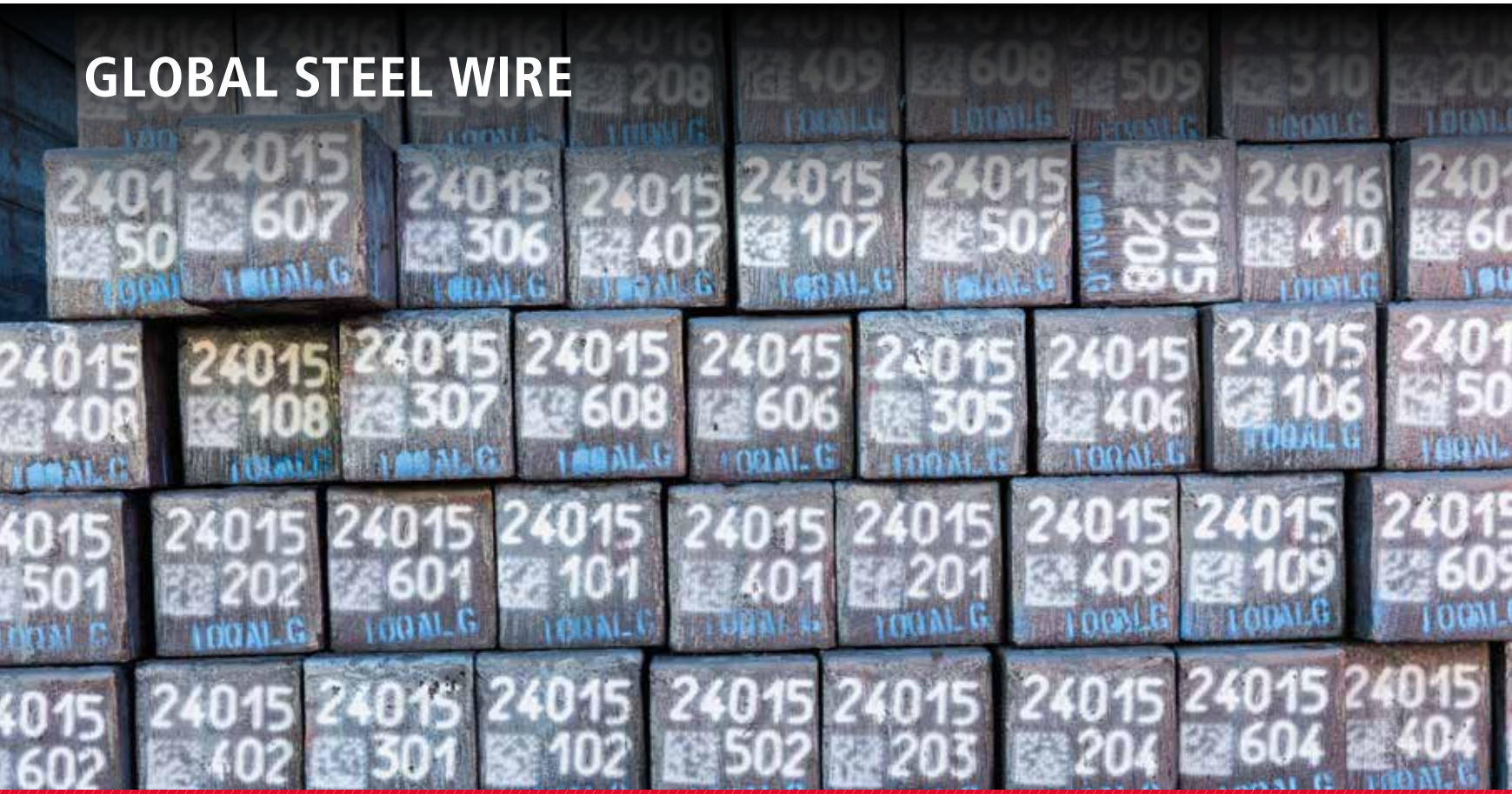
CELSA GROUP™ | GLOBAL STEEL WIRE



PASSIONATE ABOUT STEEL

CELSA™ GROUP | GLOBAL STEEL WIRE

CELSA™ GROUP | GLOBAL STEEL WIRE

GSW STEEL FACILITIES:

- 1 Million tons of billets annual capacity.
- 900,000 tons of hot rolled wire rod in coils.
- Surface and Heat treatment facilities.
- 650 direct employees.

GSW GROUP:

- **Integrated Drawing Mills: 355,000 tons of cold drawn wire production:**
  - Cold Heading Wire Qualities.
  - Pre-stressed Concrete Wire and Strand.
  - Bedding and Seating Wire Rod.
  - Technical Spring Wire Rod.
  - Engineering Steels.
  - Suspension Spring Wire Rod.
  - Steel Cord and Bead Wire.

CELSA GROUP™

ORIGIN

CELSA GROUP™ history begins in 1967 with the first rolling mill.

A decade later the first steel mill was opened.

In the 90's CELSA GROUP™ became with their Steel Long Products, leaders in Spain.

INTERNATIONAL EXPANSION

International expansion started through acquiring production facilities in the UK and Poland in 2003.

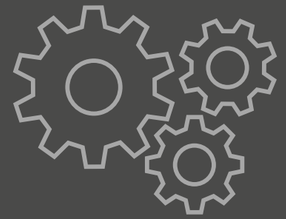
Expansion continued entering the Nordic countries in 2006 and France in 2007.

TODAY

CELSA GROUP™ is today amongst the world's top 50 Steel Producers.

CELSA GROUP™ is the most diversified European Private Group.

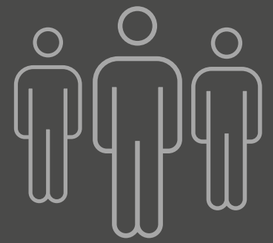
KEY FIGURES



PRODUCTION

7,0

MILLION TONS



EMPLOYEES

9,500

PEOPLE

CELSA GROUP™

Founded in 1967 and Headquartered at Barcelona, Celsa Group is the largest Long Products Producer in Spain and the most diversified European Private Group.

