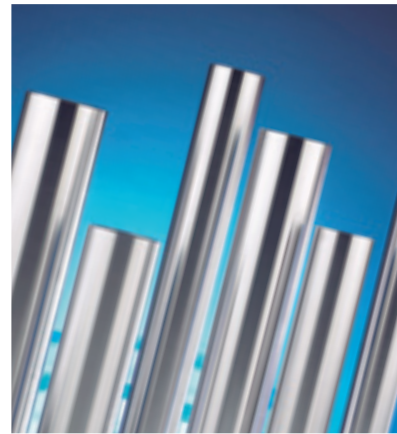




ACERALAVA



STAINLESS STEEL AND NICKEL ALLOYS BARS & BILLETS

TUBACEX GROUP



ACERÁLAVA: STAINLESS STEEL AND HIGH NICKEL ALLOYS

ACERÍA DE ÁLAVA, S.A. manufactures long stainless steel products, specialising in round and square bars, rolled and forged. These highly-appreciated products are marketed throughout the world.

The company belongs to the Tubacex Group, to which it provides the raw material for production of seamless stainless steel pipes.

The factory is located in Amurrio (Alava, Spain), and has a total surface area of 300,000 square metres.

Steel shop facilities include an electric arc furnace and a 60-tonne AOD converter.

Ingots are hot rolled through a two high reversing mill. There is also a 2000-tonne forging press with two manipulating devices.

The finishing lines are equipped with different grinding, peeling and polishing machinery.

The company is ISO 9001/2000 approved, having other certificates issued by the most prestigious institutions.



