CELSA GROUP™

GLOBAL BRIGHT BARS

A NEW BRAND OFFERING PROVEN QUALITY

GLOBAL BRIGHT BARS

CELSA GROUP | GLOBAL BRIGHT BARS

GLOBAL BRIGHT BARS

GLOBAL BRIGHT BARS is a New Division of Global Special Steel Products, exclusively focused on producing High Quality Bright Bars for the Automotive Industry.

Global Special Steels Products is a 100% subsidiary of Global Steel Wire and incorporates four companies producers of steel wire for the automotive industry, mechanical engineering, infrastructures,...

Global Steel Wire is one of the pillars of CELSA Group, one of the leading steel producers in Europe.

CELSA GROUP™

ORIGIN

CELSA Group™ history began in 1967 with the first rolling mill.

A decade later the first meltshop was opened.

In the 90's CELSA Group™ became the steel long products leader in Spain.

INTERNATIONALIZATION

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™ Today is amongst the world's top 50 steel Producers.

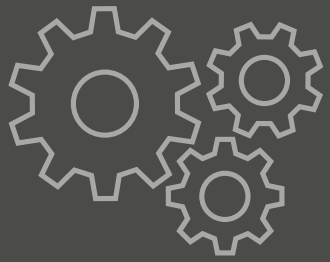
CELSA Group™ is the most diversified european private Steelmaking group.

KEY FIGURES

TURNOVER

3,900

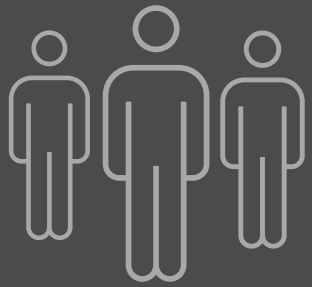
MILLION EUROS



PRODUCTION

7,0

MILLION TONS



EMPLOYEES

9,500

PEOPLE

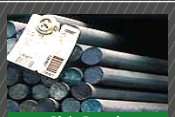
CELSA GROUP™

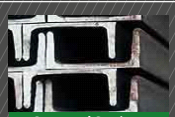
Founded in 1967 and headquartered at Barcelona, CELSA Group is the largest long products producer in Spain and the most diversified European private steelmaking group.

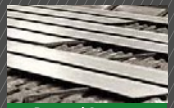
CELSA Group is focused on supplying excellent quality products and direct service to its customers.

1. ROLLED PRODUCTS


Wire Rod


Plain Rounds


Structural Sections


Bars and Squares

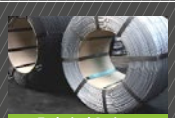

Angle Sections

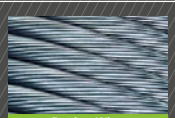

Iron Strip


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 shop and 1 rolling mill.
- Leader in the rebar market in all 4 Nordic countries.
- Down-stream integration in more than 75% of the total production.

GSW (SANTANDER)