Celsa Group is focused on supplying excellent quality products and direct service to its customers

1. ROLLED PRODUCTS


Wire Rod


Plain Rounds


Structural Sections


Bars and Squares


Angle Sections

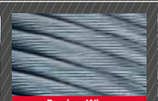

Iron Strip


Reinforcing Bars

2. TRANSFORMED PRODUCTS


Cold Heading Wire


Technical Springs


Roping Wire


Steel Cables and Strands


Welded Tube


Welded Mesh


Reinforcing Joists


Wire Fencing

3. FORGING


Steel Lingots


Fibre Crankshafts


Main Wind Turbine Shafts


CGF Crankshafts


Boat Prop. Shafts & Comp.


Customforged Parts

CELSA (BARCELONA)

Founded in 1967, Celsa produces reinforcing steel, round bars, wire rod, flat bars, squares, angles, beams, profiles and electro-welded mesh.

CELSA NORTE (GALICIA/FRANCE)

- Acquired in 2007.
- In process of integration.
- It produces more than 1 million Tons per year of billets.
- It has 2 rolling mills in Galicia.

(BILBAO)

- Producer of reinforcing steel, it has a filial -Laminaciones Arregui- which produces tubs.
- They were atcquired respectively in 1988 and 1996.
- Nervacero is located in Vizcaya and completes installations in Barcelona.

CELSA NORDIC GROUP

- Acquired in 2006.
- Headquarters: Mo i Rana (Norway).
- 953 employees* (own: 830 / sub: 123).
- 1 melting facility and 1 rolling mill.
- Leader in rebar market in all 4 Nordic countries.
- Down-stream integration in more than 75% of the total production.

GSW (SANTANDER)

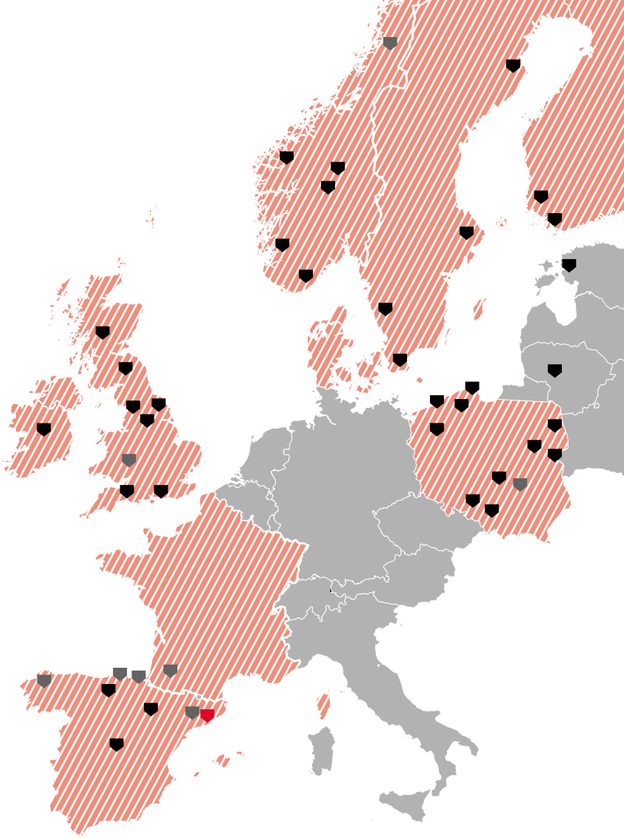
- Acquired in 1987.
- One of the most important producers of wire rod in Europe.
- Situated in Santander.
- It has its own harbor wich gives advantages while competing on the international market.

CELSA UK GROUP

- Acquired in 2003
- Headquarters: Cardiff.
- 1.661 employees* (own: 1.154 / sub: 507).
- 1 melting facility and 2 rolling mills
- Leader of British rebar and merchant bars markets.
- Down-stream integration in more than 50% in Rebar.

CELSA OSTROWIEC GROUP

- Acquired in 2003.
- Headquarters: Ostrowiec.
- 2.027 employees* (own: 1.630 / sub: 397).
- 1 melting facility and 2 rolling mills.
- Market leader in rebar in Poland.
- Leader in scrap recycle market that allows up-stream integration of 100%.
- Leader in the production of forging machine for wind and naval sector.



GLOBAL STEEL WIRE

GSW is the **Celsa Group** company engaged in manufacturing Wire Rod in an extensive range of grades and dimensions, which have been progressively expanded towards higher technology services.

We are present in all Wire Rod based manufacturing sectors.

Following our main objective of satisfying our customers, we have continously invested in keeping our facilities and processes up dated with the latest technological developments

Likewise, our Total Quality Management (TQM) system allows us to focus our entire organization towards delivering the quality and service required by our customers.

