MANUFACTURER

ERKINOX
Paslanmaz Boru Profil A.Ş.

PRODUCT CATALOGUE 2027

STAINLESS STEEL TUBE AND PROFILE

Made to measure.

Made to measure.



Stainless steel tubes and profiles

TECHNICAL HANDBOOK

2027

ERKINOX · EN 10217-7 · EN 10357 · ASTM A312 · Ø6–323.9 MM · BOZÜYÜK / TÜRKİYE

www.erkinox.com



MANUFACTURER

ERKINOX
Paslanmaz Boru Profil A.Ş.

Stainless steel tube and profile

Ø6–323.9 mm
Round tube

10 × 10 – 200 × 200 mm
Square tube

20 × 10 – 200 × 100 mm
Rectangular tube

1,500 t/month
Production capacity

MADE TO MEASURE

ABOUT THIS CATALOGUE

Made to measure.

Erkinox Paslanmaz Boru Profil A.Ş. manufactures welded stainless steel round tube, square and rectangular profiles at its facility in Bozüyük OSB, Bilecik.

This catalogue brings together the product families, size and weight tables, material and surface options, quality assurance and ordering information. Throughout the catalogue the products are referred to by three codes:

RT-01	Welded stainless steel round tube
SQ-02	Welded stainless steel square tube
RC-03	Welded stainless steel rectangular tube

Reading the tables

Weights are theoretical values in kg/m, calculated using a specific gravity of **8 kg/dm³** . Dimensions are in mm and pressures in bar. For combinations not shown in a table you may request a quotation; the final production scope is confirmed in the order confirmation together with grade, standard, surface, length and quantity.



BOZÜYÜK OSB · PRODUCTION HALL

CONTENTS ·

01 Corporate 04

About us 05
ERKINOX in numbers 06
Chairman's message 07

02 Manufacturing and quality 08

Production in ten steps 09
Technologies and standards 12
Quality control and tolerances 13
Abbreviations and standards 14
Guide to reading the tables 16
Marking 17
Package label and packing 18
Certificates 19

03 Products 20

Product families 21
RT-01 · Tube 22
Tube weight tables · EN 23
EN 10357 · Food series 26
ASTM A312 · NPS and schedule 27
SCH 5S · 10S · 40S tables 28
Working pressures 31
SQ-02 · Square tube 32
RC-03 · Rectangular tube 34

04 Technical guide 37

Chemical composition 38
Mechanical properties 39
Grade selection flow 40
Surface options 41
Standard selection 42
Formulas and conversions 43
1:1 size templates 44

05 Applications and service 46

Sectors 47
Order specification 49
Custom production and quotation 50
Shipping and export 51
Frequently asked questions 52
Sustainability 54
Contact 55



01

Corporate

About us 05

ERKINOX in numbers 06

Chairman's message 07

ERK BORU · 1992 · ERKINOX · 2022 · BOZÜYÜK OSB / BİLECİK · 1,500 TONNES/MONTH

01 · ABOUT US

A brand that turns sector experience into production strength.

Active in the stainless steel sector since 1992, we turn the experience we have gained in Türkiye and international markets into production at our Bozüyük facility under the ERKINOX brand.

Having started stainless steel tube and profile production in 2022, our company is expanding its product range under the ERKINOX brand and meeting the needs of different sectors. We offer tube, square and rectangular profile products by evaluating material, size and surface expectations together.

We place quality, trust and customer satisfaction at the centre of our work. Alongside our domestic activities, we serve international markets mainly through exports to **the United Kingdom, Canada and European Union** countries.



BOZÜYÜK OSB · PRODUCTION FACILITY



SECOND PRODUCTION FACILITY

1 PRODUCT

Welded stainless steel round tube, square and rectangular profile. Austenitic, 200 series and duplex grades.

2 TECHNOLOGY

TIG and laser welding, in-line bright annealing, eddy current and hydrostatic testing during production.

3 MARKET

A wide range of sectors from automotive to furniture, white goods to construction; exports to the United Kingdom, Canada and EU countries.

01 · ERKINOX IN NUMBERS

Measurable capacity, a documented journey.

1,500 t/month
Declared production capacity

24 m
Maximum production length

12 grade
Austenitic, 200 series and duplex

Ø6–323.9 mm
Tube outside diameter range

200 × 200 mm
Maximum square profile size

180–600 grit
Surface options

MILESTONES ·

1992

We began operating in the stainless steel sector.

2022

Stainless steel tube and profile production began in Bozüyük; the ERKINOX brand broadened the product range.

2023

EN 10217-7 and EN 10217-7 and EN 10296-2 manufacturer conformity certificates from TÜV NORD; AD 2000-W0 / PED material manufacturer approval.

2024

ISO 9001, ISO 14001, ISO 45001 and ISO 50001 management system certificates.



BOZÜYÜK OSB · PRODUCTION AREA

CORE VALUES ·

A way of working built on quality, trust and sustainable success.

Qualified human resources

Professional support from our team, each experienced in their field.

Reliable service

Relationships based on open communication and long-term cooperation.

Fast and on-time delivery

A planned and controlled process from production to delivery.

Quality control

Products inspected at every stage of production.

“

We believe in production and invest in the future.

Nail Sular
CHAIRMAN OF THE BOARD

DEAR BUSINESS PARTNERS,

Throughout our journey that began in the stainless steel sector in 1992, what we learned most while developing our business came from our customers, our colleagues and the needs of our sector. Today, as we shape the future of ERKINOX, we build on this experience; we trust in production, technology and our people.

Starting stainless tube and profile production in 2022 was an important turning point for us. By turning the experience we gained in the sector into production strength, we took on a new responsibility with our ERKINOX brand. We work in the awareness that every product we make is part of our customer's own business and the promise they have given.

I believe in the importance of strengthening domestic production for our country's future. With this understanding, as we plan our investments, we aim to develop our production capability, increase our product variety and respond more comprehensively to our customers' needs. By producing in Türkiye, we are working to become a brand preferred both at home and in international markets.

We believe that sustaining quality is possible through attention paid at every stage of production. That is why we value our work in technology and quality control. In our relationships with customers, we put understanding needs correctly, open communication and cooperation first.

As we put our future goals into practice, our greatest strength is our team that works hard and the business partners who trust us. I thank our colleagues, suppliers and customers who have a share in our success. We will continue to produce, develop and add value to our country together.

Yours sincerely,

Nail Sular
Chairman of the Board



02

Manufacturing and quality

Production in ten steps	09
Technologies and standards	12
Quality control and tolerances	13
Abbreviations and standards	14
Guide to reading the tables	16
Marking	17
Package label and packing	18
Certificates	19

TIG / LASER WELDING · IN-LINE BRIGHT ANNEALING · EDDY CURRENT · HYDROSTATIC TEST

02 · PRODUCTION

From coil to shipment, in ten steps.

At our Bozüyük facility, forming, welding, heat treatment, testing and surface finishing are carried out in a single production flow.



01 STEP 01 / 10

Coil and slitting

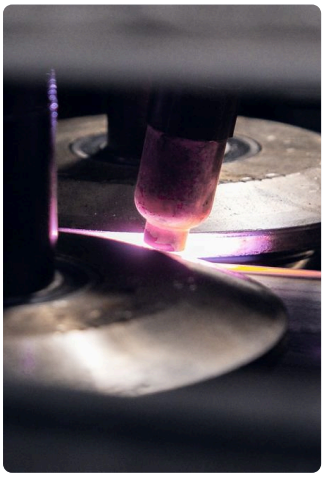
Production begins with loading stainless steel coils onto the decoiler. Coils are slit into strips of the order width; material grade, wall thickness and width are selected according to the order recipe.

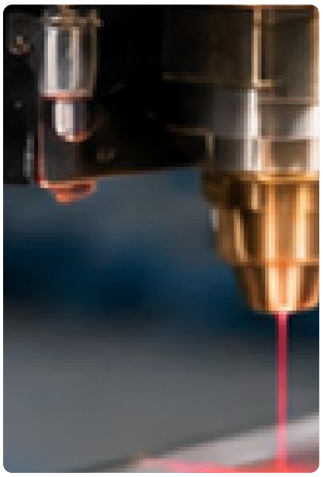


02 STEP 02 / 10

Cold forming

Roll stations bring the strip step by step to a round section. Square and rectangular profiles reach their final geometry with calibration rolls.

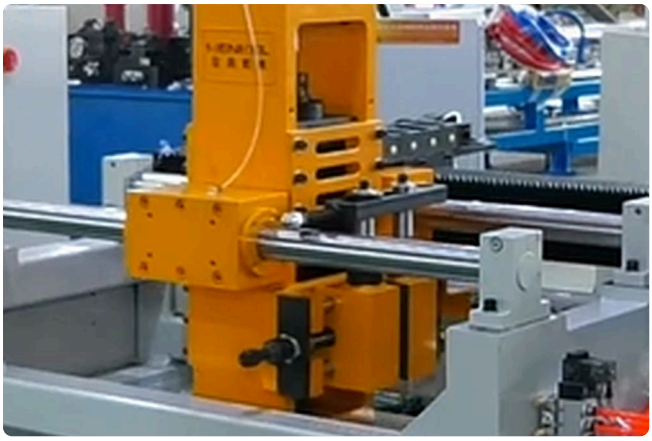




03 STEP 03 / 10

TIG and laser welding

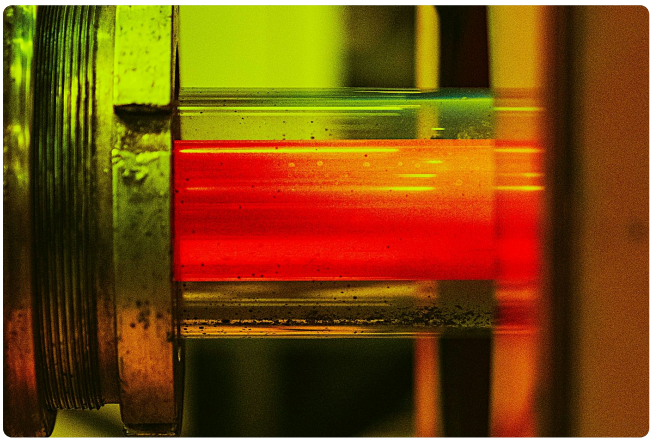
Tubes and profiles are produced using two separate welding methods: TIG (tungsten inert gas) and computer-controlled laser welding. The method is determined by product, wall thickness and area of use.



04 STEP 04 / 10

Weld bead rolling

On tubes joined by TIG or laser welding, the internal and external bead that forms at the weld seam is subjected to controlled cold plastic deformation with special rolling wheels and an internal support mandrel.



05 STEP 05 / 10

Bright annealing

The fully automatic bright annealing unit performs heat treatment in-line under a protective atmosphere. Ductility and corrosion resistance are restored; the surface does not oxidise.



06 STEP 06 / 10

Eddy current testing

Eddy current testing is a non-destructive method that detects discontinuities in the weld seam and tube surface without contact. It allows fast inspection on the production line.



07 STEP 07 / 10

Hydrostatic test

Tube samples taken from the production line at set intervals are filled with water and tested under controlled pressure. This verifies the leak tightness of the weld seam and the pressure resistance of the tube.



08 STEP 08 / 10

Pickling

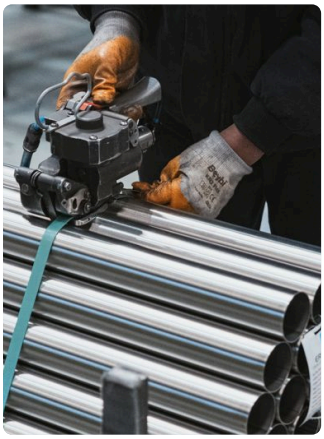
After welding and heat treatment, the oxide layer and heat tint that can form on the surface are removed by pickling. The cleaned surface passivates and fully regains the corrosion resistance of stainless steel.



09 STEP 09 / 10

Polishing and surface finishing

Products are prepared with 180, 240, 320, 400, 500 or 600 grit finishes, or custom surface work on request. Cutting to length is done in the range 1,500–24,000 mm with a length tolerance of −0 / +5 mm.





10 STEP 10 / 10

Packing and labelling

Bundles are strapped and wrapped in protective stretch film. Each bundle is shipped with an ERKINOX label carrying the batch number, size, grade, surface, length, quantity, metres, weight, standard and production date.

PRODUCTION CAPACITY AT A GLANCE ·

1,500 t/month	Ø6–323.9	200 × 200 mm	0.5–8 mm	1.5–24 m	180–600 grit
Capacity	Tube outside diameter, mm	Maximum profile	Wall (standard table)	Length	Surface

02 · TECHNOLOGIES AND STANDARDS

From welding to test, one quality approach.

Every technology on the line meets a requirement defined in the product standard. The strip below ranks our production standards by level of technical requirement.



STANDARD, ON THE PRODUCT

1. **TIG welding**
   Welding with a tungsten electrode and inert shielding gas; stable seam geometry in thin and medium wall thicknesses.
2. **Laser welding**
   Computer-controlled laser welding; narrow heat-affected zone and a clean seam appearance.
3. **Weld bead rolling**
   Internal and external seam bead is corrected in a controlled way with rolling wheels and an internal support mandrel.
4. **In-line bright annealing**
   Heat treatment in a protective atmosphere; ductility and corrosion resistance are restored, the surface does not oxidise.
5. **Eddy current testing**
   Contactless, non-destructive in-line inspection of the weld seam by eddy currents.
6. **Hydrostatic test**
   Verification of leak tightness and strength under pressure on sample tubes.
7. **Pickling**
   Oxide layer and heat tint are removed; the surface is passivated.
8. **Polishing**
   180–600 grit satin and bright finishes; custom finish on request.
9. **Dimensional inspection**
   Outside diameter and wall ISO 1127 Measured to D4 / T3, length tolerance −0 / +5 mm.
10. **Marking and traceability**
    Standard, grade, size and heat number on the product; linked to the inspection certificate by the bundle label.

OUR PRODUCTION STANDARDS ·

Starting from the most demanding requirement

1 · Pressure process lines	2 · Hygienic · food and pharma	3 · High temperature and general corrosive lines	4 · Industrial · mechanical	5 · Decorative tube and profile
EN 10217-7	**EN 10357**	**ASTM A312**	**EN 10296-2**	**ASTM A554**
ASTM A312	ASTM A270		ASTM A269	

Size and tolerance	Test category	Inspection certificate	Inspection certificate
EN ISO 1127 · D4 / T3	**TC1 · TC2 (EN 10217-7)**	**EN 10204 · 3.1**	**EN 10204 · 3.2**

02 · QUALITY CONTROL

In-line testing, measurable tolerance.