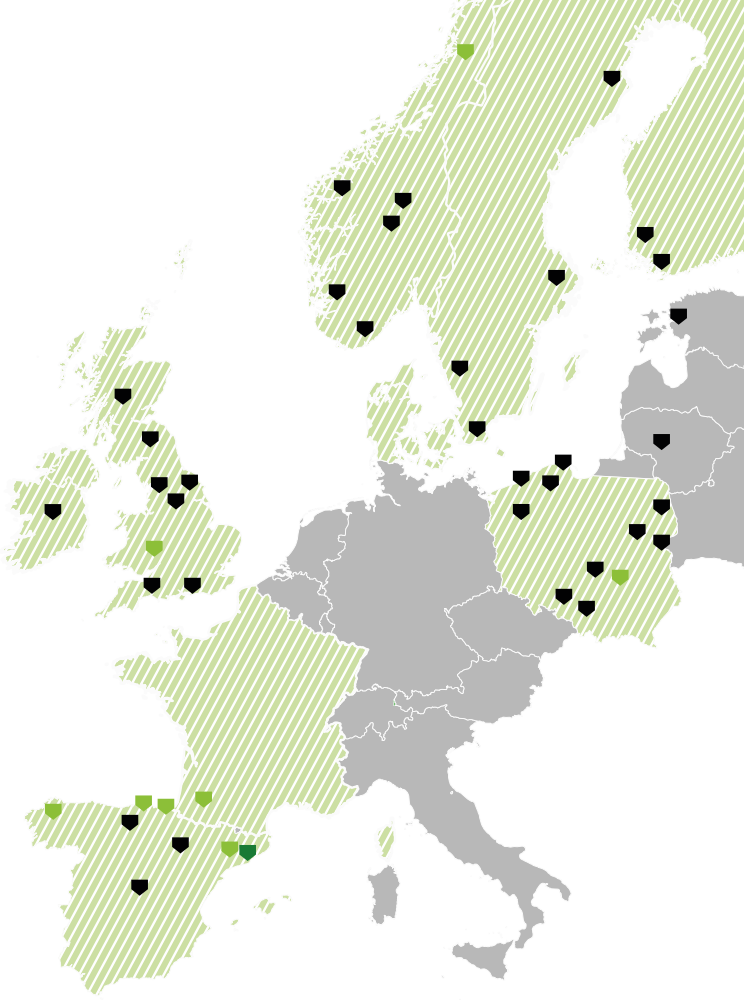
- Acquired in 1987.
- One of the most important producers of wire rod in Europe.
- Situated in Santander.
- It has its own harbour that gives advantage in competition on the international market.

CELSA UK GROUP

- Acquired in 2003
- Headquarters: Cardiff.
- 1.661 employees* (own: 1.154 / sub: 507).
- 1 melting shop 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 shop 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 steels and dimensions, which have been progressively expanded towards higher technology services.

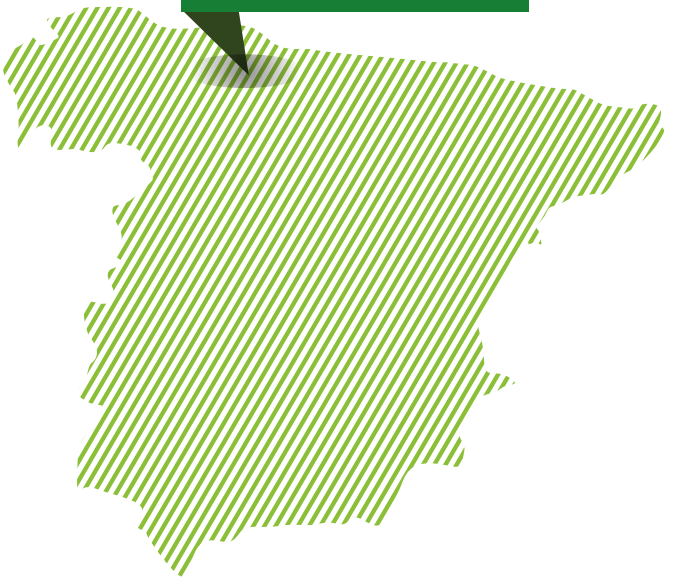
We are present in all wire rod based manufacturing sectors.