GLOBAL STEEL WIRE

PRODUCTION

1.000.000 MT (BILLETS) -
900.000 MT (WIRE ROD)

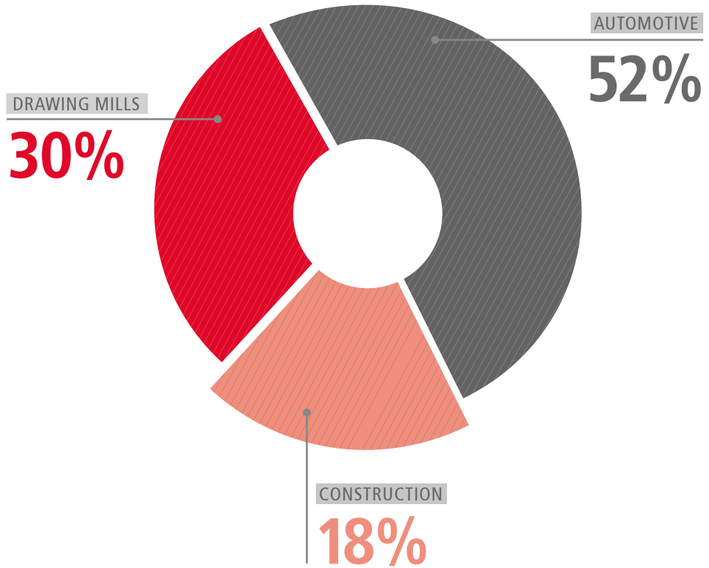
EMPLOYEES

1650 PEOPLE

DRAWING MILLS

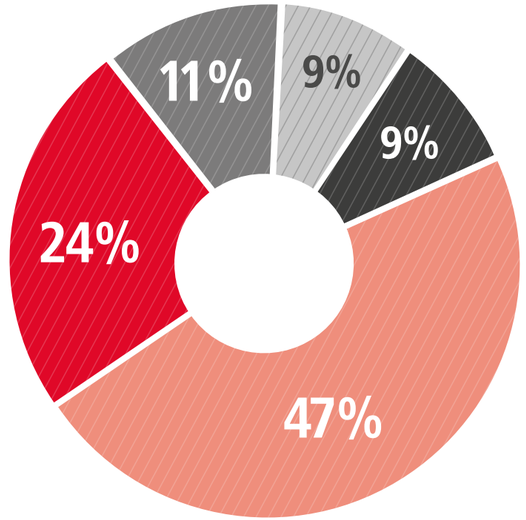
355.000 MT OF DRAWN WIRE PRODUCTION

(COLD HEADING QUALITIES, PC WIRE, BEDDING AND SEATING WIRE, CARBON STEEL WIRE, CASE HARDENING STEELS AND COLD DRAWN PRODUCTS)



AUTOMOTIVE WIRE ROD

COLD HEADING
FREE CUTTING
SPRING STEEL
SUSPENSION SPRINGS, STABILIZER AND TORSION BARS
STEEL CORD



STEEL WIRE QUALITY SYSTEM

GSW CURRENT QUALITY SYSTEM IS CERTIFIED BY ISO 9001:2015 STANDARD AND IATF 16949:2016

This system is in continuous development, adapting at all times to the changing market needs, the increasing international competition and the growing pressure of costs. We are always looking for new organisational ways to obtain the highest quality in our products for our growing customer satisfaction.

Quality management is one of the fundamental pillars of our industrial activity.

GSW has a Quality Management System certified by AENOR as compliant with ISO 9001:2008 Standard.

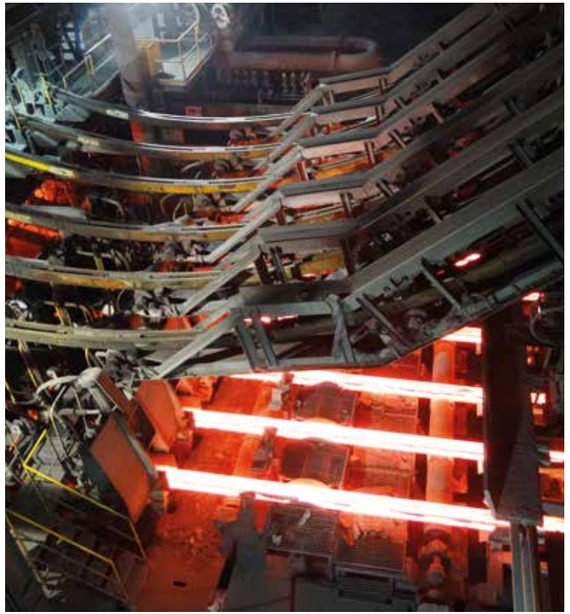
GSW HAS BEEN CERTIFIED IATF 16949:2016

GSW's Chemical Laboratory is accredited by A2LA (American Association for Laboratory Accreditation) as a competent lab according to ISO/IEC 17025. The A2LA accreditation is granted to GSW's laboratory to perform the chemical tests on metallic materials, ferroalloys, additives, iron ores, furnace dust and coal.

INSTALLATIONS

NEW FACILITY (FROM JANUARY 2016): INDUCTION FURNACE:

- Transfer car to change the rolling line.
- Roller's way to feed billets: no friction.
- Very short residence time.
- High flexibility and accuracy in heating strategies.



AUTOMATIC ADDITION AND CONTROL OF MOULD POWDER IN THE CONTINUOUS CASTING

BILLET CONTROL

Billet inspection unit at Steel Facility

BILLET CONDITIONING

Billet conditioning with grinding machine

MANUFACTURING PROCESS

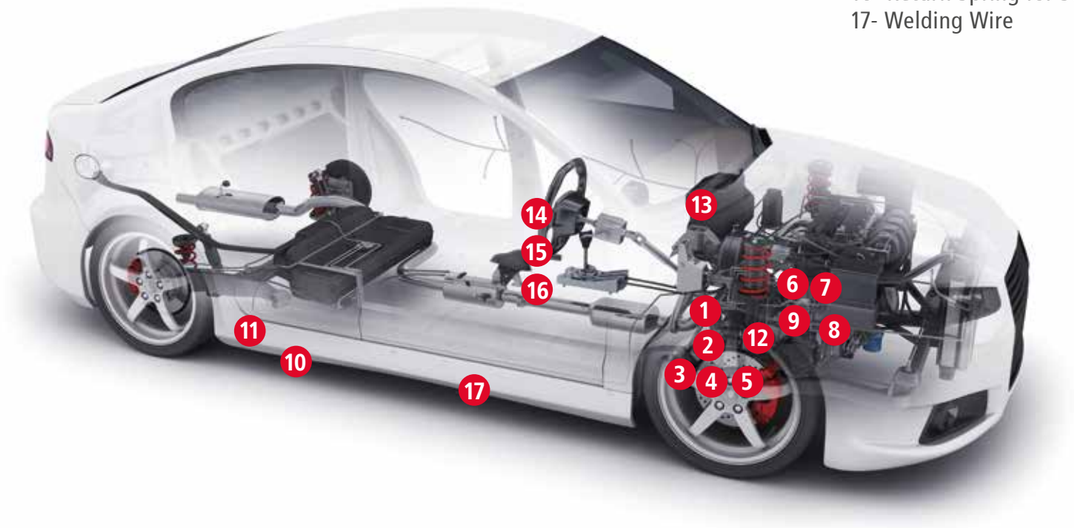
The metal charge of each heat comprises an adequate mix of selected scrap and sponge iron pellets in order to obtain the appropriate content of residual elements according to the type of steel to be produced.