INSPECTION PLAN ·

Inspection	Method	When
Raw material	Coil certificate, grade and size verification; heat number record	At coil acceptance
Weld seam	Eddy current, non-destructive	During production, in-line
Leak tightness	Hydrostatic pressure test	At set intervals, on a sample tube
Heat treatment	Fully automatic bright annealing	In-line
Size	Measurement of outside diameter, wall thickness, ovality, straightness and length	Throughout production
Traceability	Product marking and bundle label	Every product, every bundle



TOLERANCES ·

Property	Basis	Tolerance	Note
Outside diameter	ISO 1127 · D4	**± %0.5**	at least ± 0.1 mm
Wall thickness	ISO 1127 · T3	**± %10**	at least ± 0.2 mm
Length	Ordered length	**–0 / +5 mm**	1,500–24,000 mm
Ovality	ISO 1127	**Within OD tolerance**	Largest and smallest measured diameters stay within D4
Straightness	ISO 1127 · EN 10357	**≤ 0.0015 × L**	Max. 3 mm/m; EN 10357 max. 2 mm/m, food series

For square and rectangular profiles, section, corner radius, flatness and twist tolerances follow ASTM A554 and the order specification. Tighter tolerances are assessed before ordering.

Example: Ø50.8 × 1.5 mm

Outside diameter: 0.5% × 50.8 = 0.254
± 0.25 mm

Wall: 10% × 1.5 = 0.15 < 0.2
± 0.2 mm

Straightness, 6 m: 0.0015 × 6,000
≤ 9 mm

Length 6,000 mm: –0 / +5
6,000–6,005 mm

If the percentage value falls below the minimum value, the minimum value applies.

INSPECTION CERTIFICATES AND TEST CATEGORY ·

EN 10204
3.1

Inspection certificate

A document containing order-specific test results, approved by the manufacturer's authorised inspection representative who is independent of production.

EN 10204
3.2

INDEPENDENT INSPECTION

Inspection certificate

A document approved jointly by the manufacturer's authorised representative and the independent inspection representative designated by the purchaser or by regulation; requested in the order.

Test category
TC1 · TC2

EN 10217-7

The scope of inspection and testing defined in the standard. Offered as TC1 or TC2 depending on the product and customer request.

02 · ABBREVIATIONS AND STANDARDS

Abbreviations and standards glossary.

The abbreviations and standard codes used in technical sales, engineering specifications and field applications in the stainless steel tube and fittings sector, in a single reference.

1 Standards bodies

ABBREVIATION	DESCRIPTION / ENGINEERING DEFINITION
ASTM	An organisation that publishes material, product and test standards. Formerly the American Society for Testing and Materials, now named ASTM International.
ASME	American Society of Mechanical Engineers. Publishes technical standards for piping and mechanical equipment.
ANSI	American National Standards Institute. Coordinates the standards development and conformity assessment system in the USA.
EN	European Standard (European Norm). Indicates that a technical standard has been adopted as a European standard.
DIN	Deutsches Institut für Normung — German Institute for Standardization. The DIN prefix denotes a standard in the German standards system.
ISO	Short name of the International Organization for Standardization. Develops and publishes international technical standards.

2 Size and wall thickness terms

ABBREVIATION	DESCRIPTION / ENGINEERING DEFINITION
DN	Diamètre Nominal — nominal diameter, i.e. the size designation of a pipe or connection. It is not a directly measured inside or outside diameter (e.g. DN50).
NPS	Nominal Pipe Size. Used in the ASME/ANSI sizing system (e.g. NPS 2).
SCH	Schedule — wall thickness series. Read together with NPS. SCH 40S does not mean 40 mm wall thickness or 40 bar pressure.
S (within SCH)	The “S” suffix in SCH 40S: the suffix that distinguishes the stainless steel pipe wall thickness series under ASME B36.19.
OD / D	Outside Diameter — the outside diameter of the tube measured with calipers.
ID / d	Inside Diameter — the inside diameter of the tube (flow area).
t	Wall Thickness — the wall thickness of the tube; the thickness of the wall on one side.
D × t	Outside diameter × wall thickness notation. For example, 53 × 1.5 mm states unambiguously that the outside diameter is 53 mm and the wall thickness is 1.5 mm.
mm	Millimetre; unit of length and diameter.

3 Certificate and standard codes in the table

CERTIFICATE / STANDARD CODE	DESCRIPTION / ENGINEERING SCOPE
EN 10204 3.1	The certificate is signed and approved by the manufacturer’s own quality control representative, who works independently of the manufacturer’s production department.
EN 10204 3.2	In addition to the manufacturer’s quality representative, it is approved with a double signature by an inspector of a third-party independent inspection body (e.g. TÜV, Bureau Veritas, Lloyd’s Register, DNV).
ASTM A312 / A312M	The standard defining the product, production and inspection requirements of austenitic stainless steel tubes. The letter M indicates the metric/SI unit system.
ASME B36.19	The American standard defining the NPS, outside diameter and SCH wall thickness dimensions of stainless pipes.
EN 10217-7	The standard defining the technical delivery conditions of welded stainless steel tubes for pressure purposes.
EN ISO 1127	The standard defining the outside diameter, wall thickness, dimensional tolerances and theoretical unit weights per length of stainless tubes.
EN 10357	Defines the dimensions, material and surface requirements of welded stainless tubes for the food and chemical industries. The current European standard that continues the former DIN 11850 dimension systems. **Note:** The series letter in this standard defines not only a diameter size but a family of dimensions. A, C and D series with the same or similar nominal size can have different actual outside diameters. For this reason, when selecting tube, fittings and couplings, the actual outside diameter × wall thickness must always be checked together with the series.
EN 10357 Series A	The main hygienic dimension series widely used in Europe; the continuation of the former DIN 11850 Series 2 dimensions.
EN 10357 Series B	Former DIN 11850 It represented the Series 1 dimensions; EN 10357:2022 it was removed in the revision. It may still be encountered for compatibility with older installations.
EN 10357 Series C	Current EN 10357an alternative hygienic tube series covering inch-based actual OD dimensions. Its dimensions were updated in 2022.
EN 10357 Series D	Covers the other alternative outside diameter dimensions used in European hygienic and beverage processes.
EN 10374	The standard for welded elbows, tees and reducers used in food and chemical installations. DIN 11852 is the current European standard covering the same product group; it includes the dimensions and technical definitions of welded fittings.

02 · ABBREVIATIONS AND STANDARDS · CONTINUED

CERTIFICATE / STANDARD CODE	DESCRIPTION / ENGINEERING SCOPE
DIN 11850 (Tube)	The classic German standard for hygienic stainless steel tubes used in the food, dairy and beverage industries. In current applications it has largely been replaced by EN 10357 .
DIN 11850 Series 1	DIN 11850's former hygienic tube dimension family. Used between DN10 and DN50 and does not continue beyond Ø52 mm. Today it matters where compatibility with older installations is required.
DIN 11850 Series 2	DIN 11850's wider dimension family. Continues from DN10 up to DN200 and its dimensions are today carried on in EN 10357-A . It is the main dimension family used in new hygienic installations.
DIN 11851 (Coupling)	The standard for demountable stainless steel threaded-coupling connections used in food and chemical installations.
DIN 11852 (Fittings)	The classic DIN standard for stainless steel welded elbows, tees and reducers used in food and chemical plants.
EN 10296-2	The standard for welded stainless steel tubes intended for machinery and general engineering applications.
ASTM A554	The standard for welded stainless tubes and profiles used in mechanical, structural and decorative applications.
PED (2014/68/EU)	The European Union Pressure Equipment Directive (PED — 2014/68/EU) is a legal requirement for pipelines and pressure vessel components whose maximum allowable pressure (PS) is above 0.5 bar. – **Tube manufacturer approval:** The tube manufacturer must have a quality management system approved under PED 2014/68/EU Annex I, Article 4.3 (e.g. a TÜV-approved PED certificate). – **Fluid group and category:** On lines carrying hazardous (Group 1) or non-hazardous (Group 2) fluids, CE marking and Notified Body inspection are required depending on tube diameter and pressure. – **Traceability:** The brand, tube size, material grade, heat number and CE mark must be marked indelibly on every tube and fitting within the scope of the PED.
AD 2000-Merkblatt W2 / W10	AD 2000 Technical specifications published by the German pressure vessel working group. – **AD 2000-W2:** Defines the material delivery conditions and manufacturer qualification required for austenitic stainless steels (1.4301, 1.4404, 1.4571, etc.) to be used in pressure vessel construction and pipelines. – **AD 2000-W10:** Regulates the impact notch (Charpy V-Notch) tests and brittle fracture safety of stainless steel tubes operating at low and high temperatures. – **Sector importance:** The strictest material approval standard, required in addition to PED certification, especially in Germany-based engineering projects and chemical/energy plants.
EHEDG, 3-A and FDA	Internationally recognised norms that guarantee product safety and hygiene in food, dairy, fruit juice and beer installations. – **EHEDG (European Hygienic Engineering and Design Group):** Documents that installation components (couplings, valves, fittings) are fully suitable for CIP (clean-in-place) and SIP (sterilise-in-place) processes and are designed with a geometry in which no stagnant liquid can accumulate (no dead spots). – **3-A Sanitary Standards:** The standard hygiene certificate of the North American dairy and food industry. It sets strict criteria for the internal surface smoothness (Ra < 0.8 µm) and weld seam geometry of stainless steel tubes. – **FDA (Food and Drug Administration):** DIN 11851 confirms that the gasket materials used in couplings and hygienic flanges (EPDM, FKM/Viton, silicone, PTFE) do not release chemicals harmful to food products (21 CFR 177.2600 / 177.1550).
ASTM A270 and ASME BPE	Standards for high-purity process tubes used in vaccine, pharmaceutical, serum and biotechnology plants. – **ASTM A270:** The standard for welded and seamless austenitic/ferritic stainless steel hygienic tube. According to internal surface quality (mechanically polished or electropolished — EP), it is divided into smoothness classes such as S2, SF1 and SF4. – **ASME BPE (Bioprocessing Equipment):** The highest globally recognised standard for bioprocess equipment. It covers tubes and fittings with internal surface smoothness reduced down to Ra ≤ 0.38 µm (15 µin) and with specially controlled ferrite (% Fe) and sulphur (% S) content.

4 Recommendations for customer specifications

In catalogues and technical specifications, the correct combination of the certificate and standard codes given above should be used:

1 For food installations

EN 10357 tube + DIN 11851 coupling + EN 10374 fittings + EN 10204 3.1 certificate + FDA-approved EPDM/silicone gasket

2 For chemical and pressure vessels

EN 10217-7 tube + PED 2014/68/EU + AD 2000-W2 + EN 10204 3.1 (or 3.2) certificate

3 For pharma and bioprocess

ASTM A270 / ASME BPE tube (electropolished) + EHEDG / 3-A approved components + EN 10204 3.1 certificate

5 Nominal diameter (DN / NPS) and the field-verification principle

Note: Nominal diameter (DN/NPS) is not the physical diameter of the tube; it is a standard designation for the size class of tubes and fittings. It gives a convenient common language, much like a numbering system, for small–medium–large sizes. The actual outside diameter and wall thickness must be checked separately according to the standard used, to be sure.

02 · GUIDE TO READING THE TABLES

How should you read the tube tables?

For the right choice, **read the standard, size and material grade together.** The standard defines the technical requirements of the product; the size defines its physical dimensions; designations such as 304 or 316L define its material.

WHICH STANDARDS ARE USED TOGETHER? ·

Need / size system	Standards read together	What to select from the table
Pipe selection by NPS / SCH	**ASTM A312/A312M:** the product standard of the pipe. **ASME B36.19:** NPS and wall thickness sizes.	**NPS + SCH** are selected together. Example: NPS 2, SCH 40S.
Pressure tube to EN standards	**EN 10217-7:** product and delivery conditions. **EN ISO 1127:** size and tolerance reference.	**Outside diameter × wall thickness**, stated in mm.
Food / hygienic tube and fittings	**EN 10357:** tube. **DIN 11851:** demountable coupling. **EN 10374:** welded elbow, tee, reducer.	**Size series + outside diameter × wall** are checked. Tube and fitting ends are matched.
Machinery / general engineering tube	**EN 10296-2** or **ASTM A554:** the requested product standard.	**Outside diameter × wall + material + surface** is stated.

Former names: DIN 11850is a former tube reference; in current selection EN 10357 is used. DIN 11852 has been withdrawn; in its place EN 10374 is recommended.

WHAT DO THE ABBREVIATIONS TELL YOU? ·

DN and NPS

Show the nominal size of the tube, i.e. its designation. They are not the measured inside or outside diameter themselves. **DN50 (NPS 2)** may be written together; the size family should also be stated.

SCH

For a given NPS **is the wall thickness series; it is not the working pressure.** For the same NPS, when the SCH changes the outside diameter stays constant; the wall and inside diameter change.

D / OD · t · d_i / ID

D / OD: outside diameter. **t:** wall thickness. **d_i / ID:** inside diameter. Nominal inside diameter **$d_i = D - 2t$** is calculated from.

304 / 316L

This is the material grade; it does not state the tube size or the connection series.

THE SAME DN CAN HAVE DIFFERENT OUTSIDE DIAMETERS ·



Ø53 × 1.5 Ø60.3 × 3.91

Size family	Order designation	Outside diameter × wall
EN 10357-A	DN50	53 × 1.5 mm
ASME B36.19	DN50 / NPS 2, SCH 40S	60.3 × 3.91 mm

The same DN50 name does not mean the connection dimensions are the same. When ordering couplings and fittings, state the standard and the tube end, in addition to “Series 1 / Series 2”, **D × t** size.

Remember

ASTM/ASME does not belong only to heavy industry, and EN/DIN does not belong only to food. ASTM A270 can also be used for food tube. Suitability for use is assessed against the requirements of the selected product. Write the full standard number instead of a generic name such as “ANSI”.

SHORT ORDER DESCRIPTION ·

Standard + D × t or NPS/SCH + Material grade + Connection + Quantity

Technical references: ISO 6708 · ASME B36.19 · ASTM A312 · EN 10357 · DIN 11852 status · ASTM A270

02 · MARKING

Product marking reading guide.