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

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

CELSA GROUP | GLOBAL STEEL WIRE

CELSA GROUP | GLOBAL BRIGHT BARS



GLOBAL STEEL WIRE

PRODUCTION

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

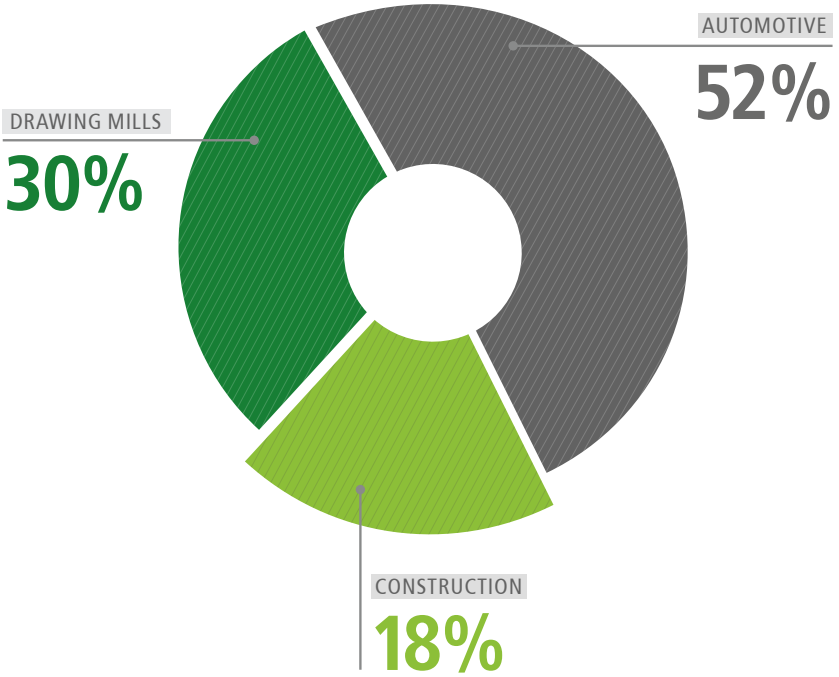
EMPLOYEES

1650 PEOPLE

DRAWING MILLS

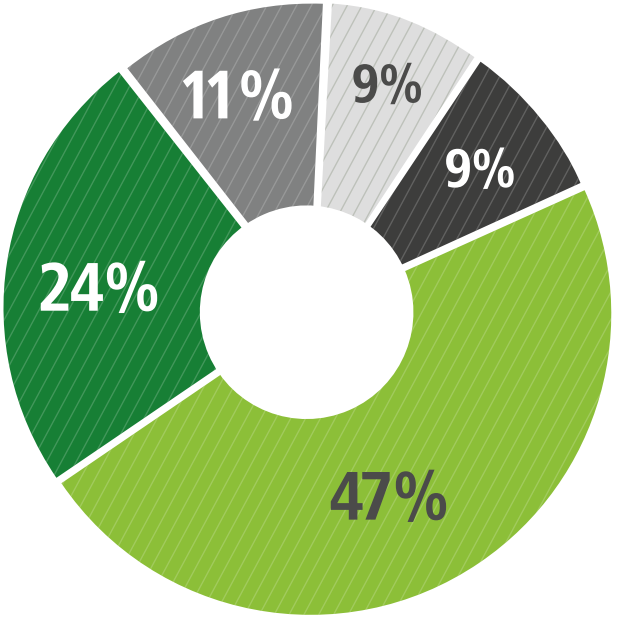
355.000 MT OF DRAWN WIRE PRODUCTION

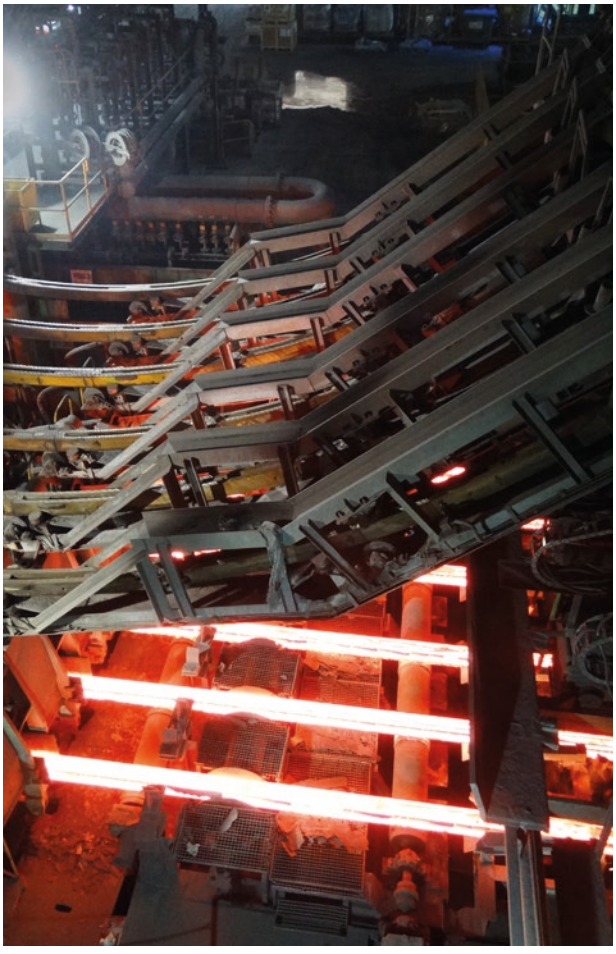
(COLD HEADING QUALITIES, PC WIRE, BEDDING AND SEATING WIRE, CARBON STEEL WIRE, CASE HARDENING STEELS AND COLD DRAWN PRODUCTS



AUTOMOTIVE WIRE ROD

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





STEEL WIRE QUALITY SYSTEMS

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 9001:2015 Standard.