The use of sponge iron pellets allows very low content levels of residual elements such as Cr, Ni, Cu, Mo, Sn and N2.

Both, the scrap and the sponge iron pellets, as well as the rest ofthe raw materials (ferroalloys, recarburizers and synthetic slags) are acquired according to the purchasing specifications from approved suppliers and are subjected to regular controls on reception.

OUR STEEL FOR AUTOMOTIVE COMPONENTS

1- Suspension Spring
2- Stabilizer Bar
3- Tripod Joint
4- Pin Ball
5- Injection parts
6- Air conditioning compressor
7- Steel cord wire
8- Wheel hub
9- Fasteners, screws, bolts for powertrain, breaking system, chassis and steering
10- Seat belt torsion bar
11- Windscreen wiper
12- Return spring for seat
13- Welding wire
14- Head rest
15- Seat Belt Torsion Bar
16- Return Spring for Seat
17- Welding Wire



STEEL WIRE ROD
DIAMETER RANGE

IN	IN	GSW SIZE (MM)
21/97	0,2165	5,5
13/55	0,2362	6,0
11/43	0,2559	6,5
8/29	0,2756	7,0
13/44	0,2953	7,5
23/73	0,3150	8,0
1/3	0,3346	8,5
28/79	0,3543	9,0
3/8	0,3740	9,5
13/33	0,3937	10,0
31/75	0,4134	10,5
13/30	0,4331	11,0
24/53	0,4528	11,5
43/91	0,4724	12,0
31/63	0,4921	12,5
43/84	0,5118	13,0
17/32	0,5315	13,5
43/78	0,5512	14,0
4/7	0,5709	14,5
13/22	0,5906	15,0
17/27	0,6299	16,0
13/20	0,6496	16,5
2/3	0,6693	17,0
11/16	0,6875	17,5
17/24	0,7087	18,0
3/4	0,7480	19,0
63/80	0,7874	20,0

IN	IN	GSW SIZE (MM)
43/52	0,8268	21,0
11/13	0,8465	21,5
13/15	0,8661	22,0
48/53	0,9055	23,0
37/40	0,9252	23,5 Hex.
17/18	0,9449	24,0
63/64	0,9843	25,0
1	1,0039	25,5 Hex.
1 1/42	1,0236	26,0
1 1/16	1,0630	27,0
1 4/39	1,1024	28,0
1 5/41	1,1220	28,5 Hex.
1 1/7	1,1417	29,0
1 2/11	1,1811	30,0
1 15/68	1,2205	31,0
1 6/25	1,2402	31,5 Hex.
1 13/50	1,2598	32,0
1 22/69	1,3189	33,5 Hex.
1 21/62	1,3386	34,0
1 5/12	1,4173	36,0
1 37/81	1,4567	37,0
1 1/2	1,4961	38,0
1 23/40	1,5748	40,0
1 17/26	1,6535	42,0
1 52/71	1,7323	44,0
1 17/20	1,8504	47,0
2 1/21	2,0472	52,0

TECHNOLOGICAL AND METALLURGICAL PROPERTIES

HARDENABILITY

Boron Steels are killed with Aluminium and Titanium, which allow enough Boron to be active in order to guarantee hardenability of the Steel.

Products are systematically checked according to the current standards of core hardness by quenching and JOMINY test.

SURFACE QUALITY

Our Rod is rolled from 180 x 180 mm blooms of assured surface quality. Rolling process in strictly controlled by computer for different parameters, allowing to get a product with a quality level which exceeds the requirements of EN 10221 Class D.

CATALOGUE

SERVICES & SPECIFICATIONS

CASE HARDENING STEELS

W.Nr	Designation	Standard	%C	%Mn	%Si	%P	%S	%Cr	%Al	%Cu	%Pb
1.7131	16MnCr5	EN ISO 683:3	0,14 - 0,19	1,00 - 1,30	0,15 - 0,40	0,025 Max	0,035 Max	0,80 - 1,10		0,40 Max	
1.7139	16MnCrS5	EN ISO 683:3	0,14 - 0,19	1,00 - 1,30	0,15 - 0,40	0,025 Max	0,020 - 0,040	0,80 - 1,10		0,40 Max	
1.7139+Al	16MnCrS5+Al	EN ISO 683:3	0,14 - 0,19	1,00 - 1,30	0,15 - 0,40	0,025 Max	0,020 - 0,040	0,80 - 1,10	0,020 - 0,040	0,40 Max	
1.7139+Pb	16MnCrS5+Pb	EN ISO 683:3	0,14 - 0,19	1,00 - 1,30	0,15 - 0,40	0,025 Max	0,020 - 0,040	0,80 - 1,10		0,40 Max	0,20 - 0,35
1.7016	17Cr3	EN ISO 683:3	0,14 - 0,20	0,60 - 0,90	0,15 - 0,40	0,025 Max	0,035 - Max	0,70 - 1,00		0,40 Max	
1.7014	17CrS3	EN ISO 683:3	0,14 - 0,20	0,60 - 0,90	0,15 - 0,40	0,025 Max	0,020 - 0,040	0,70 - 1,00		0,40 Max	

Only for information purposes. Different compositions may be agreed on between purchaser and supplier.

COLD DRAWING STEELS

W.Nr	Designation	Standard	%C	%Mn	%Si	%P	%S	%Cr	%Mo	% Ni	%Cu
1.1121	C10E 1010 Mod	EN ISO 683:3 ASTM A29/A29M	0,07 - 0,13	0,30 - 0,60	0,15 - 0,40	0,035 Max	0,035 Max	0,40 Max	0,10 Max	0,40 Max	0,30 Max
1.1141	C15E 1015 Mod	EN ISO 683:3 ASTM A29/A29M	0,12 - 0,18	0,30 - 0,60	0,15 - 0,40	0,035 Max	0,035 Max	0,40 Max	0,10 Max	0,40 Max	0,30 Max
1.1140	C15R 1015 Mod + S	EN ISO 683:3 ASTM A29/A29M	0,12 - 0,18	0,30 - 0,60	0,15 - 0,40	0,035 Max	0,020 - 0,035	0,40 Max	0,10 Max	0,40 Max	0,30 Max
1.1180	*C35R 1035 Mod	EN ISO 683:1 ASTM A29/A29M	0,32 - 0,39	0,50 - 0,80	0,10 - 0,40	0,035 Max	0,020 - 0,040	0,40 Max	0,10 Max	0,40 Max	0,30 Max
1,1189	*C40R 1040 Mod	EN ISO 683:1 ASTM A29/A29M	0,37 - 0,44	0,50 - 0,80	0,10 - 0,40	0,035 Max	0,020 - 0,040	0,40 Max	0,10 Max	0,40 Max	0,30 Max
1.1201	*C45R 1045 Mod	EN ISO 683:1 ASTM A29/A29M	0,42 - 0,50	0,50 - 0,80	0,10 - 0,40	0,035 Max	0,020 - 0,040	0,40 Max	0,10 Max	0,40 Max	0,30 Max

