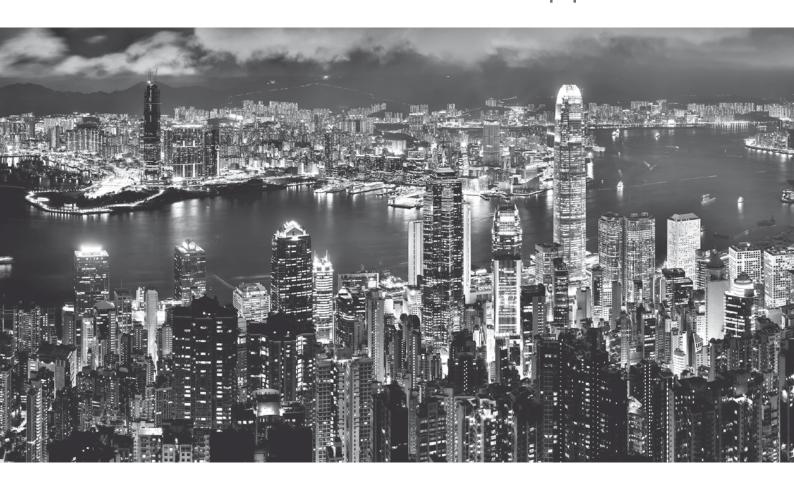


Steel tubes for offshore and structural applications





BIANCO GROUP



Proveedora de Tubos Occidental, S.L. provides PIPES AND HOLLOW SECTIONS in different executions and qualities for multiple applications. With a stock exceeding 12000 tons combined with offices and warehouses for a total covered area of 13 000 sq/ft in Álava, Madrid and Tarragona, enables us to swiftly and reliably fulfill both day-to-day ex stock orders and large-scale projects.

With over 15 years of experience in stockholding, logistic, in-house processing and sector specific requirements, PROTUBSA has a loyal and growing customer base.

As part of the family owned and managed by BIANCO GROUP, which owns over 20 companies throughout Europe, and North America, "PROTUBSA" has direct access to over 350 000 tons of group stock.

BIANCO GROUP's network gives us the benefit of GROUP purchasing, we ensure to acquire the highest quality materials at competitive rates, which allows us to pass to our customers.



PROTUBSA in SPAIN (EUROPE)

The BIANCO GROUP includes over 20 steel stockholding, distributing, processing and trading companies. Covering Europe, the Middle East, US and Canada with over 800 people, it serves more than 80,000 customers worldwide. Our founding principles remain unaltered throughout the group; depth of stock, speed of supply, efficiency and reliability of service.

The BIANCO GROUP established in 1958 with the establishment of F.G. Bianco in Milan and then in Brescia, from where today under the name of Tubindustria, we are still distributing steel tubes.

In the late 1960's and early 1970's SICAM in Italy, STAD in France and Cleveland Steel and Tubes in the UK were established creating the groundwork for building our current international steel distribution network. The 1980's and 1990's saw rapid expansion across Europe and North America creating a pattern of growth that still continues today.



BIANCO GROUP HEAD QUARTER in ITALY

Structural applications



OUR MAJOR CUSTOMERS OPERATE IN VARIOUS FIELDS AND APPLICATIONS FOR EXAMPLE:

ENERGY SEGMENT: CHEMICAL AND PETROCHEMICAL PLANTS AND STRUCTURES · OFFSHORE AND INSHORE PLATFORMS · AEOLIC AND SOLAR STRUCTURES, NATURAL GAS TERMINALS...

CIVIL CONSTRUCTION: BRIDGES, ELECTRICAL PYLONS · SUPPORTS FOR BIG SATELLITE AND RADAR DISHES · RAILWAYS POLES · TRAIN AND BUS TERMINALS · AIRPORTS · PARKING · SKI LIFTS · CABLEWAY · SPORTS HALL · TENSILE STRUCTURES...

AUTOMOTIVE: CHASSIS · WAGONS · AXLES · TRUCKS · TELESCOPIC CRANES...



Square and rectangular tubes



Seamless and Welded (inside seam removed).

Norm:

EN10219 (cold) and EN10210 (hot). **Qualities standards from stock:** S355J2H and S355NH, S275JOH and S235JR.

Other qualities upon request.

Dimensional range:

Square: 30 x 30 mm. to 500 x 500 mm.,

thickness since 3 to 20 mm.

Rectangular: 50 x 30 mm. to 600 x 400 mm.,

thickness sine 3 to 20 mm.

