.5	0.7Cu, 0.20N
	A351 CN3MN	J94651	N08926\1.4529	<0.03	21.0	24.3	6.5	0.2N, 0.5Cu
	UNS S34565	-	S34565\1.4565	<0.03	24.0	17.5	4.5	6.0Mn, 0.4N, Nb
	654 SMO	-	S32654\1.4652\654SMO	<0.020	24.0	22.0	7.5	0.50N, 3.5Mn, 0.5Cu
HEAT RESISTANT	A297 HC	J92605\1.4822	446	0.38	28.5	4.0	-	1.8Si
	A297 HD	J93005\1.4823	-	0.42	26.5	4.5	-	1.75Si
	A297 HF	J92603\1.4826	308	0.30	20.5	10.0	-	
	1.4825	1.4825	302	0.25	18.0	9.0	-	1.7Si
	1.4826	1.4826	-	0.40	22.0	10.0	-	1.75Si
	1.4835	-	S30815\1.4835	<0.12	21.0	11.0	-	1.7Si, 0.15N
	A297 HH	J93503\1.4837	309	0.40	25.0	12.5	-	1.75Si
	A297 HI	J94003\1.4846	-	0.40	27.0	17.0	-	1.0Si
	A297 HK40	J94204\1.4848	310	0.40	25.0	20.0	-	1.75Si
	310S	J94302\1.4840	-	<0.08	25.0	20.5	-	Si<1.5
	A297 HL	N08604	-	0.40	30.0	20.0	-	Si<2.0
	A297 HN	J94213	-	0.35	21.0	25.0	-	Si<2.0
	1.4859	N08151\1.4859	-	0.10	20.0	32.0	-	1.0Si, 1.0Nb
	A297HP35	1.4857	-	0.40	25.0	34.0	-	1.75Si
	A297 HT	N08605	330	0.55	17.0	35.0	-	Si<2.5
	A297 HU	N08004	331	0.40	18.0	37.5	-	Si<1.75
	A297 HP35Nb	1.4852	-	0.40	25.0	34.0	-	1.75Si, 1.3Nb
	2.4879	2.4879	-	0.45	28.5	48.5	-	5.0W, 1.5Si
	17Cr53NiW	-	-	<0.50	17.0	53.0	-	1.5W, 1.0N, 1.50Si
	24Cr24NiNb	1.4855	IN319	0.33	24.0	24.0	-	1.5Nb, 1.25Si
	25Cr55NiNb	-	-	0.37	22.5	53.0	-	1.5Nb, Si<2.5
	A297 HW	N08001	-	0.55	12.0	60.0	-	Si<2.5, Mn<2.0
	A297 HX	N06006	-	0.55	17.0	66.0	-	Si<2.5
	UMCO50	2.4778	-	0.09	28.0	-	-	49.5Co, 1.0Si
	UMCO51	2.4779	-	0.03	28.5	-	-	50.0Co, 1.0Si, 2.0Nb
	50Cr50NiNb	2.4813	IN657	<0.1	50.0	Bal	-	1.5Nb, 0.4Si

TYPE	ALLOY	UNS/DIN Castings	UNS/DIN/OTHER Hot Finisched Equivalent	STANDARD CHEMICAL COMPOSITION (wt%)				
				C	Cr	Ni	Mo	Others
DUPLEX / SUPERDUPLEX	A890 1A\CD4MCu	J93370	-	<0.04	25.5	5.4	2.0	3.0Cu
	A890 1B\CD4MCuN	J93372	-	<0.04	25.5	5.4	2.0	3.0Cu, 0.17N
	A890 2A\CE8MN	J93345	-	<0.08	24.0	9.5	3.75	0.2N
	A890 3A\CD6MN	J93371	329	<0.06	25.5	5.0	2.2	0.2N
	A890 4A\CD3MN	J92205\1.4470	S31803\1.4462\F51	<0.03	22.2	5.5	3.0	0.2N, Cu<1.0
	A890 5A\CE3MN	J93404\1.4469	S32750\1.4410\F53	<0.03	25.0	7.0	4.5	0.2N
	A890 6A\CD-3MWCuN	J93380\1.4471	S32760\F55	<0.03	25.0	7.5	3.5	0,7Cu, 0.7W, 0.25N
	1.4515	1.4515	-	<0.03	25.5	6.0	3.0	1.0Cu, 0.17N
	1.4517	1.4517	-	<0.03	25.5	6.0	3.0	3.0Cu, 0.17N
	329	-	S32900\329	<0.08	25.0	5.5	1.5	
	ALLOY 25-5LC	-	-	<0.03	25.0	7.0	2.5	0.12N
	ALLOY 25-5Cu	-	-	<0.03	25.0	6.0	2.5	2.0Cu, 0.18N
	1.4362		S32304\1.4362\2304	<0.03	23.0	4.5	0.4	0.4Cu, 0.15N
	1.4469	J93404\1.4469	-	<0.03	26.0	7.0	4.0	0.17N, Cu<1.3
NICKEL NASE	A494 CZ100	N02100\2.4066	N02200\2.4066\Nickel 200	<1.0	-	>95.0	-	
	A494 M35	N24135\2.4365	N04400\2.4369\Monel 400	<0.35	-	Bal	-	29.0Cu, Fe<3.5
	A494 M30H	N24030\2.4367	N05500\2.4375\Monel K500	<0.30	-	Bal	-	30.0Cu, 3.2Si, Fe<3.5
	A494 CY40	N06040\2.4816	N06600\2.4816\Alloy 600	<0.40	15.5	Bal	-	Fe<11.0, Si<3.0
	A494 CU5MCuC	N08826	N08825\2.4858\Alloy 825	<0.05	21.5	41.0	3.0	3.0Cu, 0.9Nb
	A494 CW6MC	N26625\2.4856	N06625\2.4856\Alloy 625	<0.06	21.5	Bal	9.0	3.75Nb, Fe<5
	A494 CW2M	N26455\2.4610	N06455\2.4610\HC-4	<0.02	16.0	Bal	16.0	Fe<2.0
	A494 CW6M	N30107	-	<0.07	18.5	Bal	18.5	Fe<3.0
	A494 CW12MW	N30002\2.4686	N10276\2.4819\HC-276	<0.12	16.5	Bal	17.0	4.25W, 0.3V, 6.0Fe
	A494 CX2MW	N26022\2.4602	N06022\2.4602\HC-22	<0.02	21.5	Bal	13.5	3.0W, 4.0Fe
	A494 CX2M	N26059\2.4607	N06059\2.4605\Alloy 59	<0.02	23.0	Bal	15.5	Fe<1.5
	HC2000-C	2.4675	N06200\2.4675\HC-2000	<0.02	23.0	Bal	16.0	1.6Cu, Fe<3.0
	A494 N7M	N30007\2.4617	-	<0.07	<1.0	Bal	31.5	Fe<3.0
	A494 N12MV	N30012\2.4882	N10665\2.4617\HB-2	<0.12	<1.0	Bal	28.0	5.0Fe, 0.4V
	HB2	N30012\2.4810	N10665\2.4617\HB-2	<0.02	<1.0	Bal	28.0	Fe<2.0
	HB3	2.4600	N10675\HB-3	<0.02	2.0	Bal	30.0	2.0Fe