* %Cr+Mo+Ni=0,63 max

WIRE ROD FOR CHAINS

W.Nr	Designation	Standard	%C	%Mn	%Si	%P	%S	%Cr	%B	%Al	%Ni
1.5530	20MnB5	EN 10083	0,17 - 0,23	1,10 - 1,40	0,40 Max	0,025 Max	0,035 Max	-	0,0020 - 0,0050	-	-

Only for information purposes. Different compositions may be agreed on between purchaser and supplier.

WIRE ROD FOR CHAINS

W.Nr	Designation	Standard	%C	%Mn	%Si	%P	%S	%Cr	%B	%Al	%Ni
1.550+Cr	20MnB5+Cr	EN 10083	0,17 - 0,23	1,10 - 1,40	0,40 Max	0,025 Max	0,035 Max	0,20 - 0,40	0,0020 - 0,0050		
1.0412	27MnSi6	DIN 17115 MOD	0,23 - 0,30	1,35 - 1,65	0,25 - 0,45	0,025 Max	0,025 Max			0,025 - 0,050	
	23MnB4+ Cr+Ni	EN 10263-4 MOD	0,20 - 0,25	0,90 - 1,20	0,30 Max	0,025 Max	0,025 Max	0,30 - 0,50	0,0008 - 0,0050		0,30 - 0,50

FREE-CUTING STEELS

W.Nr	Designation	Standard	%C	%Mn	%Si	%P	%S	%Pb
1.0715	11SMn30	EN ISO 683-4 (EN 10087)	0,14 Max	0,90 - 1,30	0,05 Max	0,11 Max	0,27 - 0,33	
1.0718	11SMnPb30	EN ISO 683-4 (EN 10087)	0,14 Max	0,90 - 1,30	0,05 Max	0,11 Max	0,27 - 0,33	0,20 - 0,35
1.0736	11SMn37	EN ISO 683-4 (EN 10087)	0,14 Max	1,00 - 1,50	0,05 Max	0,11 Max	0,34 - 0,40	
1.0737	11SMnPb37	EN ISO 683-4 (EN 10087)	0,14 Max	1,00 - 1,50	0,05 Max	0,11 Max	0,34 - 0,40	0,20 - 0,35

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FREE-CUTING STEELS

W.Nr	Designation	Standard	%C	%Mn	%Si	%P	%S	%Pb
1.0765	36SMnPb14	EN ISO 683-4 (EN 10087)	0,32 - 0,39	1,30 - 1,70	0,40 Max	0,06 Max	0,10 - 0,18	0,15 - 0,35
1.0762	44SMn28	EN ISO 683-4 (EN 10087) ASTM A29/A29M	0,40 - 0,48	1,30 - 1,70	0,40 Max	0,06 Max	0,24 - 0,33	
1.0763	44SMnPb28	EN ISO 683-4 (EN 10087)	0,40 - 0,48	1,30 - 1,70	0,40 Max	0,06 Max	0,24 - 0,33	0,15 - 0,35
1.0727	46S20	EN ISO 683-4 (EN 10087)	0,42 - 0,50	0,70 - 1,10	0,40 Max	0,06 Max	0,15 - 0,25	
1.0757	46SPb20	EN ISO 683-4 (EN 10087)	0,42 - 0,50	0,70 - 1,10	0,40 Max	0,06 Max	0,15 - 0,25	0,15 - 0,25
	1215	ASTM A29/A29M	0,09 Max	0,75 - 1,05		0,04 - 0,09	0,26 - 0,35	
	12L14	ASTM A29/A29M	0,15 Max	0,85 - 1,15		0,04 - 0,09	0,26 - 0,35	0,15 - 0,35

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WIRE ROD FOR WELDING

W.Nr	Designation	Standard	%C	%Mn	%Si	%P	%S	%Cu
	SG2		0,06 - 0,13	1,30 - 1,60	0,70 - 1,00	0,025 Max	0,025 Max	0,30 Max

LOW CARBON STEELS

W.Nr	Designation	Standard	%C	%Mn	%Si	%P	%S
	C4D 1006 Mod	ISO 16120-2 ASTM A29/A29M	0,06 Max	0,30 - 0,60	0,30 Max	0,035 Max	0,035 Max
	C7D 1008 Mod	ISO 16120-2 ASTM A29/A29M	0,05 - 0,09	0,30 - 0,60	0,30 Max	0,035 Max	0,035 Max
	C9D 1008 Mod	ISO 16120-2 ASTM A29/A29M	0,10 Max	0,30 - 0,60	0,30 Max	0,035 Max	0,035 Max
	C10D 1010 Mod	ISO 16120-2 ASTM A29/A29M	0,08 - 0,13	0,30 - 0,60	0,30 Max	0,035 Max	0,035 Max
	C12D 1012 Mod	ISO 16120-2 ASTM A29/A29M	0,10 - 0,15	0,30 - 0,60	0,30 Max	0,035 Max	0,035 Max

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MEDIUM AND HIGH CARBON STEELS