GSW IS 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.

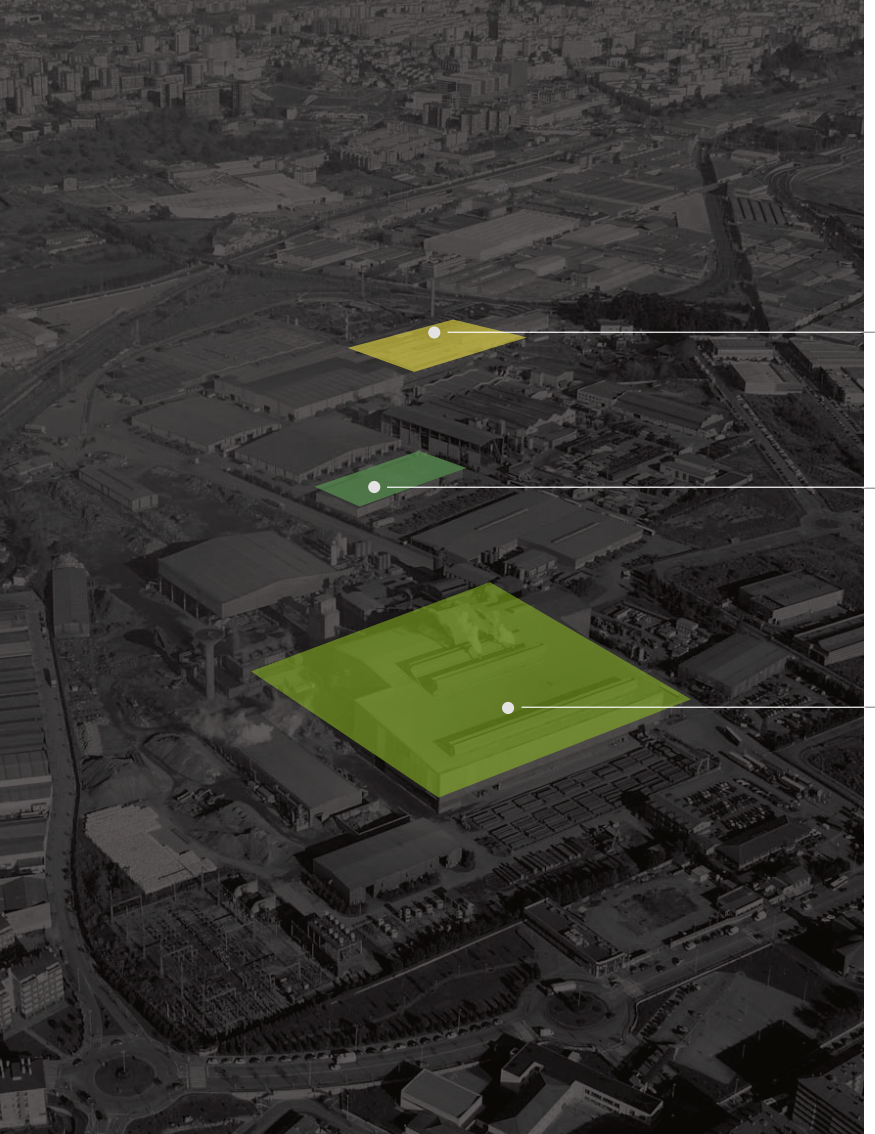
NEW INSTALLATIONS

Global Bright Bars is the result of Global Steel Wire's growth strategy focused on special steel products for the automotive industries.

Global Bright Bars benefits from its integration in Global Steel Wire's industrial operations. Planning, logistics operations, warehousing, quality control are all shared and integrated assuring **maximum service levels** to our customers.