TUBACEX GROUP: A GLOBAL INTEGRATED GROUP



Steel billets & bars

Extrusion facilities

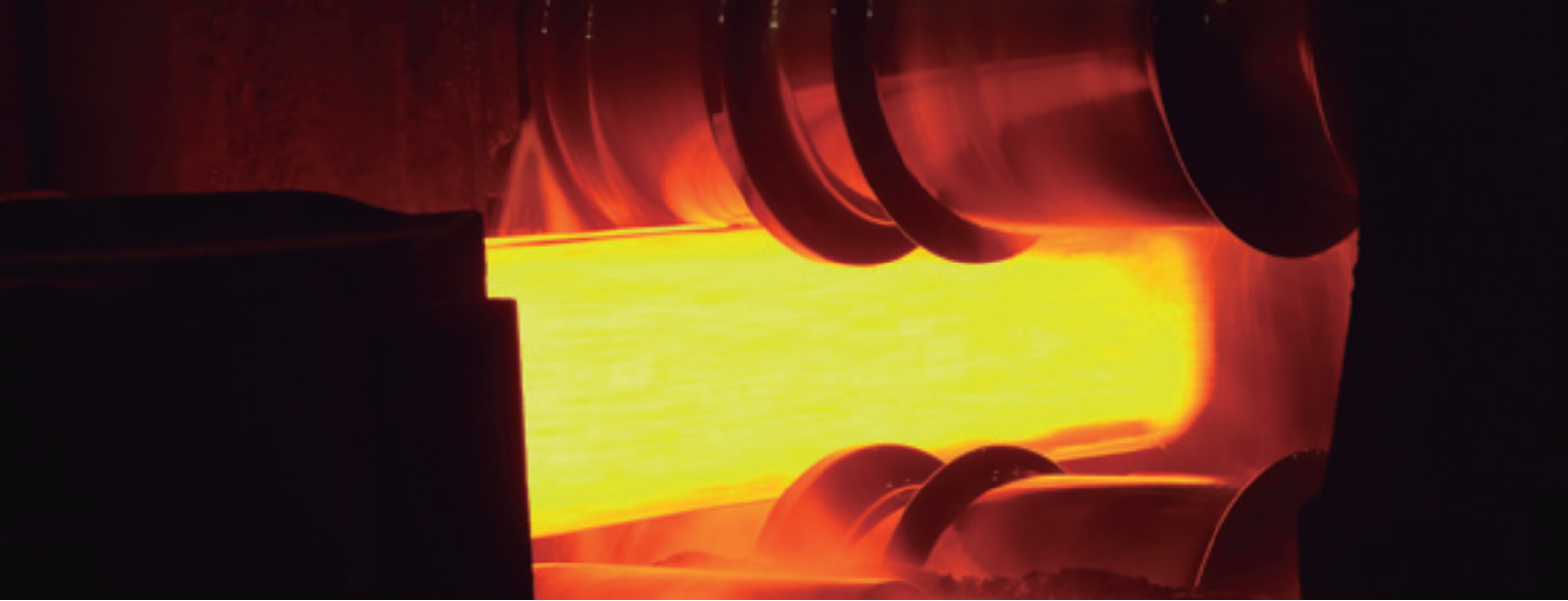
Cold finishing facilities

Mechanical tubing
Pipes & tubes
Fittings

Global service & distribution network

Commercial network

Acería de Álava, S.A. is a wholly owned subsidiary of TUBACEX, S.A. A fully integrated corporation formed, apart from Acerálava steel melting shop, by three seamless stainless steel mills: (T.T.I. Tubacex Tubos Inoxidables, S.A.) located in Spain, Schoeller Bleckmann Edelstahlrohr GmbH, located in Austria, and Salem Tube Inc., located in the U.S.); a fitting producer (Tubacex Taylor Accesorios, S.A., located in Spain) and a worldwide distribution network, led by the group's master distributor COTUBES with physical stocks in Spain, France, Austria, The U.S., China and Brazil.



TUBACEX - A STRONG GROUP AT YOUR SERVICE

Tubacex Group has become one of the main suppliers of Seamless Stainless Steel and Nickel alloy tubes for the oil & gas, petrochemical and chemical industries. Acerálava is subject to tight quality requirements of these industries, as main supplier to companies within the group.

TUBACEX Group has an integrated production process. Apart from the steel melting shop, ACERÍA DE ÁLAVA, 3 extrusion presses, more than 20 cold pilger mills and draw benches allow us to supply tubes for different Industries.

Quality

Tested by the most demanding industries

Competitiveness

Thanks to our lean manufacturing process

Service

Cooperation with or customers

Flexibility

In materials, chemical composition & deliveries

Reliability

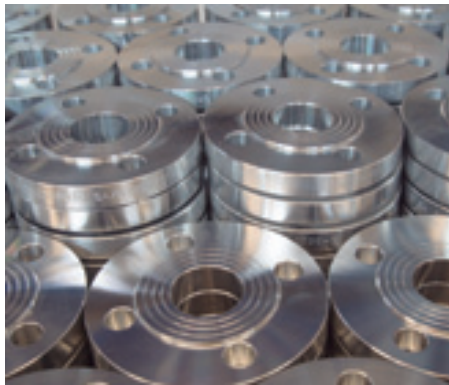
Of a fully integrated Steel Mill

Our size and focus make Acerálava a flexible supplier able to provide a wide range of steel grades, from martensitic to high Nickel alloys, with no quantity limitations.

Acerálava has customers who transform steel into many finished and semifinished products:



Pipes & tubes



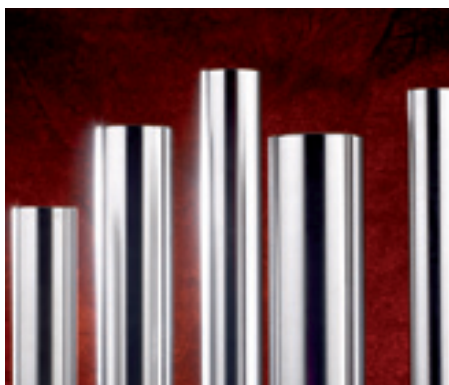
Flanges



Rings



Valves



Hollow Bar



Other metal mechanical industries

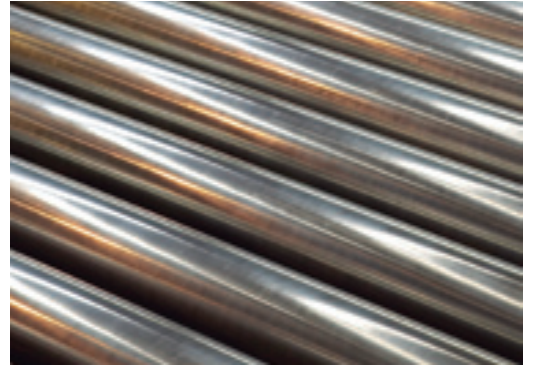
PRODUCT RANGE

Acerálava's product range includes stainless steel long products such as square and round bars, billets and ingots, rolled and forged. Our standard portfolio can be defined as follows:



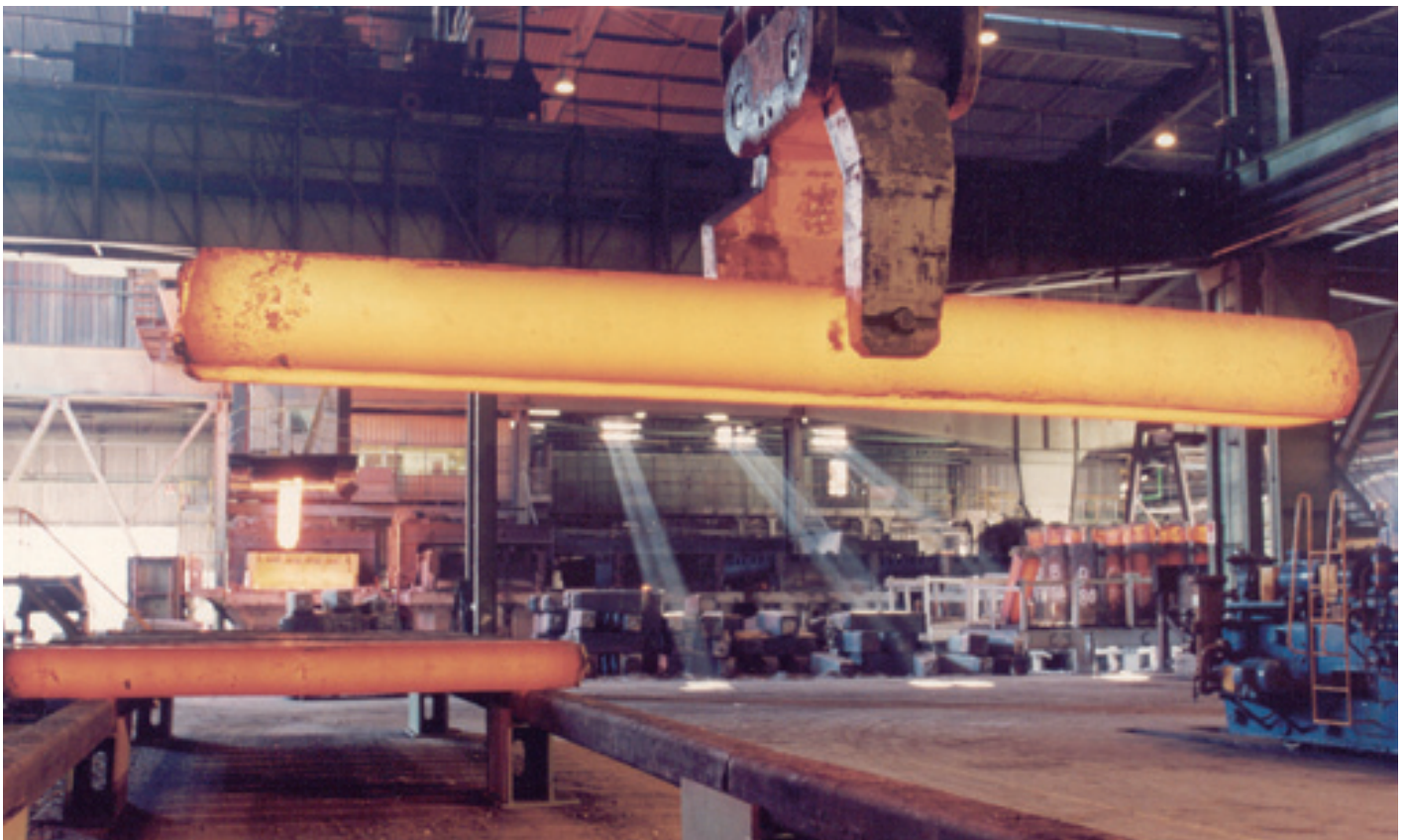
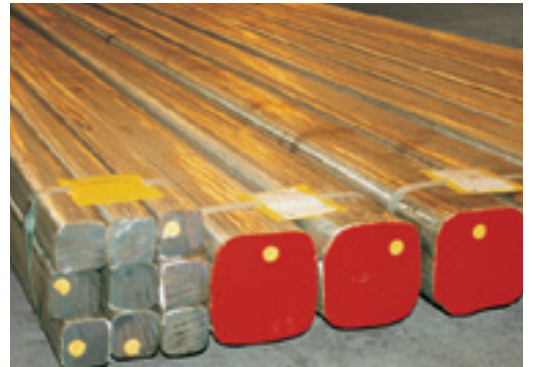
ROUNDS BARS & BILLETS