W.Nr	Designation	Standard	%C	%Mn	%Si	%P	%S
	C32D 1030 Mod	ISO 16120-2 ASTM A29/A29M	0,30 - 0,35	0,50 - 0,80	0,10 - 0,30	0,030 Max	0,030 Max
	C38D 1038 Mod	ISO 16120-2 ASTM A29/A29M	0,35 - 0,40	0,50 - 0,80	0,10 - 0,30	0,030 Max	0,030 Max
	C42D 1042 Mod	ISO 16120-2 ASTM A29/A29M	0,40 - 0,45	0,50 - 0,80	0,10 - 0,30	0,030 Max	0,030 Max
	C48D 1045 Mod	ISO 16120-2 ASTM A29/A29M	0,45 - 0,50	0,50 - 0,80	0,10 - 0,30	0,030 Max	0,030 Max
	C50D 1050 Mod	ISO 16120-2 ASTM A29/A29M	0,48 - 0,53	0,50 - 0,80	0,10 - 0,30	0,030 Max	0,030 Max
	C52D 1055 Mod	ISO 16120-2 ASTM A29/A29M	0,50 - 0,55	0,50 - 0,80	0,10 - 0,30	0,030 Max	0,030 Max
	C56D 1055 Mod	ISO 16120-2 ASTM A29/A29M	0,53 - 0,58	0,50 - 0,80	0,10 - 0,30	0,030 Max	0,030 Max
	C58D 1059 Mod	ISO 16120-2 ASTM A29/A29M	0,55 - 0,60	0,50 - 0,80	0,10 - 0,30	0,030 Max	0,030 Max
	C60D 1060 Mod	ISO 16120-2 ASTM A29/A29M	0,58 - 0,63	0,50 - 0,80	0,10 - 0,30	0,030 Max	0,030 Max

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MEDIUM AND HIGH CARBON STEELS

W.Nr	Designation	Standard	%C	%Mn	%Si	%P	%S
	C62D 1064 Mod	ISO 16120-2 ASTM A29/A29M	0,60 - 0,65	0,50 - 0,80	0,10 - 0,30	0,030 Max	0,030 Max
	C66D 1065 Mod	ISO 16120-2 ASTM A29/A29M	0,63 - 0,68	0,50 - 0,80	0,10 - 0,30	0,030 Max	0,030 Max
	C68D 1070 Mod	ISO 16120-2 ASTM A29/A29M	0,65 - 0,70	0,50 - 0,80	0,10 - 0,30	0,030 Max	0,030 Max
	C70D 1070 Mod	ISO 16120-2 ASTM A29/A29M	0,68 - 0,73	0,50 - 0,80	0,10 - 0,30	0,030 Max	0,030 Max
	C72D 1070 Mod	ISO 16120-2 ASTM A29/A29M	0,70 - 0,75	0,50 - 0,80	0,10 - 0,30	0,030 Max	0,030 Max
	C76D 1070 Mod	ISO 16120-2 ASTM A29/A29M	0,73 - 0,78	0,50 - 0,80	0,10 - 0,30	0,030 Max	0,030 Max
	C78D 1074 Mod	ISO 16120-2 ASTM A29/A29M	0,75 - 0,80	0,50 - 0,80	0,10 - 0,30	0,030 Max	0,030 Max
	C80D 1080 Mod	ISO 16120-2 ASTM A29/A29M	0,78 - 0,83	0,50 - 0,80	0,10 - 0,30	0,030 Max	0,030 Max
	C82D 1080 Mod	ISO 16120-2 ASTM A29/A29M	0,80 - 0,85	0,50 - 0,80	0,10 - 0,30	0,030 Max	0,030 Max
	C86D 1080 Mod	ISO 16120-2 ASTM A29/A29M	0,83 - 0,88	0,50 - 0,80	0,10 - 0,30	0,030 Max	0,030 Max

Only for information purposes. Different compositions may be agreed on between purchaser and supplier.

WIRE ROD FOR TYRE REINFORCEMENT

W.Nr	Designation	Standard	%C	%Mn	%Si	%P	%S
	C70		0,65 - 0,75	0,45 - 0,55	0,15 - 0,30	0,020 Max	0,020 Max
	C80		0,75 - 0,85	0,45 - 0,55	0,15 - 0,30	0,020 Max	0,020 Max

HIGH STRENGTH WIRE ROD

W.Nr	Designation	Standard	%C	%Mn	%Si	%P	%S	%Cr	%V
	C82+Cr 1080 Mod+Cr	ASTM A29/A29M	0,78 - 0,84	0,60 - 0,80	0,15 - 0,30	0,020 Max	0,020 Max	0,20 - 0,30	
	2+Cr+V 1080 Mod+Cr	ASTM A29/A29M	0,78 - 0,84	0,60 - 0,80	0,15 - 0,30	0,020 Max	0,020 Max	0,20 - 0,30	0,03 - 0,15

WIRE ROD FOR MESH

W.Nr	Designation	Standard	%C	%Mn	%Si	%P	%S
	SAE 1008	ASTM A29/A29M	0,08 Max	0,30 - 0,50	0,30 Max	0,040 Max	0,050 Max
	SAE 1010	ASTM A29/A29M	0,08 - 0,13	0,30 - 0,60	0,30 Max	0,020 Max	0,020 Max

Only for information purposes. Different compositions may be agreed on between purchaser and supplier.

PRODUCTS

SERVICES & SPECIFICATIONS

ALUMINIUM KILLED STEEL

W.Nr	Designation	Standard	%C	%Mn	%Si	%P	%S	%Al
1.0303	C4C 1006 Mod	EN 10263-2 ASTM A29/A29M	0,02 - 0,06	0,25- 0,40	0,10 max	0,020 max	0,025 max	0,020 - 0,060
1.0213	C8C 1008	EN 10263-2 ASTM A29/A29M	0,06 - 0,10	0,25- 0,45	0,10 max	0,020 max	0,025 max	0,020 - 0,060
1.0214	C10C 1010 Mod	EN 10263-2 ASTM A29/A29M	0,08 - 0,12	0,30- 0,50	0,10 max	0,025 max	0,025 max	0,020 - 0,060
1.0234	C15C 1015 Mod	EN 10263-2 ASTM A29/A29M	0,13 - 0,17	0,35- 0,60	0,10 max	0,025 max	0,025 max	0,020 - 0,060
1.0434	C17C 1018 Mod	EN 10263-2 ASTM A29/A29M	0,15 - 0,19	0,65- 0,85	0,10 max	0,025 max	0,025 max	0,020 - 0,060
1.0411	C20C 1021 Mod	EN 10263-2 ASTM A29/A29M	0,18 - 0,22	0,70- 0,90	0,10 max	0,025 max	0,025 max	0,020 - 0,060
1.5113	8MnSi7	EN 10263-2	0,10 max	1,60 - 1,80	0,90 - 1,10	0,025 max	0,025 max	0,020 max
1.1172	-C35EC	EN 10263-4	0,32 - 0,39	0,50 - 0,80	0,30 max	0,025 max	0,025 max	0,020 - 0,060

GSW Standard specification. Individual variation in any element can be considered.