Read tube and profile marking on a single page. Each field links the product to its raw material, production record and inspection certificate.

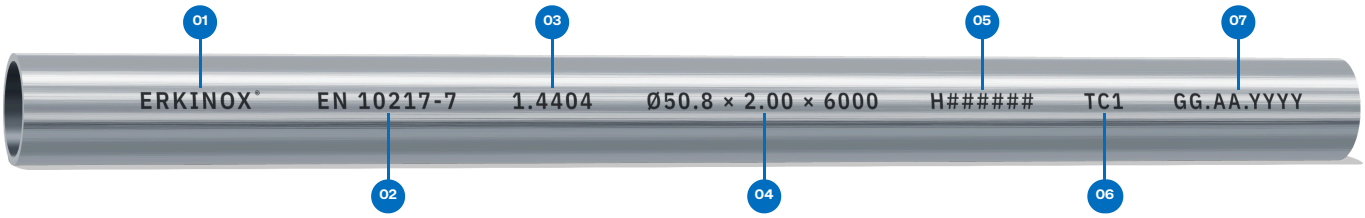




TUBE MARKING READING GUIDE

Pipe marking reading guide

Round tube marking example
(EN 10217-7)



01 Manufacturer
ERKINOX brand identity.

02 Product standard
Production standard (e.g. EN 10217-7).

03 Material grade
Steel grade (e.g. 1.4404 / 316L).

04 Size
Outside diameter × wall × length (e.g. Ø50.8 × 2.00 × 6000 mm).

05 Heat / heat no.
Heat number of the raw material.

06 Test category
TC1 or TC2 according to the product standard.

07 Production date
Production date (DD.MM.YYYY).

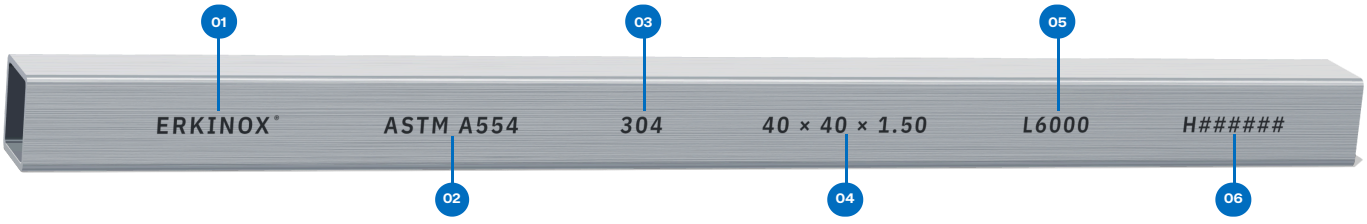
Traceability
Full traceability from raw material to inspection certificate.

Inspection certificate
Requested document type: EN 10204 3.1 / 3.2.

PROFILE MARKING READING GUIDE

Profile marking reading guide

Square / rectangular profile marking example
(ASTM A554)



01 Manufacturer
ERKINOX brand identity.

02 Product standard
Production standard (e.g. ASTM A554).

03 Material grade
Steel grade (e.g. 304).

04 Size
Width × height × wall (e.g. 40 × 40 × 1.50 mm).

05 Length
Production length (L6000 = 6000 mm).

06 Heat / heat no.
Heat number of the raw material.

EN 10204
3.1 / 3.2

Inspection documents containing the test and inspection results of the products. **3.2** is issued with the participation of an independent inspection representative; it must be stated in the order.

TC1 / TC2

EN 10217-7 test categories defined according to the standard. Offered depending on the product and the customer request.

Marking content may vary according to the product standard, order conditions and customer requests. Example values are representative.

02 · BUNDLE LABEL AND PACKING

Bundle label how to read it?

The label on every ERKINOX bundle shows the batch, grade, size, quantity and standard at a glance. For queries and complaints, simply share the serial number.

MANUFACTURER

ERKINOX
Paslanmaz Boru Profil A.Ş.

EXAMPLE

1	SERIAL NO / BATCH	B8-23
2	GRADE	304
3	SURFACE	BRIGHT
4	SIZE	42.4 × 1.5
5	LENGTH	6000
6	PCS	61
7	METRES	366
8	WEIGHT	562
9	STANDARD	EN 10296-2
10	PRODUCTION DATE	DD.MM.YYYY
11	REMARKS	–

Erkinox Paslanmaz Boru Profil A.Ş.
Bozüyük OSB · Bilecik · Türkiye

1	Serial no. / batch	B8-23	Production batch; share this number for queries and traceability.
2	Grade	304	Material grade (AISI).
3	Surface	BRIGHT	Surface finish.
4	Size	42.4 × 1.5	Outside diameter or section × wall thickness, mm.
5	Length	6000	Length of a single product, mm.
6	Pieces	61	Number of products in the bundle.
7	Metres	366	Total metres in the bundle (length × quantity).
8	Weight	562	Bundle weight, kg.
9	Standard	EN 10296-2	Production standard.
10	Production date	DD.MM.YYYY	Production day.
11	Remarks	–	Order-specific remarks field.

Example values are representative.

PACKING ·









Packing

- Bundles are strapped; the ends are closed with plugs or protective tape.
- Protective stretch wrap protects the surface against transport damage.
- Every bundle carries an ERKINOX label.
- Special packing, bundle weight and crate requests are defined in the order.



02 · CERTIFICATES

Certified systems, measurable product.

Quality, environmental, occupational health and safety, energy and information security management systems; EN 10217-7, EN 10296-2, ASTM A312 and EN 10357 product certificates, and material manufacturer approval under the Pressure Equipment Directive.

MANAGEMENT SYSTEMS ·



ISO 9001:2015
Quality management system
IQR



ISO 14001:2015
Environmental management system
IQR



ISO 45001:2018
Occupational health and safety management system
IQR



ISO 50001:2018
Energy management system
AVACERT



ISO 27001:2022
Information security management system
IQR

PRODUCT AND PRESSURE EQUIPMENT ·

Product certificate

EN 10217-7
Manufacturer conformity certificate
TÜV NORD

Product certificate

EN 10296-2
Manufacturer conformity certificate
TÜV NORD

Product certificate

AD 2000-W0 · 2014/68/EU
Material manufacturer quality assurance system (PED)
TÜV NORD

Product certificate

ASTM A312
Manufacturer conformity certificate
TÜV NORD

Product certificate

EN 10357
Manufacturer conformity certificate
TÜV NORD

DECLARATIONS OF CONFORMITY ·

Certificate of conformity

CE
Certificate of conformity
TEST-UV

Certificate of conformity

CE
Attestation of conformity
GCR CERT

Certificate of conformity

REACH
Declaration of conformity
MANUFACTURER'S DECLARATION

Certificate of conformity

RoHS
Technical file declaration
MANUFACTURER'S DECLARATION

In the order, the document type state

Inspection document requested with the product **EN 10204 3.1** or **3.2** is defined in the order. For a 3.2 certificate, the independent inspection body and the test scope must be clarified before production planning. Product data sheets, material certificates and test reports can be requested from our sales team.

Current copies of the certificates, their scope and validity dates are published at www.erkinox.com and confirmed before ordering.



03

Products

Product families	21
RT-01 · Tube	22
Tube weight tables · EN	23
EN 10357 · Food series	26
ASTM A312 · NPS and schedule	27
SCH 5S · 10S · 40S tables	28
Working pressures	31
SQ-02 · Square tube	32
RC-03 · Rectangular tube	34

RT-01 TUBE · SQ-02 SQUARE PROFILE · RC-03 RECTANGULAR PROFILE · Ø6–323.9 MM

03 · PRODUCT FAMILIES

Three product families, one technical standard.

Common production infrastructure across all three product families: TIG and laser welding, in-line bright annealing, 180–600 grit surface and 1.5–24 m length.



RT-01 s. 22

Stainless steel tube

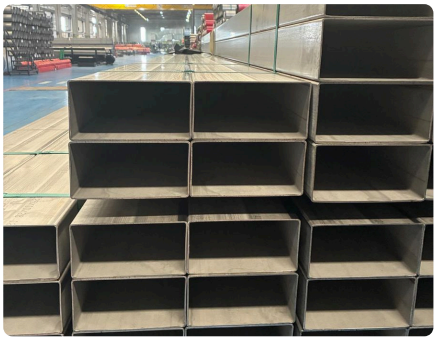
Ø6 – 323.9 mm
Size range



SQ-02 s. 32

Stainless square profile

10 × 10 – 200 × 200 mm
Size range



RC-03 s. 34

Stainless rectangular profile

20 × 10 – 200 × 100 mm
Size range

Property	RT-01 Tube	SQ-02 Square	RC-03 Rectangular
Size range	Ø6–323.9 mm	10 × 10 – 200 × 200 mm	20 × 10 – 200 × 100 mm
Wall thickness (standard table)	0.5–8.0 mm	0.5–8.0 mm	0.5–8.0 mm
Length	1,500–24,000 mm	1,500–24,000 mm	1,500–24,000 mm
Welding	TIG · laser	TIG · laser	TIG · laser
Heat treatment	In-line bright annealing	In-line bright annealing	In-line bright annealing
Test	Eddy current · hydrostatic	Eddy current	Eddy current
Tolerance	ISO 1127 D4 / T3	ASTM A554 / specification	ASTM A554 / specification
Surface	180–600 grit	180–600 grit	180–600 grit
Standards	EN 10217-7 · EN 10357 · EN 10296-2 · ASTM A312 · A270 · A269	ASTM A554	ASTM A554
Weight table	s. 23 · 26 · 28	s. 33	s. 35

MATERIAL GRADES · ALL FAMILIES ·

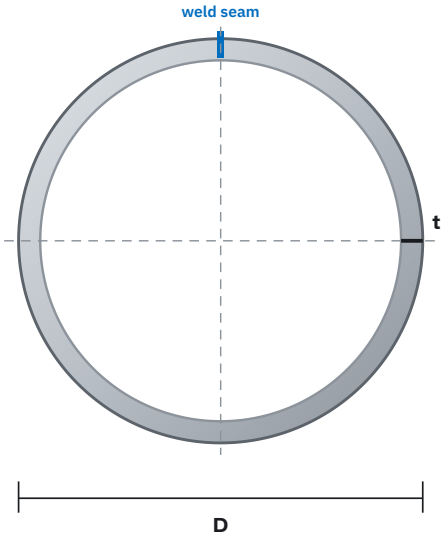
AISI / ASTM	EN no.	EN steel name	UNS
304	1.4301	X5CrNi18-10	S30400
304L	1.4307	X2CrNi18-9	S30403
316	1.4401	X5CrNiMo17-12-2	S31600
316L	1.4404	X2CrNiMo17-12-2	S31603
316Ti	1.4571	X6CrNiMoTi17-12-2	S31635
321	1.4541	X6CrNiTi18-10	S32100

Note			
201	—	—	200 series · Cr-Mn-Ni
201J1	—	—	200 series · manufacturer designation
201J3	—	—	200 series · manufacturer designation
201J4	—	—	200 series · manufacturer designation
204	—	—	200 series · manufacturer designation
2205	1.4462	X2CrNiMoN22-5-3	Duplex · special production

Grade names are the same as written in the inspection certificates: AISI / ASTM name, EN material number and EN steel name. No published EN equivalent exists for 201J1, 201J3, 201J4 and 204; the composition is given by the manufacturer's analysis and the material certificate. Requests for sizes, wall thicknesses, surfaces and lengths outside the table are evaluated.

RT-01 03 · PRODUCT FAMILY

Stainless steel tube



Welded stainless steel tubes produced by TIG and laser welding and bright annealed in-line. For process, food, construction and decorative applications.

TECHNICAL SPECIFICATIONS ·

Outside diameter (D)	Ø6–323.9 mm · Ø355.6 and Ø406.4 project-based
Wall thickness (t)	0.5–8.0 mm (standard table)
Length	1,500–24,000 mm · length tolerance –0 / +5 mm
Welding method	TIG and computer-controlled laser welding · weld seam flattening
Heat treatment	Fully automatic, in-line bright annealing
Test	Eddy current in-line · hydrostatic test on a sample tube
Tolerance class	ISO 1127 D4 / T3 · diameter ±0.5% (at least ±0.1 mm) · wall ±10% (at least ±0.2 mm)
Test category	TC1 or TC2 (EN 10217-7), on request
Surface	180 · 240 · 320 · 400 · 500 · 600 grit · custom surface on request
Material grades	304 · 304L · 316 · 316L · 316Ti · 321 · 201 · 201J1 · 201J3 · 201J4 · 204 · Duplex 2205 (1.4462, special production)
Inspection certificate	EN 10204 3.1 · 3.2 on request

STANDARDS ·

EN 10217-7 · EN 10357 · EN 10296-2 · ASTM A312 · ASTM A270 · ASTM A269 · ASTM A554 · EN ISO 1127

The product standard is stated in the order; marking and the inspection certificate are issued according to this standard. See p. 42 for selection.