Products	Size range	Condition	Grades
●	165 mm. up to 230 mm. (6 1/2" - 9")	Rolled	Martensitics Austenitics Ferritic - Austenitics High Nickel Alloys
●	230 mm. up to 500 mm. (9" - 19 3/4")	Forged	



SQUARE BILLETS

Products	Size range	Condition	Grades
■	120 mm. up to 280 mm. (4 3/4" - 11")	Rolled	Martensitics Austenitics Ferritic - Austenitics High Nickel Alloys
■	280 mm. up to 508 mm. (11" - 20")	Forged	



Acerálava's manufacturing range covers the main stainless steel grades requested by the industry. Exceptions over the standard steel grades are possible on request.

STAINLESS STEEL GRADES

	ASTM	WNr	C max*	Cr	Ni	Mo	Other
MARTENSITIC & FERRITICS	410	1.4006	0,025	11.5/12.5			
	630	1.4542	0,070	15.0/17.0	3.0/5.0		Nb 5xC/.40-Cu 3.0/5.0
	F6NM	1.4313	0,150	12.5/13.5	3.5/4.5	0.50/0.60	
AUSTENITIC		1.4418	0.060	15.0/17.0	4.0/5.0	0.8/1.2	
	304	1.4301	0,08	17/20	8/11		
	304 L	1.4306	0,03	18/20	10/12		
	304 L	1.4307	0,03	17,5/19,5	8/10,5		
	304 H		0,04/0,10	18/20	8/11		
	321	1.4541	0,08	17/19	9/12		5 C ≤ Ti ≤ 0,60
	321 H		0,04/0,10	17/20	9/13		4 C ≤ Ti ≤ 0,60
	347	1.4550	0,08	17/19	9/12		10 C ≤ Nb ≤ 1,0
	347 H		0,04/0,08	17/20	9/13		8 C ≤ Nb ≤ 1,0
	316	1.4401	0,08	16/18	11/14	2/3	
	316 L	1.4404	0,03	16/18	11/14	2/3	
	316 Ti	1.4571	0,08	16,5/18,5	10,5/13,5	2/2,5	5 C ≤ Ti ≤ 0,80
	(316 L)	1.4435	0,03	17/18,5	12,5/15	2,5/3	
	(316)	1.4436	0,07	16,5/18,5	11/14	2,5/3	
	316 Nb	1.4580	0,08	16/18	11/13	2/2,5	10 C < Nb < 1,0
	316 N/316 LN		0,03	16/18	11/14	2/3	N 0,10/0,16
	316 L urea		0,03	17/18	13/15	2/3	
	317		0,08	18/20	11/15	3/4	
	317 L	1.4438	0,03	18/20	11/15	3/4	
	309 S/309 H	1.4833	0,08	22/24	12/15	≤ 0,75	
	310 S/310 H	1.4845	0,08	24/26	19/22	≤ 0,75	
	310 MoLN	1.4466	0,02	24/26	21/23	2/2,5	N=0,1/0,15 Si<0,4 P<0,02
		1.4828	0,20	19/21	11/13		Si 1,5/2,5
314	1.4841	0,15	24/26	19/21		Si 1,5/2,5	
UNS S31254	1.4547	0,02	19,5/20,5	17,5/18,5	6,0/6,5	Cu 0,50/1,00 N 0,18/0,22	
FERRITIC AUSTENITIC	UNS S31803	1.4462	0,03	21/23	4,5/6,5	2,5/3,5	N 0,12/0,20
	UNS S32750	1.4410		24,0/26,0	6,0/8,0	3,0/5,0	
	UNS S32760	1.4501	0,03	24/26	6/8	3/5	N 0,2/0,3 Cu & W 0,5/1,0
HIGH NICKEL	904 L	1.4539	0,02	19/21	24/26	4/5	Cu 1,20/2,00 N 0,04/0,10
	800-H-HT	1.4876	0,6/0,10	19/23	30/35		Al & Ti 0,15/0,60
	UNS N08020	2.4660	0,07	19/21	32/38	2/3	Cu 3/4 Nb 8xC-1,0 Fe Balance
	UNS N08825	2.4858	0,05	19,5/23,5	38/46	2,5/3,5	Cu 1,5/3,0 Al 0,2 max Ti 0,6/1,2 Fe Balance
	UNS N08028	1.4563	0,03	26/28	30/32	3/4	Cu=0,8/1,4 N=0,04/0,15 Fe Balance
G-3 N06985			21,0/23,5	44,0/52,0	6,5/8,0	Fe: 18,0/21,0	