BORON STEEL

W.Nr	Designation	Standard	%C	%Mn	%Si	%P	%S	%Cr	%Cu	%B
1.5502	17B2	EN 10263-4	0,15 - 0,20	0,60- 0,90	0,30 max	0,025 max	0,025 max	0,30 max	0,25 max	0,0008 - 0,0050
1.5508	23B2 10B22 Mod	EN 10263-4 ASTM A29/A29M	0,20 - 0,25	0,60- 0,90	0,30 max	0,025 max	0,025 max	0,30 max	0,25 max	0,0008 - 0,0050
1.5510	28B2	EN 10263-4	0,25 - 0,30	0,60- 0,90	0,30 max	0,025 max	0,025 max	0,30 max	0,25 max	0,0008 - 0,0050
1.5525	20MnB4	EN 10263-4	0,18 - 0,23	0,90- 1,20	0,30 max	0,025 max	0,025 max	0,30 max	0,25 max	0,0008 - 0,0050
1.5535	23MnB4 10B22 Mod	EN 10263-4 ASTM A29/A29M	0,20 - 0,25	0,90- 1,20	0,30 max	0,025 max	0,025 max	0,30 max	0,25 max	0,0008 - 0,0050
1.5526	30MnB4	EN 10263-4	0,27 - 0,32	0,80- 1,10	0,30 max	0,025 max	0,025 max	0,30 max	0,25 max	0,0008 - 0,0050
1.5537	36MnB4 10B35 Mod	EN 10263-4 ASTM A29/A29M	0,33 - 0,38	0,80- 1,10	0,30 max	0,025 max	0,025 max	0,30 max	0,25 max	0,0008 - 0,0050
1.5538	37MnB5	EN 10263-4	0,35 - 0,40	1,15- 1,45	0,30 max	0,025 max	0,025 max	0,30 max	0,25 max	0,0008 - 0,0050

GSW Standard specification. Individual variation in any element can be considered.

CHROMIUM ALLOYED STEEL

W.Nr	Designation	Standard	%C	%Mn	%Si	%P	%S	%Cr	%Mo	%Cu	%B
1.5408	30MoB1	EN 10263-4	0,28 - 0,32	0,80- 1,00	0,30 max	0,025 max	0,025 max	0,30 max	0,08 - 0,12	0,25 max	0,0008 - 0,0050
1.7076	32CrB4	EN 10263-4	0,30 - 0,34	0,60- 0,90	0,30 max	0,025 max	0,025 max	0,90 - 1,20		0,25 max	0,0008 - 0,0050
1.7077	36CrB4	EN 10263-4	0,34 - 0,38	0,70 - 1,00	0,30 max	0,025 max	0,025 max	0,90 - 1,20		0,25 max	0,0008 - 0,0050
1.7033	34Cr4	EN 10263-4	0,30 - 0,37	0,60 - 0,90	0,30 max	0,025 max	0,025 max	0,90 - 1,20		0,25 max	
1.7034	37Cr4	EN 10263-4	0,34 - 0,41	0,60 - 0,90	0,30 max	0,025 max	0,025 max	0,90 - 1,20		0,25 max	
1.7035	41Cr4	EN 10263-4	0,38 - 0,45	0,60 - 0,90	0,30 max	0,025 max	0,025 max	0,90 - 1,20		0,25 max	
1.7039	41CrS4	EN 10263-4	0,38 - 0,45	0,60 - 0,90	0,30 max	0,025 max	0,020- 0,040	0,90 - 1,20		0,25 max	
1.7220	34CrMo4	EN 10263-4	0,30 - 0,37	0,60 - 0,90	0,30 max	0,025 max	0,025 max	0,90 - 1,20		0,25 max	
1.7225	42CrMo4 4140 Mod	EN 10263-4 ASTM A29/A29M	0,38 - 0,45	0,60 - 0,90	0,30 max	0,025 max	0,025 max	0,90 - 1,20		0,25 max	
1.7225	42CrMoS4 4140 Mod	EN 10263-4 ASTM A29/A29M	0,38 - 0,45	0,60 - 0,90	0,30 max	0,025 max	0,020- 0,040	0,90 - 1,20		0,25 max	

GSW Standard specification. Individual variation in any element can be considered.

SPRING STEEL

W.Nr	Designation	Standard	%C	%Mn	%Si	%P	%S	%Cr	%Mo	%V
1.5023	38Si7	EN 10089	0,35 - 0,42	0,50 - 0,80	1,50 - 1,80	0,025 max	0,025 max			
1.7176	55Cr3	EN 10089	0,52 - 0,59	0,70- 1,00	0,40 max	0,025 max	0,025 max	0,70 - 1,00		
1.7102	54SiCr6 9254 Mod	EN 10089 ASTM A29/A29M	0,51 - 0,59	0,50- 0,80	1,20 - 1,60	0,025 max	0,025 max	0,50 - 0,80		
1.8152	54SiCrV6	EN 10089	0,51 - 0,59	0,50- 0,80	1,20 - 1,60	0,025 max	0,025 max	0,50 - 0,80		0,10- 0,20
1.7108	61SiCr7	EN 10089	0,57 - 0,65	0,70- 1,00	1,20 - 1,60	0,025 max	0,025 max	0,20 - 0,45		
1.8153	60SiCrV7	EN 10089	0,56 - 0,64	0,70- 1,00	1,50 - 2,00	0,025 max	0,025 max	0,20 - 0,40		0,10- 0,20
1.8159	51CrV4	EN 10089	0,47 - 0,55	0,70- 1,00	0,40 max	0,025 max	0,025 max	0,90 - 1,20		0,10- 0,25

GSW Standard specification. Individual variation in any element can be considered.