Global Bright Bars **is certified IATF 16949:2016**

Global Bright Bars focuses on **cold drawing** and **peeling** diameters between 10 and 42mm. For drawing new **Schumag IIIB** lines are installed. **Eddy Current** rotating and statical solutions guaranteeing optimum surface quality requirements.



GLOBAL STEEL WIRE GROUP CONTROLLED INDUSTRIAL AREA

Rolling mill

CELSA GROUP | GLOBAL BRIGHT BARS

GLOBAL BRIGHT BARS

CELSA GROUP | GLOBAL BRIGHT BARS

Meltshop

CELSA GROUP | GLOBAL BRIGHT BARS

GBB is integrated in GSW's operations in Santander

BRAND NEW INSTALLATIONS & MACHINERY

- Automatic system for tip and coil threading.
- Drawing wide range of diameters.
- High processing speeds.
- Special tolerances of up to ± 0,5 mm length.
- Guaranteeing optimum surface quality requirements.
- POKA YOKE avoiding material grade mix.
- Peeled material diameter 100% control by LASER.
- Deformations minimum diameter, out of round and triangularity.

ROTATORY

- New generation of high sensitivie electronic system allows to discriminate defects of 150 microns.
- Easy maintenance system and automatic balancing system.
- Easy and fast regulation system.
- Various alarms.
- Online monitoring and review of data.

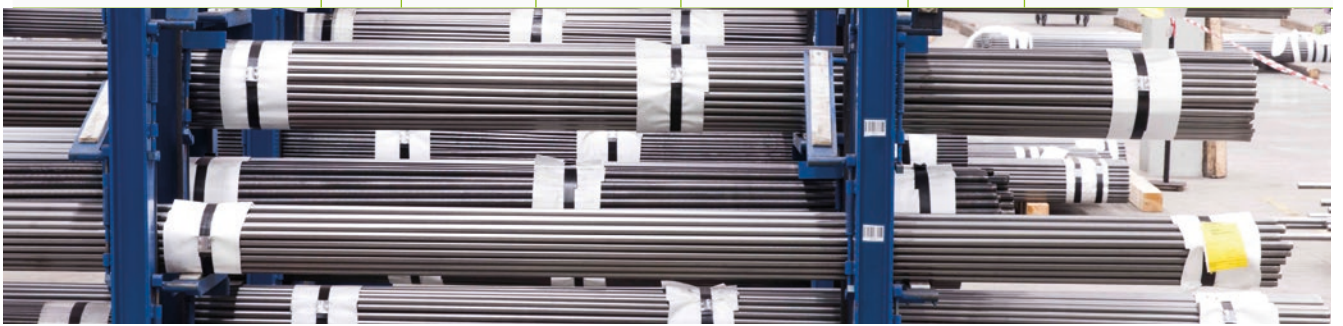
STATICAL

- Online monitoring and review of data.
- Latest generation of high sensitive electronic system.
- Various alarms.

PRODUCT OFFERING
PROCESSES, SERVICES & SPECIFICATIONS

BRIGHT BARS

PROCESSES	PROFILE	OPERATIONS	RANGE	TOLERANCES		OTHER SUPPLY CONDITIONS
Cold drawing / Peeling Cut to length Eddy Current (Rotating and Statical)	Round ●	Drawing +C Peeling +SH Cut to length Diameter Length	10 - 42 mm 10 - 41 mm 10 - 28 mm 150 - 7000 mm	Cold drawing /Peeling Cut to length Standard Special	up to h8 +20 mm ±0,5 mm	Length 150 to 7.000 mm Straightening up to 0,5 mm/m Chamfered both sides (0,5mm to 5mm), 30° - 45° Bundles 500 kg to 2.500 kg Technical conditions EN 10277-1-5 Wooden boxes Seaworthy packageing
Cold drawing / Peeling Cut to length Eddy Current (Rotating and Statical)	Hexagonal ⬢	Drawing +C Cut to length Diameter Length	19 - 32 mm 19 - 28 mm 150 - 7000 mm	Cold drawing /Peeling Cut to length Standard Special	up to h11 +20 mm ±0,5 mm	



MATERIALS, COMPOSITION, APPLICATIONS

CARBON STEEL

Applications: Shock absorbers, Shafts, etc.