Specify in the order

1. Product standard (e.g. EN 10217-7, EN 10357, ASTM A312)
2. Material grade (AISI and EN no.)
3. Outside diameter × wall (or NPS + schedule)
4. Length and length tolerance
5. Surface: line finish or grit
6. Test category: TC1 / TC2
7. Inspection certificate: EN 10204 3.1 / 3.2
8. Quantity: metres, pieces or tonnes

WEIGHT · EN
Metric sizes, ISO 1127
s. 23

FOOD SERIES
EN 10357 A · B · C · D
s. 26

NPS AND SCHEDULE
ASTM A312 · SCH 5S / 10S / 40S
s. 27

PRESSURE
Working pressures
s. 31

RT-01 · SIZE AND WEIGHT · EN ISO 1127 · 1 / 3

Tube weight table · Ø6–35 mm

kg/m
theoretical weight · ρ = 8 kg/dm³

RT-01 · Welded stainless round tube

Welded stainless steel round tube

SIZE STANDARD
EN ISO 1127
EN 10217-7 · EN 10296-2 TUBES

D mm	DN OD inch	Wall thickness t (mm)									
		0.8	1	1.2	1.5	1.6	2	2.5	2.6	3	3.2
6			0.126								
8		0.145	0.176								
10		0.185	0.226	0.265	0.320						
12		0.225	0.276	0.326	0.396	0.418	0.503				
12.7	OD ½″	0.239	0.294	0.347	0.422	0.446					
14		0.265	0.327	0.386	0.471	0.499	0.603				
15		0.286	0.352	0.416	0.509	0.539	0.653				
16		0.306	0.377	0.446	0.547	0.579	0.704				
17.2	DN10	0.330	0.407	0.483	0.592	0.627	0.764	0.924	0.954	1.071	
18		0.346	0.427	0.507	0.622	0.659	0.804	0.974	1.006	1.131	
19		0.366	0.452	0.537	0.660	0.700	0.855	1.037	1.072	1.206	
19.05	OD ¾″	0.367	0.454	0.538	0.662	0.702	0.857	1.040	1.075	1.210	
20		0.386	0.478	0.567	0.697	0.740	0.905	1.100	1.137	1.282	
21.3	DN15	0.412	0.510	0.606	0.746	0.792	0.970	1.181	1.222	1.380	
22		0.426	0.528	0.627	0.773	0.820	1.005	1.225	1.268	1.433	
23		0.446	0.553	0.657	0.811	0.861	1.056	1.288	1.333	1.508	
24		0.466	0.578	0.688	0.848	0.901	1.106	1.351	1.398	1.583	
25		0.487	0.603	0.718	0.886	0.941	1.156	1.414	1.464	1.659	
25.4	OD 1″	0.495	0.613	0.730	0.901	0.957	1.176	1.439	1.490	1.689	
26.9	DN20	0.525	0.651	0.775	0.958	1.017	1.252	1.533	1.588	1.802	
28		0.547	0.679	0.808	0.999	1.062	1.307	1.602	1.660	1.885	
29		0.567	0.704	0.838	1.037	1.102	1.357	1.665	1.725	1.960	
30		0.587	0.729	0.869	1.074	1.142	1.407	1.728	1.790	2.036	
31.8	OD 1¼″	0.623	0.774	0.923	1.142	1.214	1.498	1.841	1.908	2.171	
32		0.627	0.779	0.929	1.150	1.222	1.508	1.854	1.921	2.187	
33		0.647	0.804	0.959	1.188	1.263	1.558	1.916	1.986	2.262	
33.7	DN25	0.661	0.822	0.980	1.214	1.291	1.593	1.960	2.032	2.315	2.453
34		0.668	0.829	0.989	1.225	1.303	1.608	1.979	2.052	2.337	2.477
35		0.688	0.855	1.019	1.263	1.343	1.659	2.042	2.117	2.413	2.558

Calculation: kg/m = (D − t) × t × 0.02513 (ERKINOX calculation basis, ρ = 8 kg/dm³).

Empty cell: a combination not in the standard programme; you can request a quotation.

DN / OD inch: EN 10217-7 nominal diameter or outside diameter in inches (OD 2″ = 50.8 mm). Food series p. 26, NPS and schedule p. 27.

RT-01 · SIZE AND WEIGHT · EN ISO 1127 · 2 / 3

Tube weight table · Ø38–88.9 mm

kg/m
theoretical weight · ρ = 8 kg/dm³

RT-01 · Welded stainless round tube

Welded stainless steel round tube

SIZE STANDARD
EN ISO 1127
EN 10217-7 · EN 10296-2 TUBES

D mm	DN OD inch	Wall thickness t (mm)												
		0.8	1	1.2	1.5	1.6	2	2.5	2.6	3	3.2	3.6	4	5
38		0.748	0.930	1.110	1.376	1.464	1.810	2.231	2.313	2.639	2.799	3.112	3.418	
40		0.788	0.980	1.170	1.451	1.544	1.910	2.356	2.444	2.790	2.960	3.293	3.619	
41			1.005	1.200	1.489	1.584	1.960	2.419	2.509	2.865	3.040	3.384	3.720	
42			1.030	1.230	1.527	1.625	2.011	2.482	2.575	2.941	3.120	3.474	3.820	
42.4	DN32		1.040	1.243	1.542	1.641	2.031	2.507	2.601	2.971	3.153	3.511	3.860	
43			1.056	1.261	1.565	1.665	2.061	2.545	2.640	3.016	3.201	3.565	3.921	
44.5			1.093	1.306	1.621	1.725	2.136	2.639	2.738	3.129	3.322	3.701	4.072	
45			1.106	1.321	1.640	1.745	2.161	2.670	2.771	3.167	3.362	3.746	4.122	
48			1.181	1.411	1.753	1.866	2.312	2.859	2.967	3.393	3.603	4.017	4.423	
48.3	DN40		1.189	1.421	1.764	1.878	2.327	2.878	2.986	3.416	3.627	4.044	4.454	
50			1.232	1.472	1.828	1.946	2.413	2.985	3.097	3.544	3.764	4.198	4.624	
50.8	OD 2″		1.252	1.496	1.859	1.978	2.453	3.035	3.150	3.604	3.828	4.271	4.705	
51			1.257	1.502	1.866	1.986	2.463	3.047	3.163	3.619	3.844	4.289	4.725	
52			1.282	1.532	1.904	2.027	2.513	3.110	3.228	3.695	3.925	4.379	4.825	
53			1.307	1.562	1.942	2.067	2.564	3.173	3.293	3.770	4.005	4.470	4.926	
54			1.332	1.592	1.979	2.107	2.614	3.236	3.359	3.845	4.086	4.560	5.027	
55			1.357	1.623	2.017	2.147	2.664	3.299	3.424	3.921	4.166	4.651	5.127	
57			1.407	1.683	2.092	2.228	2.765	3.424	3.555	4.072	4.327	4.832	5.328	
60.3	DN50		1.490	1.782	2.217	2.360	2.930	3.632	3.770	4.320	4.592	5.130	5.660	6.949
63.5	OD 2½″		1.571	1.879	2.337	2.489	3.091	3.833	3.980	4.562	4.850	5.420	5.982	7.351
70			1.734	2.075	2.582	2.751	3.418	4.241	4.404	5.052	5.372	6.008	6.635	8.168
73			1.810	2.165	2.695	2.871	3.569	4.430	4.600	5.278	5.614	6.279	6.937	8.545
76.1	DN65		1.887	2.259	2.812	2.996	3.725	4.624	4.803	5.512	5.863	6.560	7.248	8.935
80			1.985	2.377	2.959	3.153	3.921	4.869	5.058	5.806	6.177	6.913	7.640	9.425
83			2.061	2.467	3.072	3.273	4.072	5.058	5.254	6.032	6.418	7.184	7.942	9.802
84			2.086	2.497	3.110	3.314	4.122	5.121	5.319	6.107	6.498	7.274	8.042	9.927
85			2.111	2.527	3.148	3.354	4.172	5.184	5.384	6.183	6.579	7.365	8.143	10.053
88.9	DN80			2.645	3.295	3.511	4.368	5.429	5.639	6.477	6.892	7.718	8.535	10.543

Calculation: kg/m = (D − t) × t × 0.02513 (ERKINOX calculation basis, ρ = 8 kg/dm³).

Empty cell: a combination not in the standard programme; you can request a quotation.

DN / OD inch: EN 10217-7 nominal diameter or outside diameter in inches (OD 2″ = 50.8 mm). Food series p. 26, NPS and schedule p. 27.

RT-01 · SIZE AND WEIGHT · EN ISO 1127 · 3 / 3

Tube weight table · Ø95–406.4 mm

kg/m
theoretical weight · ρ = 8 kg/dm³

RT-01 · Welded stainless round tube

Welded stainless steel round tube

SIZE STANDARD
EN ISO 1127
EN 10217-7 · EN 10296-2 TUBES

D mm	DN OD inch	Wall thickness t (mm)										
		1.5	1.6	2	2.5	2.6	3	3.2	3.6	4	5	6
95		3.525	3.756	4.675	5.812	6.038	6.937	7.383	8.270	9.148	11.310	
101.6	OD 4"	3.774	4.021	5.006	6.227	6.469	7.434	7.914	8.867	9.812	12.139	
103		3.826	4.078	5.077	6.315	6.561	7.540	8.026	8.994	9.953	12.315	
104		3.864	4.118	5.127	6.377	6.626	7.615	8.107	9.084	10.053	12.441	
108		4.015	4.279	5.328	6.629	6.887	7.917	8.429	9.446	10.455	12.943	
114.3	DN100	4.252	4.532	5.645	7.025	7.299	8.392	8.935	10.016	11.089	13.735	16.331
127	OD 5"	4.731	5.043	6.283	7.823	8.129	9.349	9.957	11.165	12.365	15.331	18.246
129		4.807	5.123	6.384	7.948	8.260	9.500	10.117	11.346	12.566	15.582	18.548
139.7	DN125	5.210	5.553	6.922	8.621	8.959	10.307	10.978	12.314	13.642	16.927	20.161
153		5.711	6.088	7.590	9.456	9.828	11.310	12.048	13.517	14.979	18.598	22.167
154		5.749	6.128	7.640	9.519	9.893	11.385	12.128	13.608	15.080	18.724	22.318
155		5.787	6.169	7.691	9.582	9.959	11.461	12.208	13.698	15.180	18.850	22.469
156		5.825	6.209	7.741	9.645	10.024	11.536	12.289	13.789	15.281	18.975	22.619
159		5.938	6.329	7.892	9.833	10.220	11.762	12.530	14.060	15.582	19.352	23.072
168.3	DN150	6.288	6.703	8.359	10.418	10.828	12.463	13.278	14.902	16.517	20.521	24.474
204		7.634	8.139	10.154	12.661	13.161	15.155	16.149	18.132	20.106	25.007	29.858
205		7.672	8.179	10.204	12.723	13.226	15.230	16.230	18.222	20.207	25.133	30.008
206				10.254	12.786	13.291	15.306	16.310	18.313	20.307	25.258	30.159
219.1	DN200			10.913	13.609	14.147	16.294	17.364	19.498	21.624	26.905	32.135
254	OD 10"			12.667	15.802	16.428	18.925	20.171	22.656	25.133	31.290	37.398
255				12.717	15.865	16.493	19.000	20.251	22.746	25.233	31.416	37.548
256				12.767	15.928	16.558	19.076	20.331	22.837	25.334	31.542	37.699
273	DN250			13.622	16.996	17.669	20.358	21.699	24.375	27.043	33.678	40.263
304				15.180	18.944	19.695	22.695	24.192	27.180	30.159	37.573	44.937
306				15.281	19.069	19.826	22.846	24.353	27.361	30.360	37.825	45.239
323.9	DN300			16.180	20.194	20.995	24.195	25.792	28.980	32.160	40.074	47.938
355.6*	DN350			17.774	22.186	23.067	26.585	28.342	31.848	35.347	44.058	52.718
406.4*	DN400			20.327	25.378	26.386	30.416	32.427	36.444	40.454	50.441	60.379

Calculation: kg/m = (D − t) × t × 0.02513 (ERKINOX calculation basis, ρ = 8 kg/dm³).

Empty cell: a combination not in the standard programme; you can request a quotation.

DN / OD inch: EN 10217-7 nominal diameter or outside diameter in inches (OD 2" = 50.8 mm). Food series p. 26, NPS and schedule p. 27.

***** Ø355.6 and Ø406.4 are project-based; the production scope is confirmed at the quotation stage.

RT-01 · FOOD AND PROCESS SERIES · EN 10357

Food and process tube · EN 10357

kg/m
theoretical weight · ρ = 8 kg/dm³

RT-01 · Food, beverage, pharmaceutical and chemical installations

Hygienic tubes for food, beverage, pharmaceutical and chemical lines

STANDARD
EN 10357
GRADE · 1.4301 · 1.4307 · 1.4404

Series A

Preferred series · DIN 11850 series 2 dimensions

D, mm	DN / OD	t, mm	Inside diameter, mm	kg/m	m / tonne
13	DN10	1.5	10.00	0.434	2,307
19	DN15	1.5	16.00	0.660	1,516
23	DN20	1.5	20.00	0.811	1,234
29	DN25	1.5	26.00	1.037	965
35	DN32	1.5	32.00	1.263	792
41	DN40	1.5	38.00	1.489	672
53	DN50	1.5	50.00	1.942	515
70	DN65	2	66.00	3.418	293
85	DN80	2	81.00	4.172	240
104	DN100	2	100.00	5.127	195
129	DN125	2	125.00	6.384	157
154	DN150	2	150.00	7.640	131
204	DN200	2	200.00	10.154	98

Series B

Thin-wall series · DIN 11850 series 1 dimensions

D, mm	DN / OD	t, mm	Inside diameter, mm	kg/m	m / tonne
12	DN10	1	10.00	0.276	3,617
18	DN15	1	16.00	0.427	2,341
22	DN20	1	20.00	0.528	1,895
28	DN25	1	26.00	0.679	1,474
34	DN32	1	32.00	0.829	1,206
40	DN40	1	38.00	0.980	1,020
52	DN50	1	50.00	1.282	780

Series C

ISO 1127 outside diameters

D, mm	DN / OD	t, mm	Inside diameter, mm	kg/m	m / tonne
17.2	DN10	1.6	14.00	0.627	1,594
21.3	DN15	1.6	18.10	0.792	1,262
26.9	DN20	1.6	23.70	1.017	983
33.7	DN25	2	29.70	1.593	628
42.4	DN32	2	38.40	2.031	492
48.3	DN40	2	44.30	2.327	430
60.3	DN50	2	56.30	2.930	341
76.1	DN65	2	72.10	3.725	268
88.9	DN80	2	84.90	4.368	229
114.3	DN100	2	110.30	5.645	177

Series D

Inch and special outside diameters

D, mm	DN / OD	t, mm	Inside diameter, mm	kg/m	m / tonne
25		1.2	22.60	0.718	1,393
25.4	OD 1″	1.6	22.20	0.957	1,045
32		1.2	29.60	0.929	1,077
38		1.2	35.60	1.110	901
38.1	OD 1½″	1.5	35.10	1.380	725
38.1	OD 1½″	1.6	34.90	1.468	681
50.8	OD 2″	1.5	47.80	1.859	538
50.8	OD 2″	1.6	47.60	1.978	505
51		1.2	48.60	1.502	666
63.5	OD 2½″	1.5	60.50	2.337	428
63.5	OD 2½″	1.6	60.30	2.489	402
76.1		1.5	73.10	2.812	356
76.1		1.6	72.90	2.996	334
76.1		2	72.10	3.725	268
101.6	OD 4″	2	97.60	5.006	200

Tolerances: outside diameter tolerance includes ovality. Wall tolerance is ±0.15 mm (1.5–1.6 mm) and ±0.20 mm (2.0 mm) in the A and C series, ±0.10 mm in the B series, and ±10% in the D series. Straightness 0.0015 × L, at most 2 mm/m.