* Maximum unless otherwise indicated

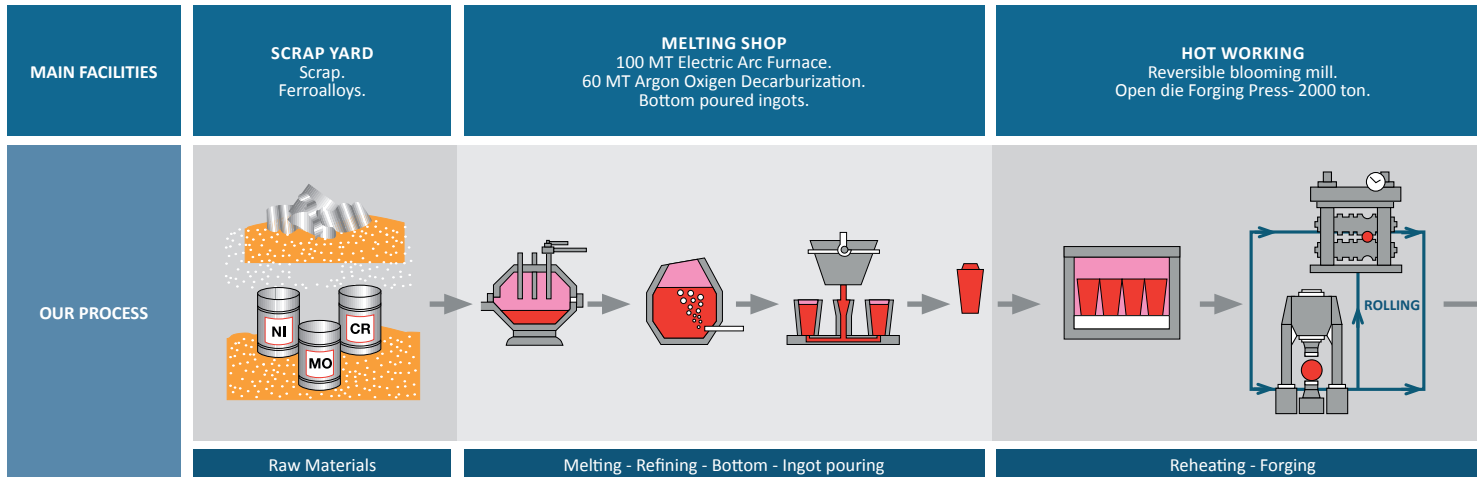
Improved Machinability Available MECATEX

In addition to these standards, Acerálava is capable of supplying a wide range of stainless steel and high nickel alloy grades depending on the requirements.