			CHEMICAL COMPOSITION								
EN 10277-2	Nº material	SAE	%C	%Mn	%Si	%P	%S	%Cr	%Mo	%Ni	%Cu
C15R	1.1140	1015	0,12-0,18	0,30-0,60	0,15-0,40	0,035max	0,020-0,035	0,40 max	0,10 max	0,40 max	0,30 max
C35	1.1180	1035	0,32-0,39	0,50-0,80	0,10-0,40	0,035max	0,020-0,040	0,40 max	0,10 max	0,40 max	0,30 max
C40	1.1189	1040	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
C45	1.1201	1045	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

STABILIZER BARS AND TORSION BARS

Applications: Stabilizer Bars and Torsion Bars for Automotion

			CHEMICAL COMPOSITION					
EN 10089/10083	Nº material	SAE	%C	%Mn	%Si	%P	%S	%Cr
55Cr3	1.7176	5155	0,52-0,59	0,70-1	0,40 max	0,025 max	0,025 max	0,70-1,00
28Mn6	1.1170	1330	0,25 - 0,32	1,40 - 1,65	◂0,40	◂0,03	-	◂0,40

COIL SPRINGS

Applications: Coil Springs

			CHEMICAL COMPOSITION						
EN 10089	Nº material	SAE	%C	%Mn	%Si	%P	%S	%Cr	%V
54SiCr6	1.7102	9254	0,51-0,59	0,50-0,8	1,20-1,60	0,025 max	0,025 max	0,50-0,80	
54SiCrV6	1.8152	50B60	0,51-0,59	0,50-0,8	1,20-1,60	0,025 max	0,025 max	0,50-0,80	0,10-0,20
61SiCr7	1.7108	9262	0,57-0,65	0,70-1	1,60-2,00	0,025 max	0,025 max	0,20-0,45	
60SiCrV7	1.8153		0,56-0,64	0,70-1	1,50-2,00	0,025 max	0,025 max	0,20-0,40	0,10-0,20
51CrV4	1.8159	6150	0,47-0,55	0,70-1,1	0,40 max	0,025 max	0,025 max	0,90-1,20	0,10-0,25

HARDENING AND TEMPERING STEEL

Applications: Rotors, Shafts, Pinion gears

			CHEMICAL COMPOSITION							
EN 10277-5	Nº material	SAE	%C	%Mn	%Si	%P	%S	%Cr	%Cu	%B
34Cr4 (+A+C)	1.7033	5130	0,30-0,37	0,60-0,9	0,30 max	0,025 max	0,025 max	0,90-1,20	0,25 max	
41CrS4 (+A+C)	1.7039	5142	0,38-0,45	0,60-0,9	0,30 max	0,025 max	0,020-0,040	0,90-1,20	0,25 max	
41Cr4 (+A+C)	1.7035	5140	0,38-0,45	0,60-0,9	0,30 max	0,025 max	0,025 max	0,90-1,20	0,25 max	
42CrMoS4 (+A+C)	1.7225	4142	0,38-0,45	0,60-0,9	0,30 max	0,025 max	0,025 max	0,90-1,20	0,25 max	
36CrB4	1.7077	50B40	0,34-0,38	0,70-1	0,30 max	0,025 max	0,025 max	0,90-1,20	0,25 max	0,0008-0,0050
20MnB4	1.5525	1049	0,18-0,23	0,90-1,2	0,30 max	0,025 max	0,025 max	0,30 max	0,25 max	0,0008-0,0050