Sizes outside the table: outside diameter EN ISO 1127 D4 (Ø < 90 mm) or D3 (Ø > 90 mm), wall ±10%. Grades: EN 10217-7: austenitic and austenitic-ferritic grades; the most common are 1.4301, 1.4307, 1.4404, 1.4432 and 1.4435.

Calculation: kg/m = (D − t) × t × 0.02513; m/tonne = 1000 / (kg/m). Surface roughness (Ra) and inner-surface requirements are defined in the order.

RT-01 · ASTM A312 · NPS AND SCHEDULE

ASTM A312 · NPS, DN and schedule wall thicknesses

Nominal pipe size (NPS), DN and schedule wall thicknesses for buyers working to ASTM A312. The last column gives the corresponding outside diameter in the ERKINOX metric tables. Weights for each schedule are on the following pages.

NPS · ASME B36.19M stainless pipe sizes

Stainless steel pipe dimensions

PRODUCT STANDARD
ASTM A312 / A312M
ASME B36.19M

NPS	DN	Outside diameter mm	Outside diameter inch	SCH 5S mm	SCH 10S mm	SCH 40S mm	SCH 80S mm	ERKINOX Ø mm
1/8″	6	**10.3**	0.405	–	1.24	1.73	2.41	–
1/4″	8	**13.7**	0.540	–	1.65	2.24	3.02	–
3/8″	10	**17.1**	0.675	–	1.65	2.31	3.20	17.2 (EN)
1/2″	15	**21.3**	0.840	1.65	2.11	2.77	3.73	21.3
3/4″	20	**26.7**	1.050	1.65	2.11	2.87	3.91	26.9 (EN)
1″	25	**33.4**	1.315	1.65	2.77	3.38	4.55	33.7 (EN)
1 1/4″	32	**42.2**	1.660	1.65	2.77	3.56	4.85	42.4 (EN)
1 1/2″	40	**48.3**	1.900	1.65	2.77	3.68	5.08	48.3
2″	50	**60.3**	2.375	1.65	2.77	3.91	5.54	60.3
2 1/2″	65	**73.0**	2.875	2.11	3.05	5.16	7.01	73 · 76.1 (EN)
3″	80	**88.9**	3.500	2.11	3.05	5.49	7.62	88.9
3 1/2″	90	**101.6**	4.000	2.11	3.05	5.74	8.08	101.6
4″	100	**114.3**	4.500	2.11	3.05	6.02	8.56	114.3
5″	125	**141.3**	5.563	2.77	3.40	6.55	9.53	139.7 (EN)
6″	150	**168.3**	6.625	2.77	3.40	7.11	10.97	168.3
8″	200	**219.1**	8.625	2.77	3.76	8.18	12.70	219.1
10″	250	**273.0**	10.750	3.40	4.19	9.27	12.70	273
12″	300	**323.8**	12.750	3.96	4.57	9.53	12.70	323.9 (EN)

EN and ASME diameters

EN 10217-7 / ISO 1127 diameters differ from ASME in some sizes (e.g. 26.9 / 26.7 mm; 139.7 / 141.3 mm). State the correct series in the order for fittings and weld preparation.

Schedule and production range

SCH 5S and 10S wall thicknesses are within ERKINOX's standard range of 0.5–8.0 mm. Sizes of 40S above 8 mm, and 80S, are evaluated at the quotation stage.

Weight tables

SCH 5S · p. 28 SCH 10S · p. 29 SCH 40S · p. 30
Weights are given on the ERKINOX calculation basis (ρ = 8 kg/dm³).

RT-01 · ASTM A312 · ASME B36.19M · SCH 5S

SCH 5S weight table

kg/m
theoretical weight · ρ = 8 kg/dm³

SCH 5S · Welded stainless pipe

Welded stainless steel pipe

PRODUCT STANDARD
ASTM A312 / A312M
SIZE · ASME B36.19M

NPS	DN	Outside diameter mm	Outside diameter inch	Wall mm	Wall inch	Inside diameter mm	Weight kg/m	Weight lb/ft	m / tonne	6 m length kg
1/2″	15	21.3	0.840	1.65	0.065	18.0	0.815	0.548	1,227	4.89
3/4″	20	26.7	1.050	1.65	0.065	23.4	1.039	0.698	963	6.23
1″	25	33.4	1.315	1.65	0.065	30.1	1.317	0.885	760	7.90
1 1/4″	32	42.2	1.660	1.65	0.065	38.9	1.682	1.130	595	10.09
1 1/2″	40	48.3	1.900	1.65	0.065	45.0	1.935	1.300	517	11.61
2″	50	60.3	2.375	1.65	0.065	57.0	2.432	1.634	411	14.59
2 1/2″	65	73.0	2.875	2.11	0.083	68.8	3.759	2.526	266	22.56
3″	80	88.9	3.500	2.11	0.083	84.7	4.602	3.093	217	27.61
3 1/2″	90	101.6	4.000	2.11	0.083	97.4	5.276	3.545	190	31.66
4″	100	114.3	4.500	2.11	0.083	110.1	5.949	3.998	168	35.70
5″	125	141.3	5.563	2.77	0.109	135.8	9.644	6.481	104	57.86
6″	150	168.3	6.625	2.77	0.109	162.8	11.524	7.744	87	69.14
8″	200	219.1	8.625	2.77	0.109	213.6	15.060	10.120	66	90.36
10″	250	273.0	10.750	3.40	0.134	266.2	23.038	15.481	43	138.23
12″	300	323.8	12.750	3.96	0.156	315.9	31.832	21.390	31	190.99

Same NPS, different wall · 2″ (Ø60.3 mm) · to scale



SCH 5S
t = 1.65 mm

SCH 10S
t = 2.77 mm

SCH 40S
t = 3.91 mm

SCH 80S
t = 5.54 mm

SCH 5S · thin-wall pipe

Used in low-pressure process, food and water lines, and in installations where weight and cost matter. Assess wall thickness together when choosing weld preparation and fittings.

Calculation: kg/m = (D − t) × t × 0.02513 (ρ = 8 kg/dm³); lb/ft = kg/m × 0.672; m/tonne = 1000 / (kg/m). Weights in ASME tables may be based on a different density.

Production range: all wall thicknesses in the table are within ERKINOX's standard range of 0.5–8.0 mm.

Size note: The ASME diameter may differ from the EN diameter; correspondences are on p. 27. In the order, write NPS and schedule together (e.g. 2″ SCH 10S).

RT-01 · ASTM A312 · ASME B36.19M · SCH 10S

SCH 10S weight table

kg/m
theoretical weight · ρ = 8 kg/dm³

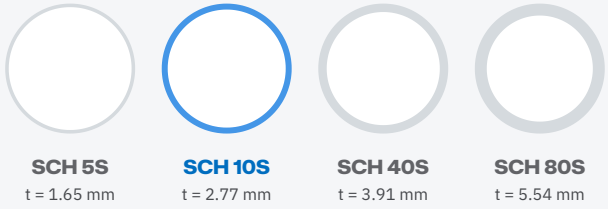
SCH 10S · Welded stainless pipe

Welded stainless steel pipe

PRODUCT STANDARD
ASTM A312 / A312M
SIZE · ASME B36.19M

NPS	DN	Outside diameter mm	Outside diameter inch	Wall mm	Wall inch	Inside diameter mm	Weight kg/m	Weight lb/ft	m / tonne	6 m length kg
1/8″	6	**10.3**	0.405	**1.24**	0.049	7.8	**0.282**	0.190	3,542	1.69
1/4″	8	**13.7**	0.540	**1.65**	0.065	10.4	**0.500**	0.336	2,001	3.00
3/8″	10	**17.1**	0.675	**1.65**	0.065	13.8	**0.641**	0.431	1,561	3.84
1/2″	15	**21.3**	0.840	**2.11**	0.083	17.1	**1.018**	0.684	983	6.11
3/4″	20	**26.7**	1.050	**2.11**	0.083	22.5	**1.304**	0.876	767	7.82
1″	25	**33.4**	1.315	**2.77**	0.109	27.9	**2.132**	1.433	469	12.79
1 1/4″	32	**42.2**	1.660	**2.77**	0.109	36.7	**2.745**	1.845	364	16.47
1 1/2″	40	**48.3**	1.900	**2.77**	0.109	42.8	**3.170**	2.130	315	19.02
2″	50	**60.3**	2.375	**2.77**	0.109	54.8	**4.005**	2.691	250	24.03
2 1/2″	65	**73.0**	2.875	**3.05**	0.120	66.9	**5.362**	3.603	186	32.17
3″	80	**88.9**	3.500	**3.05**	0.120	82.8	**6.581**	4.422	152	39.48
3 1/2″	90	**101.6**	4.000	**3.05**	0.120	95.5	**7.554**	5.076	132	45.33
4″	100	**114.3**	4.500	**3.05**	0.120	108.2	**8.528**	5.730	117	51.17
5″	125	**141.3**	5.563	**3.40**	0.134	134.5	**11.784**	7.918	85	70.70
6″	150	**168.3**	6.625	**3.40**	0.134	161.5	**14.091**	9.469	71	84.55
8″	200	**219.1**	8.625	**3.76**	0.148	211.6	**20.349**	13.674	49	122.10
10″	250	**273.0**	10.750	**4.19**	0.165	264.6	**28.307**	19.022	35	169.84
12″	300	**323.8**	12.750	**4.57**	0.180	314.7	**36.666**	24.638	27	219.99

Same NPS, different wall · 2″ (Ø60.3 mm) · to scale



SCH 5S
t = 1.65 mm

SCH 10S
t = 2.77 mm

SCH 40S
t = 3.91 mm

SCH 80S
t = 5.54 mm

SCH 10S · the most common process series

The most frequently requested series in chemical, energy and general process lines. In applications requiring pressure and corrosion allowance, it is selected together with the design calculation.

Calculation: kg/m = (D − t) × t × 0.02513 (ρ = 8 kg/dm³); lb/ft = kg/m × 0.672; m/tonne = 1000 / (kg/m). Weights in ASME tables may be based on a different density.

Production range: all wall thicknesses in the table are within ERKINOX's standard range of 0.5–8.0 mm.

Size note: The ASME diameter may differ from the EN diameter; correspondences are on p. 27. In the order, write NPS and schedule together (e.g. 2″ SCH 10S).

RT-01 · ASTM A312 · ASME B36.19M · SCH 40S

SCH 40S weight table

kg/m
theoretical weight · ρ = 8 kg/dm³

SCH 40S · Welded stainless pipe

Welded stainless steel pipe

PRODUCT STANDARD
ASTM A312 / A312M
SIZE · ASME B36.19M

NPS	DN	Outside diameter mm	Outside diameter inch	Wall mm	Wall inch	Inside diameter mm	Weight kg/m	Weight lb/ft	m / tonne	6 m length kg
1/8″	6	**10.3**	0.405	**1.73**	0.068	6.8	**0.373**	0.250	2,684	2.24
1/4″	8	**13.7**	0.540	**2.24**	0.088	9.2	**0.645**	0.434	1,550	3.87
3/8″	10	**17.1**	0.675	**2.31**	0.091	12.5	**0.859**	0.577	1,165	5.15
1/2″	15	**21.3**	0.840	**2.77**	0.109	15.8	**1.290**	0.867	775	7.74
3/4″	20	**26.7**	1.050	**2.87**	0.113	21.0	**1.719**	1.155	582	10.31
1″	25	**33.4**	1.315	**3.38**	0.133	26.6	**2.550**	1.714	392	15.30
1 1/4″	32	**42.2**	1.660	**3.56**	0.140	35.1	**3.457**	2.323	289	20.74
1 1/2″	40	**48.3**	1.900	**3.68**	0.145	40.9	**4.127**	2.773	242	24.76
2″	50	**60.3**	2.375	**3.91**	0.154	52.5	**5.541**	3.724	180	33.25
2 1/2″	65	**73.0**	2.875	**5.16**	0.203	62.7	**8.798**	5.912	114	52.79
3″	80	**88.9**	3.500	**5.49**	0.216	77.9	**11.509**	7.734	87	69.05
3 1/2″	90	**101.6**	4.000	**5.74**	0.226	90.1	**13.829**	9.293	72	82.97
4″	100	**114.3**	4.500	**6.02**	0.237	102.3	**16.383**	11.009	61	98.30
5″	125	**141.3**	5.563	**6.55**	0.258	128.2	**22.182**	14.906	45	133.09
6″	150	**168.3**	6.625	**7.11**	0.280	154.1	**28.804**	19.355	35	172.82
8″*	200	**219.1**	8.625	**8.18**	0.322	202.7	**43.362**	29.138	23	260.17
10″*	250	**273.0**	10.750	**9.27**	0.365	254.5	**61.444**	41.288	16	368.66
12″*	300	**323.8**	12.750	**9.53**	0.375	304.7	**75.272**	50.581	13	451.63

Same NPS, different wall · 2″ (Ø60.3 mm) · to scale



SCH 5S t = 1.65 mm
SCH 10S t = 2.77 mm
SCH 40S t = 3.91 mm
SCH 80S t = 5.54 mm

SCH 40S · thick-wall series

For lines requiring higher pressure and mechanical load. Wall thicknesses above 8 mm are outside the ERKINOX standard range; send your size with the quotation form.

Calculation: kg/m = (D − t) × t × 0.02513 (ρ = 8 kg/dm³); lb/ft = kg/m × 0.672; m/tonne = 1000 / (kg/m). Weights in ASME tables may be based on a different density.

***** Wall thickness is above the ERKINOX standard range (0.5–8.0 mm); the production scope is assessed at the quotation stage.

Size note: The ASME diameter may differ from the EN diameter; correspondences are on p. 27. In the order, write NPS and schedule together (e.g. 2″ SCH 10S).

RT-01 · WORKING PRESSURES

Stainless steel tube working pressures

Working pressures by outside diameter × wall thickness and temperature, in bar. Values are taken from the table published by ERKINOX; calculation basis AISI 304L, EN 10217-7, weld factor V = 1.