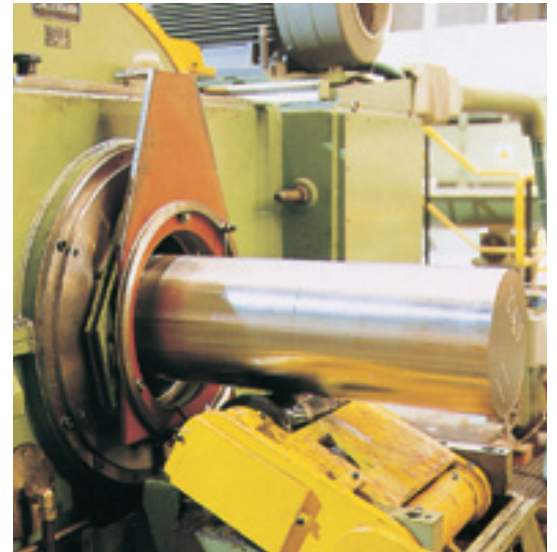
PROCESS

Aceralava's fully integrated process from raw materials to finished products in a single mill, guarantees the quality of the product and a flexible service to our customers

MANUFACTURING PROCESS



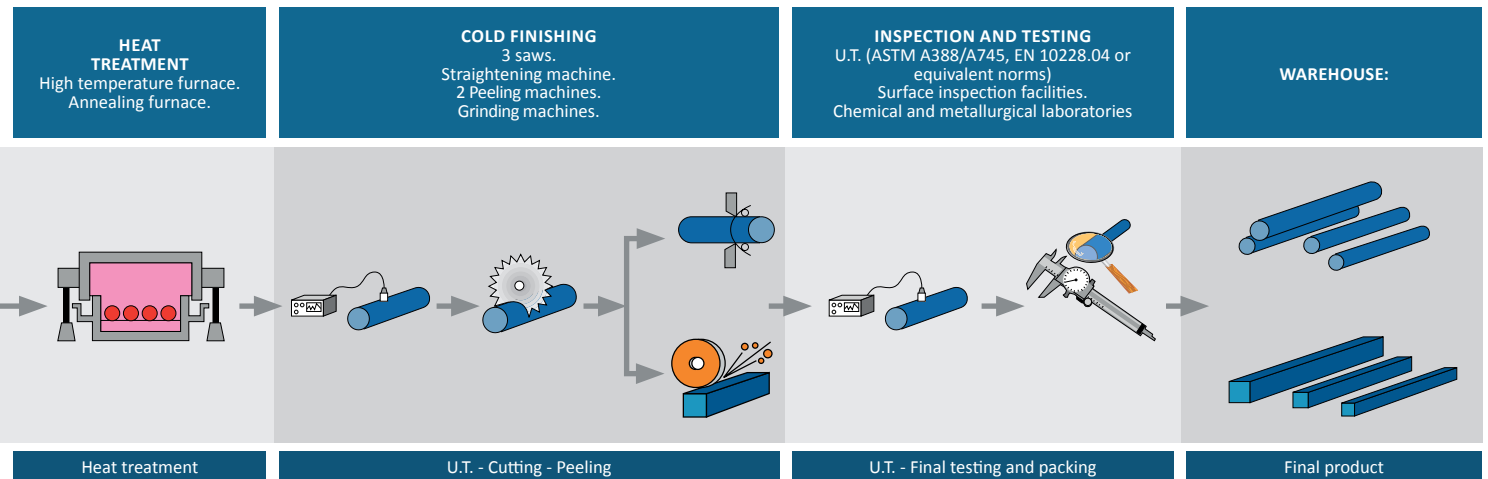
EQUIPMENT



Acerálava is on a continuous development process in order to improve its quality and meet the tightest industry requirements.

- Electric Arc Furnace (100 tons)
- AOD converter (60 tonnes)
- 8 soaking pit furnaces (gas heated)
- Forging press
- Blooming rolling mill
- Heat treatment
- Grinding
- Peeling and polishing
- Non destructive testing





QUALITY & APPROVALS

International Standards

Aceralava manufactures and delivers stainless steel products in accordance with most international standards.

INTERNATIONAL STANDARDS
ASTM: A182, A276, A479, A484, A564, A582, B472, B564, B649,...
EN: 10088, 10272,...
BS: 970,...
JIS, GOST, UNI,...



Management system certificates

The company is ISO 9001 certified. In addition, Aceralava holds several approvals as a manufacturer and supplier of stainless steel products.