FREE CUTTING

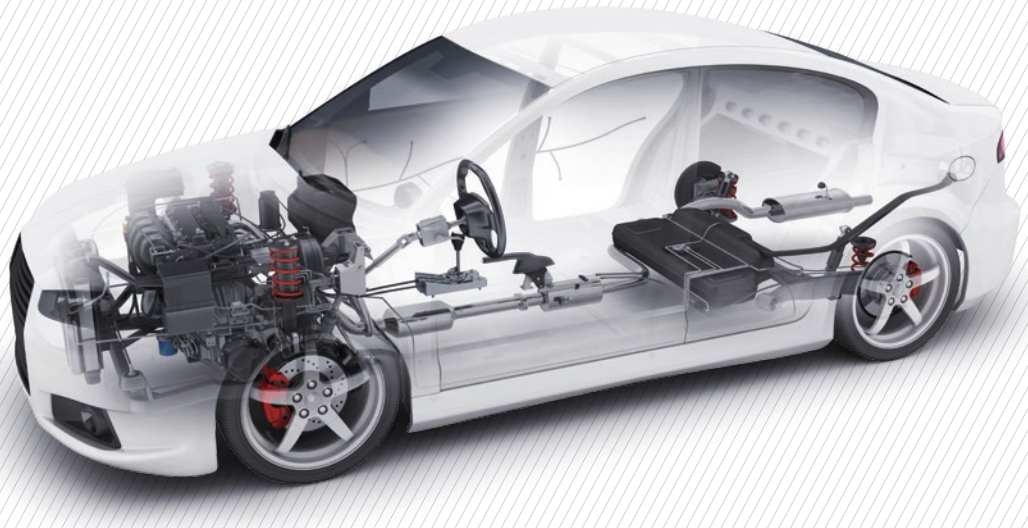
Applications: Machined elements for various applications in mechanical engineering and automotive components.

			CHEMICAL COMPOSITION					
EN 10277-3	Nº material	SAE	%C	%Mn	%Si	%P	%S	%Pb
11SMn30	1.0715	1215	0,14max	0,90-1,30	0,05 max	0,11 max	0,27-0,33	
11SMnPb30	1.0718	12L14	0,14max	0,90-1,30	0,05 max	0,11 max	0,27-0,33	0,20-0,35
C45Pb	1.0504		0,42 - 0,50	0,50 - 0,80	0,10 - 0,40	0,020 - 0,040	-	◂0,40
36SMnPb14	1.0765	1137	0,32-0,39	1,30-1,70	0,40 max	0,06 max	0,10-0,18	0,15-0,35
44SMn28	1.0762	1144	0,40-0,48	1,30-1,70	0,40 max	0,06 max	0,24-0,33	
44SMnPb28	1.0763		0,40-0,48	1,30-1,70	0,40 max	0,06 max	0,24-0,33	0,15-0,35
46S20	1.0727	1146	0,42-0,50	0,70-1,10	0,40 max	0,06 max	0,15-0,25	
46S20Pb	1.0757		0,42-0,50	0,70-1,10	0,40 max	0,06 max	0,15-0,25	0,15-0,25

CASE HARDENING STEEL

Applications: Shafts, Pinion gears, etc.

			CHEMICAL COMPOSITION								
EN 10277-4	Nº material	SAE	%C	%Mn	%Si	%P	%S	%Cr	%Al	%Cu	%Pb
16MnCrS5	1.7139	5115	0,14-0,19	1,00-1,3	0,15-0,40	0,025 max	0,020-0,040	0,80-1,1		0,40 max	
16MnCr5 (DBL4027)	1.7139+Al		0,14-0,19	1,00-1,3	0,15-0,40	0,025 max	0,020-0,040	0,80-1,1	0,020-0,04	0,40 max	
16MnCrS5Pb	1.7139+Pb		0,14-0,19	1,00-1,3	0,15-0,40	0,025 max	0,020-0,040	0,80-1,1		0,40 max	0,20-0,35



CELSA GROUP™ SUSTAINABILITY MODEL

Sustainable development is based on a commitment to improve the quality of life of society today and in the future. For the companies which work under the CELSA Group™ name it means **taking into account the environmental, social and economic consequences** of the strategic 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.

CELSA™ GROUP | 2nd RECYCLING COMPANY *in Europe*

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 although they may not form a part of our organisation, participate 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.

CELSA GROUP | GLOBAL BRIGHT BARS

GLOBAL BRIGHT BARS
Mr. Kjeld Andreasen
P: +34 942 200 362
M: +34 696 161 182
kjeld.andreasen@gcelsa.com

GLOBAL SPECIAL STEEL PRODUCTS S.A.U – GLOBAL BRIGHT BARS
Polígono Industrial Nueva Montaña s/n
39011 Santander
Cantabria (Spain)

www.globalbrightbars.com

CELSA GROUP | Leading the *circular* transformation