RT-01 · Working pressure (bar)

Working pressure, bar

BASIS
AISI 304L · EN 10217-7
V = 1 · LASER / TIG WELDING

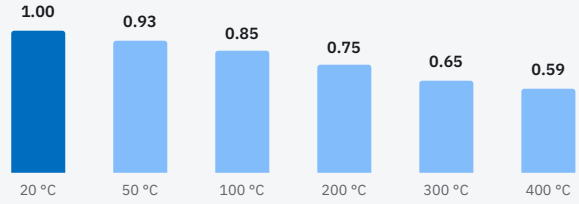
D × t mm	20 °C	50 °C	100 °C	200 °C	300 °C	400 °C
10 × 1	257	239	218	194	168	152
12 × 1	215	200	182	159	138	125
12 × 1.2	257	239	218	194	168	152
14 × 1	184	171	156	135	117	106
14 × 1.2	221	205	187	164	142	129
16 × 1	161	150	136	117	101	92
16 × 1.2	193	180	163	142	123	111
16 × 1.6	257	239	218	194	168	152
16 × 2	322	299	272	248	215	195
17.2 × 1	150	139	127	108	94	85
17.2 × 1.2	180	167	152	131	114	103
17.2 × 1.6	239	223	203	179	155	141
17.2 × 2	299	278	253	229	199	180
18 × 1	143	133	121	103	89	81
18 × 1.2	172	160	145	125	109	98
18 × 1.6	229	213	194	170	148	134
18 × 2	286	266	242	218	189	171
18 × 2.3	329	306	278	255	221	200
19.05 × 1	135	126	115	97	85	77
19.05 × 1.2	163	151	138	118	102	93
19.05 × 1.6	217	202	183	161	139	126
19.05 × 2	271	252	229	205	178	161
19.05 × 2.3	312	290	264	240	208	188

D × t mm	20 °C	50 °C	100 °C	200 °C	300 °C	400 °C
20 × 1	129	120	109	92	80	73
20 × 1.2	154	144	131	112	97	88
20 × 1.6	206	192	174	152	132	119
20 × 2	257	239	218	194	168	152
20 × 2.3	296	275	250	226	196	178
20 × 2.6	335	311	283	260	225	204
20 × 2.9	373	347	316	294	255	231
21.3 × 1	121	112	102	86	75	68
21.3 × 1.2	145	135	123	105	91	82
21.3 × 1.6	193	180	164	142	123	112
21.3 × 2	242	225	205	181	157	142
21.3 × 2.3	278	259	235	211	183	166
21.3 × 2.6	314	292	266	242	210	190
21.3 × 2.9	350	326	297	274	237	215
22 × 1	117	109	99	84	73	66
22 × 1.2	140	131	119	101	88	80
22 × 1.6	187	174	158	137	119	108
22 × 2	234	218	198	175	151	137
25 × 1	103	96	87	73	63	58
25 × 1.2	124	115	105	88	77	70
25 × 1.6	165	153	139	120	104	94
25 × 2	206	192	174	152	132	119

The ratio varies with D/t; use the table value for each size. Tubes with the same D/t ratio carry the same pressure value (e.g. 10 × 1 and 20 × 2). Wall thicknesses of 2.3 and 2.9 mm are not in the weight tables; they are assessed at the quotation stage.

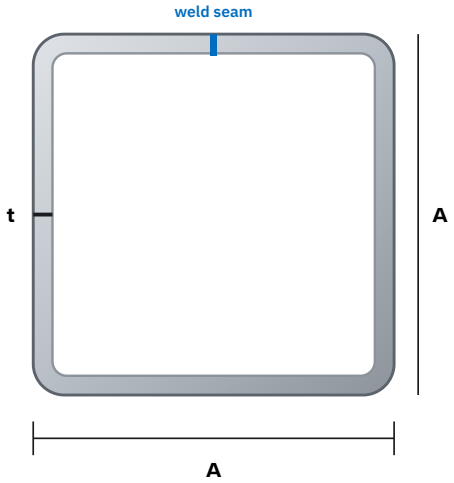
Values are for information; the relevant standard, corrosion allowance and safety factors must be the basis for design calculations. Consult our technical team for other sizes and grades.

Reduction with temperature · relative to 20 °C



SQ-02 03 · PRODUCT FAMILY

Stainless square profile



Welded stainless square profiles from 10 × 10 mm to 200 × 200 mm. For structural and decorative use, with clean corner geometry and 180–600 grit surface options.

TECHNICAL SPECIFICATIONS ·

Section (A × A)	10 × 10 – 200 × 200 mm
Wall thickness (t)	0.5–8.0 mm (standard table)
Length	1,500–24,000 mm · length tolerance –0 / +5 mm
Welding method	TIG and computer-controlled laser welding
Heat treatment	Fully automatic, in-line bright annealing
Test	Eddy current, during production
Tolerance	Section, corner radius, flatness and twist: ASTM A554 and the order specification
Surface	180 · 240 · 320 · 400 · 500 · 600 grit · custom surface on request
Material grades	304 · 304L · 316 · 316L · 316Ti · 321 · 201 · 201J1 · 201J3 · 201J4 · 204 · Duplex 2205 (1.4462, special production)
Inspection certificate	EN 10204 3.1 · 3.2 on request

STANDARDS ·

ASTM A554

Specify in the order

1. Product standard (ASTM A554 / specification)
2. Material grade (AISI and EN no.)
3. Section A × A × wall
4. Length and length tolerance
5. Surface: grit and brush direction
6. Corner radius requirement (if any)
7. Inspection certificate: EN 10204 3.1 / 3.2
8. Quantity: metres, pieces or tonnes

WEIGHT
Square profile table
s. 33

MARKING
Profile reading example
s. 17

SURFACE
180–600 grit
s. 41

GRADES
Chemical composition
s. 38

SQ-02 · SIZE AND WEIGHT

Square profile · 10 × 10 – 200 × 200 mm

kg/m
theoretical weight · ρ = 8 kg/dm³

SQ-02 · Welded stainless square profile

Welded stainless steel square tube

STANDARD
ASTM A554

A × A mm	Wall thickness t (mm)							
	1	1.2	1.5	2	2.5	3	4	5
10 × 10	0.295	0.348	0.424					
15 × 15	0.455	0.540	0.664	0.860				
16 × 16	0.487	0.579	0.712	0.924				
20 × 20	0.615	0.732	0.904	1.180				
25 × 25	0.775	0.924	1.144	1.500	1.844	2.175		
30 × 30	0.935	1.116	1.384	1.820	2.244	2.655		
35 × 35	1.095	1.308	1.624	2.141	2.644	3.136		
40 × 40	1.256	1.501	1.864	2.461	3.045	3.616	4.720	
45 × 45	1.416	1.693	2.105	2.781	3.445	4.096	5.361	
50 × 50		1.885	2.345	3.101	3.845	4.576	6.001	7.376
60 × 60			2.825	3.741	4.645	5.537	7.282	8.977
70 × 70			3.305	4.382	5.446	6.497	8.562	10.577
80 × 80			3.785	5.022	6.246	7.458	9.843	12.178
100 × 100			4.746	6.303	7.847	9.379	12.404	15.380
120 × 120				7.583	9.448	11.300	14.966	18.581
150 × 150				9.504	11.849	14.181	18.808	23.384
200 × 200				12.706	15.851	18.984	25.211	31.388

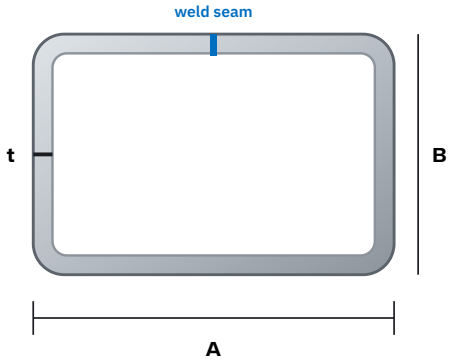
Calculation: kg/m = (2 × (A + B) / 3.14 – t) × t × 0.02513 (ERKINOX calculation basis, ρ = 8 kg/dm³).

Empty cell: a combination not in the standard programme; you can request a quotation.

Corner radius and section tolerances are according to ASTM A554 and the order specification.

RC-03 03 · PRODUCT FAMILY

Stainless rectangular profile



Welded stainless rectangular profiles in sections suited to the width and height required. For construction, industrial and design projects with different section and wall thickness needs.

TECHNICAL SPECIFICATIONS ·

Section (A × B)	20 × 10 – 200 × 100 mm
Wall thickness (t)	0.5–8.0 mm (standard table)
Length	1,500–24,000 mm · length tolerance –0 / +5 mm
Welding method	TIG and computer-controlled laser welding
Heat treatment	Fully automatic, in-line bright annealing
Test	Eddy current, during production
Tolerance	Section, corner radius, flatness and twist: ASTM A554 and the order specification
Surface	180 · 240 · 320 · 400 · 500 · 600 grit · custom surface on request
Material grades	304 · 304L · 316 · 316L · 316Ti · 321 · 201 · 201J1 · 201J3 · 201J4 · 204 · Duplex 2205 (1.4462, special production)
Inspection certificate	EN 10204 3.1 · 3.2 on request

STANDARDS ·

ASTM A554

Specify in the order

1. Product standard (ASTM A554 / specification)
2. Material grade (AISI and EN no.)
3. Section A × B × wall
4. Length and length tolerance
5. Surface: grit and brush direction
6. Corner radius requirement (if any)
7. Inspection certificate: EN 10204 3.1 / 3.2
8. Quantity: metres, pieces or tonnes

WEIGHT
Rectangular table
s. 35

MARKING
Profile reading example
s. 17

SURFACE
180–600 grit
s. 41

GRADES
Chemical composition
s. 38

RC-03 · SIZE AND WEIGHT · 1 / 2

Rectangular profile · 20 × 10 – 60 × 20 mm

kg/m
theoretical weight · ρ = 8 kg/dm³

RC-03 · Welded stainless rectangular profile

Welded stainless steel rectangular tube

STANDARD
ASTM A554

A × B mm	Wall thickness t (mm)					
	1	1.2	1.5	2	2.5	3
20 × 10	0.455	0.540	0.664			
20 × 15	0.535	0.636	0.784	1.020		
25 × 10	0.535	0.636	0.784	1.020		
25 × 15	0.615	0.732	0.904	1.180		
30 × 10	0.615	0.732	0.904	1.180		
30 × 15	0.695	0.828	1.024	1.340		
30 × 20	0.775	0.924	1.144	1.500	1.844	2.175
35 × 20	0.855	1.020	1.264	1.660	2.044	2.415
40 × 10	0.775	0.924	1.144	1.500	1.844	2.175
40 × 15	0.855	1.020	1.264	1.660	2.044	2.415
40 × 20	0.935	1.116	1.384	1.820	2.244	2.655
40 × 27	1.047	1.251	1.552	2.045	2.524	2.991
40 × 30	1.095	1.308	1.624	2.141	2.644	3.136
50 × 10	0.935	1.116	1.384	1.820	2.244	2.655
50 × 20	1.095	1.308	1.624	2.141	2.644	3.136
50 × 25	1.175	1.405	1.744	2.301	2.844	3.376
50 × 30	1.256	1.501	1.864	2.461	3.045	3.616
50 × 40	1.416	1.693	2.105	2.781	3.445	4.096
60 × 10	1.095	1.308	1.624	2.141	2.644	3.136
60 × 20	1.256	1.501	1.864	2.461	3.045	3.616

Calculation: kg/m = (2 × (A + B) / 3.14 – t) × t × 0.02513 (ERKINOX calculation basis, ρ = 8 kg/dm³).

Empty cell: a combination not in the standard programme; you can request a quotation.

Corner radius and section tolerances are according to ASTM A554 and the order specification.

RC-03 · SIZE AND WEIGHT · 2 / 2

Rectangular profile · 60 × 30 – 200 × 100 mm

kg/m
theoretical weight · ρ = 8 kg/dm³

RC-03 · Welded stainless rectangular profile

Welded stainless steel rectangular tube

STANDARD
ASTM A554

A × B mm	Wall thickness t (mm)							
	1	1.2	1.5	2	2.5	3	4	5
60 × 30	1.416	1.693	2.105	2.781	3.445	4.096		
60 × 40			2.345	3.101	3.845	4.576	6.001	
70 × 20			2.105	2.781	3.445	4.096	5.361	
70 × 40			2.585	3.421	4.245	5.056	6.641	
80 × 20			2.345	3.101	3.845	4.576	6.001	
80 × 30			2.585	3.421	4.245	5.056	6.641	
80 × 40			2.825	3.741	4.645	5.537	7.282	8.977
80 × 50			3.065	4.062	5.046	6.017	7.922	9.777
80 × 60			3.305	4.382	5.446	6.497	8.562	10.577
100 × 40			3.305	4.382	5.446	6.497	8.562	10.577
100 × 50			3.545	4.702	5.846	6.977	9.203	11.378
100 × 60			3.785	5.022	6.246	7.458	9.843	12.178
100 × 80			4.266	5.662	7.047	8.418	11.124	13.779
120 × 40			3.785	5.022	6.246	7.458	9.843	12.178
120 × 60			4.266	5.662	7.047	8.418	11.124	13.779
120 × 80			4.746	6.303	7.847	9.379	12.404	15.380
150 × 50				6.303	7.847	9.379	12.404	15.380
150 × 100				7.904	9.848	11.780	15.606	19.382
160 × 80				7.583	9.448	11.300	14.966	18.581
200 × 100				9.504	11.849	14.181	18.808	23.384

Calculation: kg/m = (2 × (A + B) / 3.14 – t) × t × 0.02513 (ERKINOX calculation basis, ρ = 8 kg/dm³).

Empty cell: a combination not in the standard programme; you can request a quotation.

Corner radius and section tolerances are according to ASTM A554 and the order specification.



04

Technical guide

Chemical composition	38
Mechanical properties	39
Grade selection flow	40
Surface options	41
Standard selection	42
Formulas and conversions	43
1:1 size templates	44

AISI 304 · 304L · 316 · 316L · 316TI · 321 · 2205 · EN 10217-7 · ISO 1127

04 · CHEMICAL COMPOSITION

The right material, the right solution.

Material selection is made together with the service environment, temperature, mechanical requirements and the product standard. Grade and certificate scope are assessed together with the size and processing request.