ALLOYS PRODUCED UNDER PATENT

* Under Trade Mark
** Under Exclusive Licence

PATENT	PROPRIETARY Alloy	UNS/DIN Castings	Wrought	STANDARD CHEMICAL COMPOSITION (wt%)				
				C	Cr	Ni	Mo	Others
FONDINOX	316HP	-	-	<0.07	21.0	9.0	2.3	0.12N
	316LHP	-	-	<0.03	21.0	9.0	2.3	0.12N
	ALLOY 25-5LC	-	-	<0.03	25.0	7.0	2.5	0.12N
	ALLOY 25-5Cu	-	-	<0.03	25.0	6.0	2.5	2.0Cu, 0.18N
SANDVIK	SAF 2304	-	SAF 2304	<0.03	23.0	4.0	-	0.15N
	SAF 2205	J92205\1.4470	SAF 2205	<0.03	22.0	5.5	3.0	0.18N
	SAF 2507®	J93404\1.4469	SAF 2507	<0.03	25.0	7.0	4.2	0.25N
	2RK65	1.4538	2RK65	<0.03	20.0	25.0	4.5	1.5Cu
	Sanicro 28	-	Sanicro 28	<0.03	27.0	31.0	3.5	1.0Cu
OUTOKUMPU	254SMO®	J93254\1.4557	254SMO	<0.025	20.0	18.0	6.3	0.7Cu, 0.20N
	654SMO®	-	654SMO	<0.020	24.0	22.0	7.5	0.50N, 3.5Mn, 0.5Cu
	153MA™	-	153MA	<0.05	18.5	9.5	-	1.5Si, 0.15N, Ce
	253MA®	-	253MA	<0.20	21.0	11.0	-	1.70Si, Ce
	353MA®	1.4852	353MA	<0.20	25.0	35.0	-	1.50Si, Ce
HAYNES INTL. INC.	Hastelloy® C-276*	N30002\2.4686	Hastelloy C-276	<0.02	15.5	Bal	16.0	5.5Fe, 3.75W
	Hastelloy® C-4*	N26455\2.4610	Hastelloy C-4	<0.02	16.0	Bal	16.25	Fe<2.0
	Hastelloy® C-22*	N26022	Hastelloy C-22	<0.02	21.25	Bal	13.5	4.0Fe, 3.0W
	Hastelloy® B-2*	N30007	Hastelloy B-2	<0.02	<1.0	Bal	28.0	Fe<2.0
	Hastelloy® G-3*	2.4619	Hastelloy G-3	<0.02	22.25	Bal	7.0	2.0Cu, 19.5Fe
	Hastelloy® G-30*	-	Hastelloy G-30	<0.03	29.75	Bal	5.3	15Fe, 1.7Cu, 2.8W, Nb
	Hastelloy® C-2000**	2.4675	Hastelloy C-2000	<0.02	23.0	Bal	16.0	1.6Cu, Fe<3.0
	Hastelloy® B-3**	2.4600	Hastelloy B-3	<0.02	2.0	Bal	29.5	2.0Fe
	Hastelloy® C-22HS**	-	Hastelloy C-22HS	<0.02	20.7	Bal	16.5	Fe<1.8
	Hastelloy® G-35**	2.4643	Hastelloy G-35	<0.02	33.4	Bal	8.3	Fe<2.0

FONDINOX S.p.A.
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NEAR AIRPORT: Milano Malpensa (55km), Milano Linate (35km), Orio al Serio (20km)

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