APPROVALS	
Body	In Accordance with
AENOR	UNE-EN ISO 9001/2000
TÜV SÜDDEUTSCHLAND	AD2000 - MERKBLATT W0/TRD100
LLOYD'S REGISTER	LR'S RULES FOR THE MANUFACTURE, TESTING AND CERTIFICATION OF MATERIALS
ASME	ASME BOILER AND PRESSURE VESSEL CODE (NCA-3800 REQUIREMENTS)
AENOR	UNE- EN ISO 14001
TÜV SÜDDEUTSCHLAND (Notified Body 0036)	PRESSURE EQUIPMENT DIRECTIVE 97/23/EC
DET NORSKE VERITAS	DNV'S RULES FOR CLASSIFICATION PT.2
OAyC	OHSAS 18001/1999
-----	NORSOK M-650

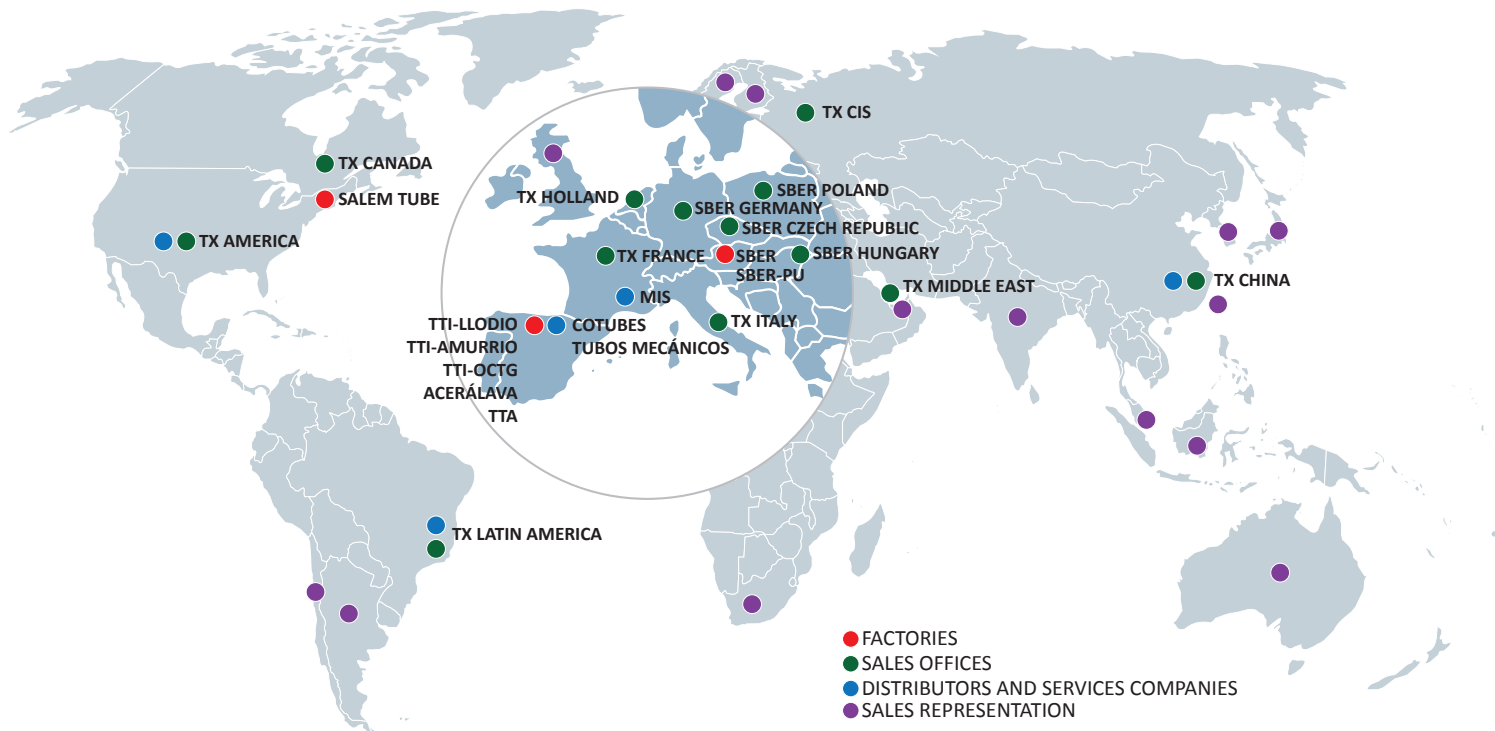


Safety and environmental responsibility

Aceralava is highly engaged with the environment and it is ISO 14001 certified. Additionally Occupational health and Safety is also a key element of our culture. The company is OHSAS 18.001 certified.