CHEMICAL COMPOSITION, % BY WEIGHT ·

AISI	EN no.	EN steel name	UNS	C	Si	Mn	Cr	Ni	Mo	Other	ρ kg/dm³
304	1.4301	X5CrNi18-10 Austenitic Cr-Ni	S30400	≤0.07	≤1.00	≤2.00	17.5–19.5	8.0–10.5	–	N ≤0.10	**7.90**
304L	1.4307	X2CrNi18-9 Austenitic Cr-Ni	S30403	≤0.030	≤1.00	≤2.00	17.5–19.5	8.0–10.5	–	N ≤0.10	**7.90**
316	1.4401	X5CrNiMo17-12-2 Austenitic Cr-Ni-Mo	S31600	≤0.07	≤1.00	≤2.00	16.5–18.5	10.0–13.0	2.00–2.50	N ≤0.10	**8.00**
316L	1.4404	X2CrNiMo17-12-2 Austenitic Cr-Ni-Mo	S31603	≤0.030	≤1.00	≤2.00	16.5–18.5	10.0–13.0	2.00–2.50	N ≤0.10	**8.00**
316Ti	1.4571	X6CrNiMoTi17-12-2 Austenitic, Ti-stabilised	S31635	≤0.08	≤1.00	≤2.00	16.5–18.5	10.5–13.5	2.00–2.50	Ti 5×C–0.70	**8.00**
321	1.4541	X6CrNiTi18-10 Austenitic, Ti-stabilised	S32100	≤0.08	≤1.00	≤2.00	17.0–19.0	9.0–12.0	–	Ti 5×C–0.70	**7.90**
2205	1.4462	X2CrNiMoN22-5-3 Duplex	S32205 / S31803	≤0.030	≤1.00	≤2.00	21.0–23.0	4.5–6.5	2.50–3.50	N 0.10–0.22	**7.80**
201	–	– Austenitic Cr-Mn	S20100	≤0.15	≤1.00	5.5–7.5	16.0–18.0	3.5–5.5	–	N ≤0.25	**7.80**

Limits EN 10088-2 / EN 10217-7 (ASTM A240 for 201) basis; single values are maximums. See the relevant standard for P and S limits and the full composition. No published EN equivalent exists for 201J1, 201J3, 201J4 and 204; the composition is given by the manufacturer's analysis and the material certificate. On request, different EN designations such as 1.4306 for 304L are assessed separately.

CALCULATION BASIS IN WEIGHT TABLES ·

All weight tables and formulas in the catalogue **specific gravity 8 kg/dm³** are prepared on this basis. For a closer value according to the density of the selected grade, multiply the table value by the factor below.

Grade	ρ (EN 10088-1)	Factor
304 · 304L · 321	7.90	**× 0.988**
316 · 316L · 316Ti	8.00	**× 1.000**
2205 · 201	7.80	**× 0.975**

Example: 304 · Ø42.4 × 1.5 mm → 1.542 × 0.988 = 1.523 kg/m.

Other grade requests

Requests for 309 / 310, 430 (1.4016, ferritic) and similar grades are assessed together with the product, standard and order quantity.

Duplex 2205

1.4462 (UNS S32205 / S31803) is special production; the welding procedure and inspection scope are defined separately in the order.

04 · MECHANICAL PROPERTIES

Strength, ductility and selection guide.

MECHANICAL PROPERTIES AT ROOM TEMPERATURE ·

Grade	Rp0.2 min. MPa	Rp1.0 min. MPa	Rm MPa	A min. % (longitudinal)	ASTM min. Rp0.2 / Rm, MPa
304 · 1.4301	195	230	500–700	40	A312 · 205 / 515
304L · 1.4307	180	215	460–680	40	A312 · 170 / 485
316 · 1.4401	205	240	510–710	40	A312 · 205 / 515
316L · 1.4404	190	225	490–690	40	A312 · 170 / 485
316Ti · 1.4571	210	245	500–730	35	A312 · 205 / 515
321 · 1.4541	180	215	460–680	35	A312 · 205 / 515
2205 · 1.4462	450	–	640–840	25	A790 · 450 / 620 (S31803) · 485 / 655 (S32205)

EN 10217-7, solution-annealed condition. Valid values are according to the product standard and the inspection certificate in the order.

GRADE SELECTION BY APPLICATION ·

Grade	Distinguishing feature	Typical use	Selection notes
201 · 200 series	Cr-Mn-N alloyed austenitic structure; low nickel content.	Interior profiles, furniture, household items.	Not recommended in corrosive and outdoor environments; lower grades (J1, J3, J4, 204) are confirmed in the order.
304	General-purpose Cr-Ni austenitic grade.	Architecture, food and kitchen equipment, general industry.	Chloride, temperature and cleaning conditions are decisive.
304L	Low-carbon (C ≤ 0.03%) option of the 304 family.	Welded process lines, tanks, equipment.	Reduces the risk of intergranular corrosion after welding.
316 / 316L	2–2.5% molybdenum; more resistant to chloride and pitting.	Chemical, food, pharmaceutical, marine and coastal applications.	316L is preferred in welded fabrication.
316Ti / 321	Titanium-stabilised; resistant to intergranular corrosion after welding and in the 450–850 °C range.	Exhaust, flue, hot process lines.	Operating temperature and temperature cycles are the basis.
2205 duplex	Austenitic-ferritic structure; roughly twice the yield strength.	Chemical tanks, oil and gas, seawater lines.	Special production; the welding procedure is defined separately.

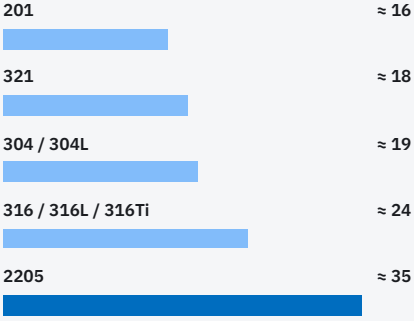
PHYSICAL PROPERTIES, 20 °C ·

Grade	Density kg/dm³	Young's modulus GPa	Expansion 20–100 °C 10^{-6}/K	Conductivity W/(m·K)	Specific heat J/(kg·K)	Magnetic (annealed)
304 · 304L	7.90	200	16.0	15	500	No
316 · 316L	8.00	200	16.0	15	500	No
316Ti	8.00	200	16.5	15	500	No
321	7.90	200	16.0	15	500	No
2205	7.80	200	13.0	15	500	Yes

EN 10088-1 typical values. Weight tables are based on 8 kg/dm³ (p. 38).

Pitting resistance · PREN

PREN = %Cr + 3.3 × %Mo + 16 × %N. Typical values; a higher value means higher resistance in chloride environments.



04 · GRADE SELECTION FLOW

Which grade should I choose?

Make a preliminary selection with four questions. Finalise the choice with our technical team, together with environment, temperature, load, welding and product standard.

1 Is the environment chloride-laden?

Seashore, swimming pool, salt water, chemical cleaning

YES → **316 / 316L** — PREN ≈ 24

Molybdenum-bearing; resistant to chloride and pitting.

Very high chloride or high strength → Duplex 2205

NO

2 Is there continuous high temperature?

Above about 450 °C; exhaust, flue, hot process

YES → **321 / 316Ti** — TI-STABILISED

Resistant to intergranular corrosion at high temperature.

NO

3 Outdoor, food or hygiene requirement?

Architectural façade, food and beverage, kitchen equipment

YES → **304 / 304L** — PREN ≈ 19

General purpose; architecture, food and industry.

304L in welded fabrication

NO

4 Dry interior with cost the priority?

Furniture, decoration, interior profiles

YES → **201 series** — PREN ≈ 16

Economical interior solution.

Not recommended in humid and corrosive environments

NO

304 General-purpose grade; the safe choice when in doubt.

Will it be welded?
Choose low-carbon L grades (304L, 316L); the risk of intergranular corrosion is reduced.

04 · SURFACE OPTIONS

Surface flexibility for looks and function.

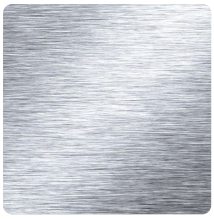
The surface is chosen according to appearance expectations, cleanability and service environment. Critical surface requirements are defined by sample, grain direction and Ra target.

FROM COARSE TO FINE: SAMPLE CARD ·

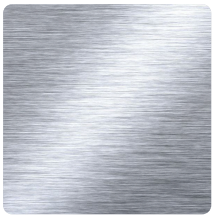
Texture images are representative; real samples are below.



180 grit
Satin
Ra ≈ 0.6–0.8 µm



240 grit
Satin
Ra ≈ 0.4–0.6 µm



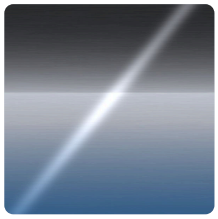
320 grit
Fine satin
Ra ≈ 0.25–0.4 µm



400 grit
Bright
Ra ≈ 0.15–0.25 µm



500 grit
Bright
Ra ≈ 0.1–0.15 µm



600 grit
Mirror
Ra ≤ 0.1 µm



REAL SAMPLES: SATIN AND BRIGHT



SATIN SURFACE

SURFACE TABLE ·

Surface	International equivalent	How it is obtained	Typical Ra µm	Use
Line finish · bright annealed	2B / BA strip (EN 2B / 2R)	Bright annealing in a protective atmosphere in-line; no additional mechanical treatment.	**0.1–0.5**	Process, industrial and pressure lines
Satin 180–240 grit	No.4 (≈ EN 2J / 2K)	Directional mechanical grinding; brushed texture.	**0.4–0.8**	Architecture, railings, white goods
Satin 320 grit	Fine No.4 (≈ EN 2K)	Finer grinding; soft, uniform texture.	**0.25–0.4**	Furniture, interiors, decoration
Bright 400–500 grit	No.7 (≈ EN 2P)	Mechanical polishing; reflective surface.	**0.1–0.25**	Decorative, lighting, furniture
Mirror 600 grit	No.8 · Mirror (≈ EN 2P)	Advanced polishing; pronounced reflection.	**≤ 0.1**	Prestige applications, shop windows, décor

Grit is not an Ra value. Ra values are indicative only; they vary with strip quality, polishing method and measurement direction. For orders with an Ra requirement, the target value and measurement method are set at the quotation stage. The 2B, BA, No.4 and mirror (No.8) equivalents refer to sheet surface designations.

04 · STANDARD SELECTION

Let's choose the right standard together.

The standard determines how the tube is produced, which tests it passes and which document it is delivered with. This page is designed to get you to the standard closest to your need in a few steps.

1 **First, check your specification.** If your project specification or drawing names a standard, take it as the basis; we produce, mark and certify to that standard. If there is no specification, start with the question below.

2 Where will your tube work?

EN 10217-7
ASTM A312
Pressure process lines

Pressurised fluid will pass through the tube

Process, steam, chemical and energy lines. For projects under the Pressure Equipment Directive we hold material manufacturer approval (AD 2000-W0); select the test category (TC1 / TC2) and the document type together.

EN 10357
ASTM A270
Hygienic · food and pharma

Will contact food, beverages or pharmaceuticals

Narrow-tolerance series for hygienic installations. State your inner surface and Ra target in the order; choose the size series (A, B, C, D) from p. 26.

ASTM A312
High-temperature and general corrosive lines

High temperature or general corrosive environment

ASTM A312: chemical composition, mechanical properties, heat treatment and test requirements of TP304, TP304L, TP316 and TP316L austenitic stainless tubes. Ordered with NPS and schedule sizes (p. 27–30); for the 304 vs 316 question, see p. 40.

EN 10296-2
ASTM A269
Industrial · mechanical

Machinery, construction or mechanical part

Chassis, load-bearing and moving parts, general engineering. Applications where no pressure is expected and size and machinability matter most.

ASTM A554
Decorative tube and profile

Visible, decorative or structural use

Railings, furniture, façades and shop windows. In this application the main choice is the surface: determine grit and brush direction from p. 41.

3 Add size, test and certificate

Size and tolerance	Test category	Inspection certificate
EN ISO 1127 D4 / T3	**TC1 · TC2**	**EN 10204 3.1 · 3.2**

If you are not sure, just tell us where it will be used.

Share the fluid, temperature, pressure and environment; we will recommend the standard and grade for you. When we make this decision together, you neither overpay nor end up with missing documents. **satis@erkinox.com.tr**

OTHER COMMON STANDARDS

EN 10216-5	Seamless tubes for pressure purposes
DIN 11850	Food tubes; EN 10357 took its place
ASTM A249	Welded tubes for heat exchangers and boilers
ASTM A358	Electric fusion welded (EFW) pipes
ASTM A790	Duplex seamless and welded pipes
EN 10219-2	Cold-formed welded structural hollow sections

For reference only; requests to these standards are assessed at the quotation stage.

04 · FORMULAS AND CONVERSIONS

Calculate the weight, convert the units.

All formulas and weight tables use **specific gravity 8 kg/dm³** as the basis: coefficient π × 8 / 1000 = 0.02513.

Round tube

kg/m = (D − t) × t × 0.02513

D: outside diameter (mm), t: wall thickness (mm).

Example: Ø42.4 × 1.5 mm → (42.4 − 1.5) × 1.5 × 0.02513 = **1.542 kg/m**

Square and rectangular profile

kg/m = (2(A + B) / 3.14 − t) × t × 0.02513

A, B: section sides (mm), t: wall thickness (mm). For a square profile A = B.

Example: 40 × 40 × 2 mm → (160 / 3.14 − 2) × 2 × 0.02513 = **2.461 kg/m**

Total weight

kg = kg/m × length (m) × quantity

Bundle metres

m = length (m) × quantity

Online calculator

For sizes outside the tables, use the weight calculator at www.erkinox.com.

UNIT CONVERSIONS ·

Length	1 inch = 25.4 mm	1 ft = 304.8 mm
Linear weight	1 kg/m = 0.672 lb/ft	1 lb/ft = 1.488 kg/m
Pressure	1 bar = 0.1 MPa = 14.504 psi	1 MPa = 10 bar
Tensile	1 MPa = 1 N/mm²	1 ksi = 6.895 MPa
Temperature	°F = °C × 1.8 + 32	°C = (°F − 32) / 1.8
Roughness	1 µm = 39.37 µin	1 µin = 0.0254 µm

WALL THICKNESS EQUIVALENTS ·

Gauge	inch	mm
BWG 20	0.035″	**0.89 mm**
BWG 18	0.049″	**1.24 mm**
BWG 16	0.065″	**1.65 mm**
BWG 14	0.083″	**2.11 mm**
BWG 13	0.095″	**2.41 mm**
BWG 12	0.109″	**2.77 mm**
BWG 11	0.120″	**3.05 mm**
BWG 10	0.134″	**3.40 mm**

BWG (Birmingham Wire Gauge) is often used in ASTM A554 decorative tube orders.