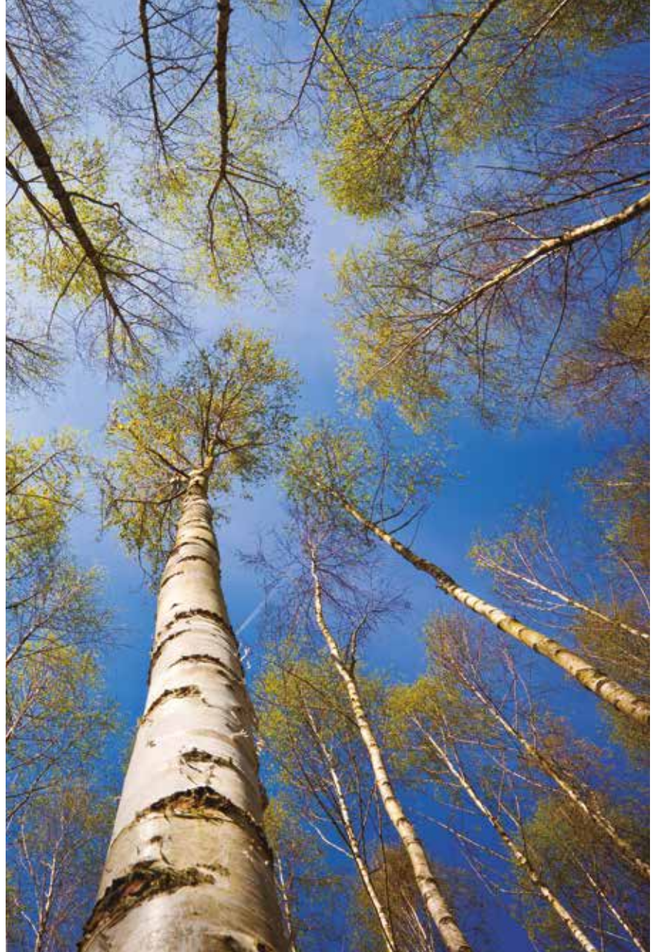
TREATMENTS

We offer a wide variety of surface and annealing treatments.
For this purpose are available pickling and coating installation, sandblasting and several annealing furnaces with a capacity of 100.000 Tn per year.

CELSA GROUP™ SUSTAINABILITY MODEL

Sustainable development is based on a commitment to improve societies quality of life today and in the future. For the companies that work under the CELSA Group™ name it means **taking into account the environmental, social and economic consequences** of the strategical decisions we make in all our daily tasks.

Steel is one of the most recyclable and recycled materials in the world. It can be recycled over and over again without losing its properties and, thanks to its magnetic properties, it can be easily separated for recycling.



Two technologies exist today for producing steel: that which uses a blast furnace, which use iron ore and that used in electric arc furnaces, which recycle scrap and, therefore, respects the environment more.

In **CELSA Group™** we produce steel exclusively in electric arc furnaces, using scrap as our raw material in 100% of our products. Thanks to vertical integration, we cover the complete cycle of steel recycling; from the separation and recovery of scrap to its transformation into new steel products.

"WE TAKE INTO ACCOUNT THE ENVIRONMENTAL, SOCIAL AND ECONOMIC CONSEQUENCES OF THE STRATEGIC DECISIONS WE MAKE IN ALL OUR DAILY TASKS"

IN THIS WAY, CELSA GROUP™ CONTRIBUTES PROMINENTLY IN PROTECTING THE ENVIRONMENT:

- Using the most sustainable steel production technology
- Recycling steel products at the end of their life-cycle
- Recovering the sub-products of manufacturing processes which use steel as raw material
- Producing fully recyclable products
- Operating facilities in efficient way

All steel products produced by CELSA GROUP™ come from recycled scrap and are 100% recyclable.

COMMITTED TO PEOPLE

HEALTH AND SAFETY AT WORK

We are continuously making the effort to keep our **workplace safe from accidents.**

One of our principal objectives is to ensure a **safe and healthy workplace for all our staff.**

This **commitment** extends to all people, who may or may not form part of our organization, participates in it, such as providers, contractors, clients, visitors, and the residential community around us.

We focus all available resources on the integration of health and safety as an essential part of our daily management.

We believe that any business whose activities cause damage to its employees or to the environment is not a sustainable business.

OUR MOST IMPORTANT ASSETS AT CELSA GROUP ARE OUR EMPLOYEES (BOTH INTERNAL AND EXTERNAL), AND THE PROTECTION OF THEIR HEALTH AND SAFETY AT WORK IS OUR TOP PRIORITY.

For this reason "zero accidents" is the only possible principal objective in all our activities.

In order to achieve this objective, it is not enough to uphold and maintain the requirements for health and safety and the environment; only a commitment to rigorously maintain our own health and safety and that of our colleagues will enable us to fulfil it.

This commitment is demonstrated by sharing common principals and the proactive application of existing tools to prevent accidents and work-related illnesses.

OUR KEY TOOLS

- Visible leadership: the importance of safety is observed in the safety-consciousness of the management.
- Investigation of accidents and incidents: we analyse daily activity to spot potential causes of accidents or incidents.
- Preventative observations for safety: we analyse all situations of risk or accidents in order to prevent them and to avoid them recurring.
- Internal auditing: we ensure that all safety regulations are rigorously upheld.
- Risk correction cards: we make it easy for all company employees to inform us of possible risk using this card system.
- Corporate standards of health and safety: standards describe all safe conduct to be maintained.

OUR SAFETY PRINCIPALS

- All professional accidents and illnesses can and should be prevented.
- Management is responsible and will keep account of all actions related to health and safety.
- The commitment and training of employees is fundamental.
- Working safely is a condition of employment, promotion and career.
- Excellence in health and safety will lead us to excellent results in business.
- Health and safety is fully integrated in all our business management procedures.

"Take the information with you"

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