STEEL GRADES FOR STRUCTURAL APPLICATIONS, OFFSHORE STRUTURES AND TUBES FOR PETROCHEMICAL (Weldable structural steels for fixed offshore structures)

Steel grades, chemical composition and mechanical characteristics

			C %	Si %	Mn %	Ni	P %	S %	Cr %	Mo %	V%	N %	Nb %	Ti %	Al %	Cu %
Steel	Number	Norm	max	max	max	max	max	max	max	max	max	max	max	max	max	max
S235JRH	1.0039	EN10210 - EN10219	0,17		1,40		0,045	0,045	-	-	-	-	-	-	-	-
S275JOH	1.0149	EN10210 - EN10219	0,20		1,60	-	0,040	0,040	-	-	-	-	-	-	-	-
S355J2H	1.0138	EN10210 - EN10219	0,22		1,50	-	0,035	0,035	-	-	-	-	-	-	-	-
S355NH	1.0576	EN10210 - EN10219	0,22	0,55	1,60	-	0,030	0,030	-	-	-	-	-	-	-	-
S275J2H	1.0539	EN10210 - EN10219	0,23	0,50	0,9 - 1,65	0,50	0,035	0,030	0,30	0,10	0,12	0,020	0,05	0,03	0,02	0,35
S355G8	1.8810	EN10225:2009	0,14	0,15 - 0,55	1 - 1,65	0,50	0,020	0,007	0,25	0,08	0,06	0,010	0,04		0,015 - 0,055	
S355G13	1.1182	EN10225:2009	0,16	0,15 - 0,55	1,60	0,30	0,025	0,015	0,25	0,08	0,10	0,014	0,05	0,020	0,06	0,35
S355G15	1.1190	EN10225:2009	0,18	0,15 - 0,55	1,60	0,30	0,025	0,007	0,25	0,08	0,10	0,014	0,05	0,020	0,06	0,35
5L Gr. B (s)	1.0425	API / EN10216	0,28		1,20	0,50	0,030	0,030	0,50	0,15	a,b	-	a,b	b	-	0,50
5L Gr. B (w)	1.0425	API / EN10216	0,26		1,20	0,50	0,030	0,030	0,50	0,15	a,b	-	a,b	b	-	0,50
X42 (s)	1.0429	API / EN10208	0,28		1,30	0,50	0,030	0,030	0,50	0,15	b	-	b	b	-	0,50
X42 (w)	1.0429	API / EN10208	0,26		1,30	0,50	0,030	0,030	0,50	0,15	b	-	b	b	-	0,50
X52 (s)	1.0582	API / EN10208	0,28		1,40	0,50	0,030	0,030	0,50	0,15	b	-	b	b	-	0,50
X52 (w)	1.0582	API / EN10208	0,26		1,40	0,50	0,030	0,030	0,50	0,15	b	-	b	b	-	0,50
X60 (s)	1.8972	API / EN10208	0,28		1,40	0,50	0,030	0,030	0,50	0,15	b	-	b	b	-	0,50
X60 (w)	1.8972	API / EN10208	0,26		1,40	0,50	0,030	0,030	0,50	0,15	b	-	b	b	-	0,50
X65 (s)	1.8952	API / EN10208	0,28		1,40	0,50	0,030	0,030	0,50	0,15	b	-	b	b	-	0,50
X65 (w)	1.8952	API / EN10208	0,26		1,45	0,50	0,030	0,030	0,50	0,15	b	-	b	b	-	0,50
A53 Gr. B (s)	1.0425	ASTM / EN10216	0,30		1,20	0,40*	0,050	0,045	0,40*	0,15*	0,08*	-	-	-	-	0,40*
A53 Gr. B (w)	1.0425	ASTM / EN10216	0,30		1,20	0,40*	0,050	0,045	0,40*	0,15*	0,08*	-	-	-	-	0,50*
A106 - SA106	1.0425	ASTM / ASME	0,30	0,10	0,29 - 1,06	0,40	0,035	0,035	0,40	0,15	0,08	-	-	-	-	0,40
A333 - SA333 (sw)	1.0425	ASTM / ASME	0,30	0,10	0,29 - 1,06		0,025	0,025								

Round tubes

Seamless and Welded (inside seam removed).

Norm:

EN10219 (cold) and EN10210 (hot). Qualities standards from stock: S355J2H and S355NH, S275J0H and S235JR.

Other qualities upon request.

Offshore qualities: standard S355G13+N, S355G15+N, S355G8+N API 5L X52, and other qualities upon request.



Dimensional range:

Structural round: Ø 42,4 mm. to Ø 812,8 mm., thickness since 3 to 100 mm. Others sizes upon request.

Offshore: Ø 273 x 12,5 mm. to Ø 914 x 31,8 mm. Others sizes upon request.