HEAD OFFICE:
 Tres Cruces, 8
 P.O. Box nº 22
 01400 LLODIO (ÁLAVA) SPAIN
 Phone: +(34) 94 671 93 00
 Fax: +(34) 94 671 93 14
 e-mail: aceralavasales@tubacex.es
 www.tubacex.com.



SALES OFFICES AROUND THE WORLD

WEST EUROPE:

TUBACEX EUROPE, BV
 Phone: + 31 (0) 162 690 430
 Fax: + 31 (0) 162 690 435
 e-mail: marcel.villares@tubacex.nl

SPAIN:

COTUBES
 Phone: + (34) 945 39 36 00
 Fax: + (34) 945 39 34 22
 e-mail: jbilbao@cotubes.es

CANADA:

TUBACEX CANADA INC.
 Phone: + (1) 905 629 2011
 Fax: + (1) 905 629 4468
 e-mail: sales@tubacex-cda.com

FRANCE:

TUBACEX FRANCE
 Phone: + (33) 1 48 79 30 50
 Fax: + (33) 1 48 79 18 06
 e-mail: frederic.bouvier@sbtfr.fr

UNITED STATES OF AMERICA:

TUBACEX AMERICA
 Phone: + (1) 713 856 2700/13
 Fax: + (1) 713 856 2799
 e-mail: sales@tubacex-usa.com

ITALY:

TUBACEX ITALIA
 Phone: + (39) 02 669 5505
 Fax: + (39) 02 673 845 92
 e-mail: sales@tubacexitalia.it

CHINA:

TUBACEX ASIA
 Phone: + (86) 21 5298 0242
 Fax: + (86) 21 5298 0241
 e-mail: tubacexasia@tubacex.com.cn

BRASIL:

TUBACEX LATIN AMERICA
 Phone: + (55) (11) 3622 4860
 Fax: + (55) (11) 3621 9117
 e-mail: vendas@special-steels.com.br

DUBAI:

TUBACEX MIDDLE EAST
 Phone: + (971) 4 7017 212
 Fax: + (971) 4 7017 213
 e-mail: inigo@ae.tubacex.com

RUSSIA:

TUBACEX CIS
 Phone: + (7) 916 644 22 51
 Fax: +(7) 495 959 21 80
 e-mail: okulyk@tubacex.us

GERMANY:

**SCHOELLER-BLECKMANN EDELSTAHLROHR
 DEUTSCHLAND GMBH**
 Phone: + (49) 2150 70 567-0
 Fax: + (49) 2150 70 567-20
 e-mail: juergen.brinkmann@sber.de

HUNGARY:

**SCHOELLER-BLECKMANN EDELSTAHLROHR
 HUNGRIA**
 Phone: + (36) 1 250 23 42
 Fax: + (36) 1 250 23 46
 e-mail: jozsef.horvath@sber.hu

CZECH REPUBLIC:

SCHOELLER-BLECKMANN a.s.
 Phone: + (42) 02 71 00 11 91
 Fax: + (42) 02 71 00 11 90
 e-mail: martin.broz@sbpraha.cz

AUSTRIA:

**SCHOELLER-BLECKMANN EDELSTAHLROHR,
 GmbH**
 Phone: + (43) 2630 3160
 Fax: + (43) 2630 369 47
 e-mail: office@sber.co.at

POLAND:

SCHOELLER-BLECKMANN EDELSTAHLROHR, AG
 Phone: + (48) 32 253 99 67
 Fax: + (48) 32 206 82 48
 e-mail: bronislaw.flak@sber.com.pl