	Nominal Thicknes	Nominal Thickness (mm)							Nominal Thickness (mm)					
_	to 3 3 - 100 100 - 120		to 16 16 - 40 40 - 63 63 - 80 80 - 100 100 - 120					KV Impact	to 40	40 - 63	63 - 100	100 - 120		
	Rm. (Mpa) - Tensile strength		ReH (Mpa) - Minimun yield strength						energy Joules	A - Min.elongation (%) length				
Steel	Tim. (wpa) Tensile													
S235JRH	340 - 470		235						20°C 27J	24				
S275JOH	410 - 560		275						0°C 27J	20				
S275J2H	410 - 560		275	265	255	245	235	225	-20° C 27 J	23	22	21	19	
S355J2H	510 - 680 470 - 630			345	335	325	315	295	-20° C 27 J	22	21	20	18	
S355NH	to 65 470 - 6	355 345 to 40 - 65 335						-20° C 40 J	long. to 65 22 - trans. to 65 20					
S355G8	460 - 630 (+1	320 - 355 (+N)						-40°C 50 J (+N)	22 (Lo=5,65 √ So (%) (+N)					
S355G13	460 - 620 (+QT)	355 (+QT) (+N)						-40°C 50 J (+QT) (+N)						
S355G15	460 - 620 (+QT)	345 - 355 (+QT) (+N)						-40°C 50 J (+QT) (+N)	22 (L	.o=5,65 √	So (%) (+	QT) (+N)		
5L Gr. B (s)	415				245									
5L Gr. B (w)	415				245									
X42 (s)	415				290									
X42 (w)	415				290									
X52 (s)	460				360									
X52 (w)	460	360												
X60 (s)	520				415									
X60 (w)	520				415									
X65 (s)	535	450												
X65 (w)	535				450									
4500 D()	47					2.40								
A53 Gr. B (s)	415	240												
A53 Gr. B (w)	415	240												
1105 01105	415					2.40				00				
A106 - SA106	5 415					240				30				
4000 04000/	415				,	240			450.0.10.1	00				
A333 - SA333 (sw) 415						240			-45° C 18 J	30				

S355K2H, S355NL, S355NLH, S355MH, S355MLH, S460MH, S460MLH, S460NL, S460NH - S355G1,2,3,4,5,6,7,9,10,11,12 and 14.

Offshore pipes







PROTUBSA has recently added a new product to its already substantial range of structural welded and seamless tubes; OFFSHORE PIPES. With a high quality standard, this product meets with high spec technical requirements. Thanks to the large inventory available in BIANCO GROUP's companies, WE CAN OFFER SHORT TIME DELIVERIES, DIFFERENT PIPES QUALITIES AND LARGE SIZE RANGE (UP TO 914 OD).

BIANCO GROUP's long experience in the offshore market makes us the obvious choice for fabricators and end users. We understand the critical nature of the offshore projects in extreme environments.

We have extensive experience in this specific field fully respecting the technical requirements of pipes bought only from the best manufacturers in the world.

Our warehouses have enough storage capacity to make partial deliveries according to customer schedule. Our additional services include cutting to length, plasma cutting, sand blasting, surface's preparation for painting, circumferential welds and additional analysis performed by independent laboratories.

BIANCO GROUP is currently one of the largest independent distributors in Europe. Our market position allows us to develop EXCELLENT RELATIONSHIPS WITH THE LEADING MANUFACTURERS. Our purchasing volume ensures that our customers receive the best commercial terms, quality and availability. Our group is undoubtedly the best connection between manufacturers and end users.

Others products at your disposal

HIDRAULIC AND PNEUMATIC

Crome plated bars and tubes Cold Drawn Hydraulic and Pneumatic Cylinder Tube Hot Finished Cylinder Tubes Cold Drawn seamless hydraulic line pipe

MECHANICAL TUBES

Hot finish seamless mechanical tubes CAST IRON BARS

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Ask us the catalogs or download them in www.protubsa.com





MILL TEST CERTIFICATES &

TRACEABILITY, all products listed in this brochure can be supplied with full mill certification to EN10204 3.1 upon request. Some specific Offshore structural hollow section and hot finished pipe grades carry full mill certification EN10204 3.2. In addition, we are able to perform supplementary testing, as well as color coding, shipping marks and third party inspection. Full traceability of materials through our supply chain from our supplier to your point of delivery is always maintained.



ISO CERTIFICATION, Protubsa operates a Quality Management System approved by Lloyds Register of Quality Assurance to ISO 9001.



Our facilities have sufficient storage capacity to make partial deliveries within the deadlines you Require. Additional services include custom cutting, plasma cutting, charter - first primer, girth welds and additional independent laboratory tests.