SAMPLE ORDER

Ø42.4 × 1.5 × 6000 mm
61 pcs

61 × 6 m = 366 m · 366 × 1.542 = **564 kg**

FROM TONNES TO METRES

m/tonne = 1000 / (kg/m)

For Ø42.4 × 1.5: 1000 / 1.542 ≈ **649 m**

FROM METRES TO PIECES

quantity = m / length (m)

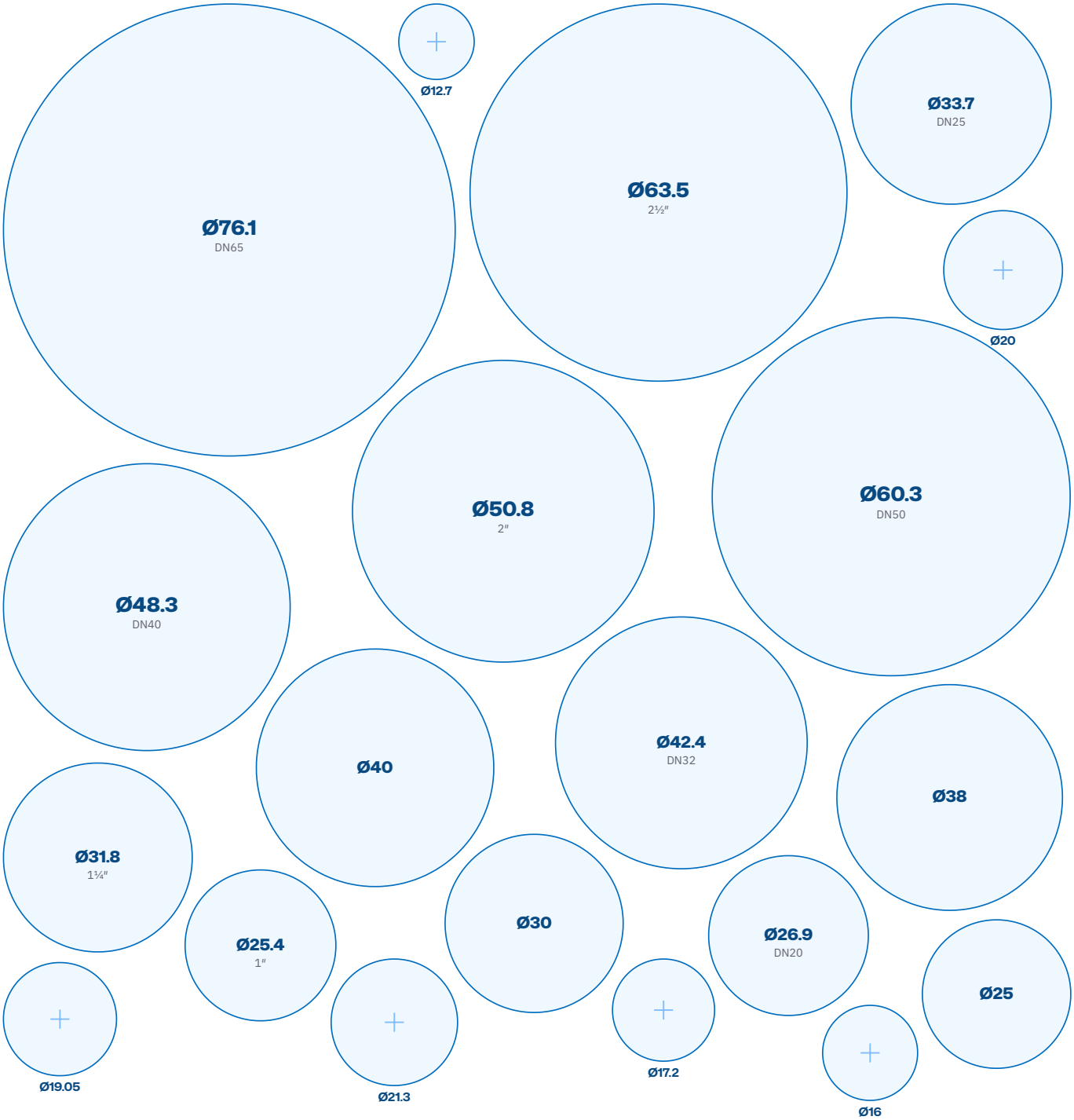
649 m, at 6 m length ≈ **109 pcs** (rounded up)

04 · 1:1 SIZE TEMPLATE

Place your tube on the page.

Print the PDF at **100% scale** (actual size, “fit to page” off). Place the tube end over the circles; the circle the outer edge fits exactly gives the outside diameter. For sizes above Ø76.1 use calipers; actual size is not shown on screen.

Check line: it must measure exactly **100 mm** when printed.



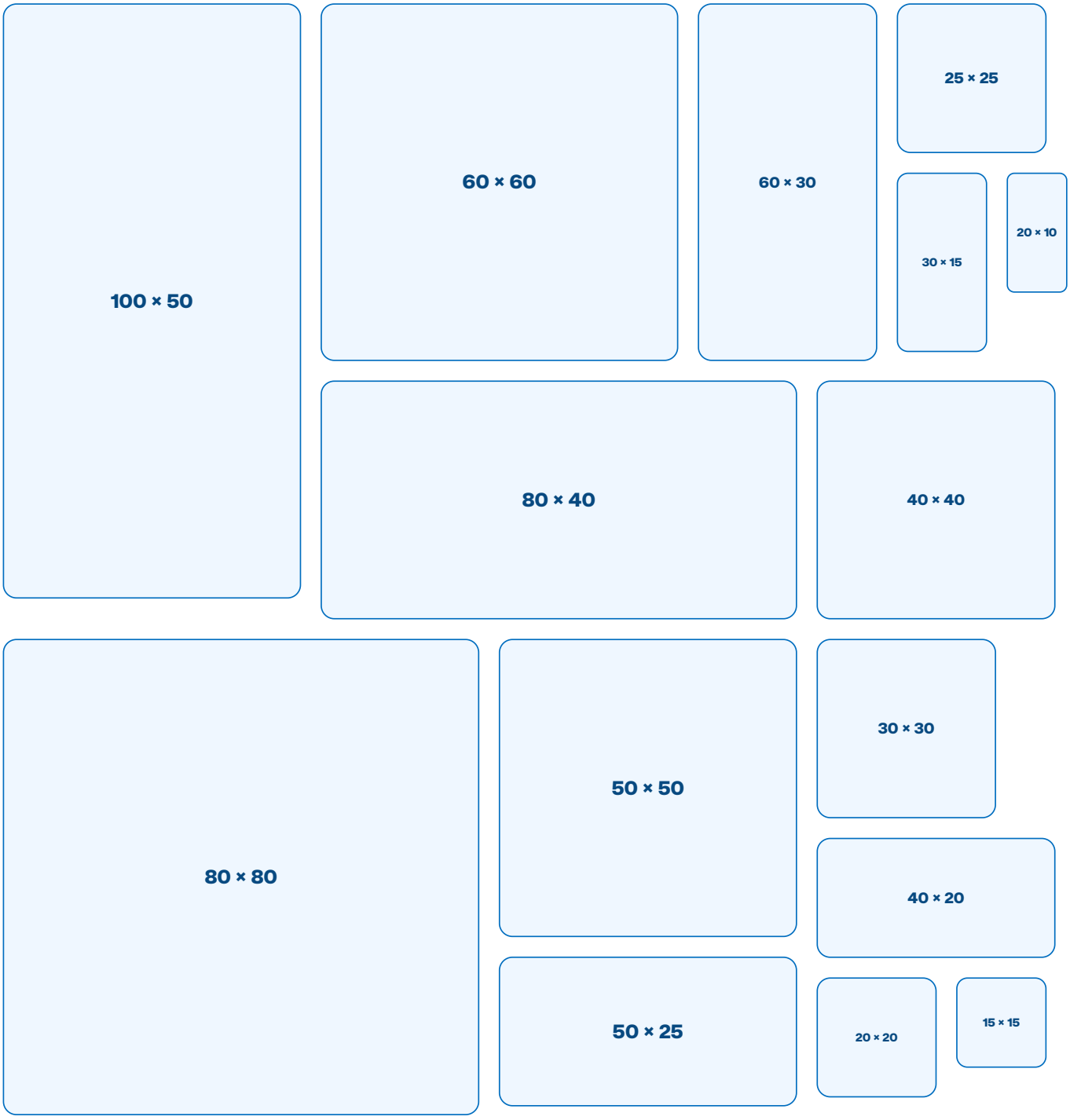
04 · 1:1 SIZE TEMPLATE

Place your profile on the page.

Place the profile end over the frames; the section size is read from the outer edge. Templates are for information; confirm exact size with calipers.



Check line: it must measure exactly **100 mm** when printed.





05

Applications and service

Sectors	47
Order specification	49
Custom production and quotation	50
Shipping and export	51
Frequently asked questions	52
Sustainability	54
Contact	55

TURKEY · UNITED KINGDOM · CANADA · EUROPEAN UNION · EN 10204 3.1 / 3.2

05 · SECTORS

A technical approach to every project.

We turn your application requirements into a clear production definition covering material, size, surface, product standard and certificate scope.





Construction and architecture

Railing, stair and balcony systems, façade and roof elements, decorative architectural details.

Product	**Tube · square · rectangular**
Standard	**ASTM A554 · EN 10296-2**
Share in the quotation	**Appearance expectation, grit, sample**

Automotive

Exhaust systems, fuel lines, chassis and body parts, in-vehicle equipment.

Product	**Tube · square · rectangular**
Standard	**EN 10296-2 · ASTM A554**
Share in the quotation	**Customer specification, tolerance**

Furniture and decoration

Modern furniture, lighting fixtures, interior and shop-window details.

Product	**Tube · square · rectangular**
Standard	**ASTM A554**
Share in the quotation	**Surface (180–600 grit), length**

White goods

Body, frame and components; production according to size, wall and surface expectations.

Product	**Tube · rectangular**
Standard	**EN 10296-2 · ASTM A554**
Share in the quotation	**Technical drawing, process plan**

Industrial plants and process

Food processing, beverage, chemical, energy and general process lines.

Product	**Tube**
Standard	**EN 10217-7 · EN 10357 · ASTM A312**
Share in the quotation	**Fluid, pressure, temperature, document type**

Machine building

Construction, chassis, load-bearing and moving machine parts.

Product	**Tube · square · rectangular**
Standard	**EN 10296-2 · ASTM A554**
Share in the quotation	**Size, tolerance, machinability**

PRODUCT BY APPLICATION ·

Sector	RT-01 Tube	SQ-02 Square	RC-03 Rectangular	Standard
Construction and architecture	●	●	●	**ASTM A554 · EN 10296-2**
Automotive	●	●	●	**EN 10296-2 · ASTM A554**
Furniture and decoration	●	●	●	**ASTM A554**
White goods	●	–	●	**EN 10296-2 · ASTM A554**
Industrial plants and process	●	–	–	**EN 10217-7 · EN 10357 · ASTM A312**
Machine building	●	●	●	**EN 10296-2 · ASTM A554**

Pressure equipment

Pressure Equipment Directive (PED 2014/68/EU) and AD 2000-W0 — tubes with material manufacturer approval; EN 10217-7 / ASTM A312.

Selection help

Product selection is finalised according to the project specification and service conditions. Our technical team supports you in choosing grade, surface and standard (p. 42).



05 · ORDER DESCRIPTION

Define your order in a single line.

Eight pieces of information form a complete product description for quotation and production. You can write the line exactly as it is in your email or quotation form.

1	2	3	4	5	6	7	8
RT-01	316L	EN 10217-7	Ø42.4 × 1.5	6,000 mm	320 grit	3.1	1,200 m

1 Product code
RT-01 tube · SQ-02 square · RC-03 rectangular profile

2 Material grade
AISI and EN number: 316L / 1.4404

3 Product standard
EN 10217-7 · EN 10357 · EN 10296-2 · ASTM A312 · ASTM A554

4 Size, mm
Tube: outside diameter × wall · profile: A × B × wall · NPS: 2″ SCH 10S

5 Length
1,500–24,000 mm; length tolerance −0 / +5 mm

6 Surface
Line finish (bright annealed) or 180–600 grit

7 Inspection certificate
EN 10204 3.1 or 3.2 · always state it in the order

8 Quantity
Metres, pieces or tonnes

TWO EXAMPLES IN THE SAME STRUCTURE ·

SQ-02	304	ASTM A554	40 × 40 × 1.5	6,000 mm	240 grit	3.1	300 pcs
RC-03	201	ASTM A554	60 × 30 × 1.2	6,000 mm	180 grit	3.1	2 tonnes

Sample calculation 1,200 m ÷ 6 m = **200 pcs** · 1,200 m × 1.542 kg/m = **1,850 kg** (≈ 1.85 tonnes)

CAPACITY, IN KILOMETRES ·

Sample calculation · theoretical weight · ρ = 8 kg/dm³

How many kilometres of tube is 1,500 tonnes/month?



From the thinnest tube to the largest diameter: the same monthly capacity makes roughly 62 km to 11,937 km of tube, depending on size. For comparison: the Istanbul–Ankara highway is about 450 km.

05 · CUSTOM PRODUCTION AND QUOTATION

The size you need, let's clarify it together.

In addition to standard sizes, we evaluate your requests for custom sizes, surfaces and lengths. For sizes outside the tables, send us your request.

1 Size

Diameters and sections outside the table; within Ø6–323.9 · 10 × 10 – 200 × 200 · 20 × 10 – 200 × 100 mm.

2 Wall thickness

Wall thicknesses outside the standard table; ISO 1127 with D4/T3 tolerances.

3 Length

Cutting to order, 1,500–24,000 mm; length tolerance −0 / +5 mm.

4 Surface

Satin and bright surfaces between 180–600 grit; custom surface work on request.

5 Material

ATTENTION

Write the grade with its EN number alongside the AISI name (e.g. 316L / 1.4404). The 200 series (201, J1, J3, J4, 204) is not suitable for outdoor and corrosive environments.

6 Certificates and tests

IMPORTANT

Write the inspection certificate type (EN 10204 3.1 or 3.2) and any additional tests in the order. A 3.2 certificate needs an independent inspection representative; notify us before production planning.

INFORMATION NEEDED FOR A QUOTATION ·

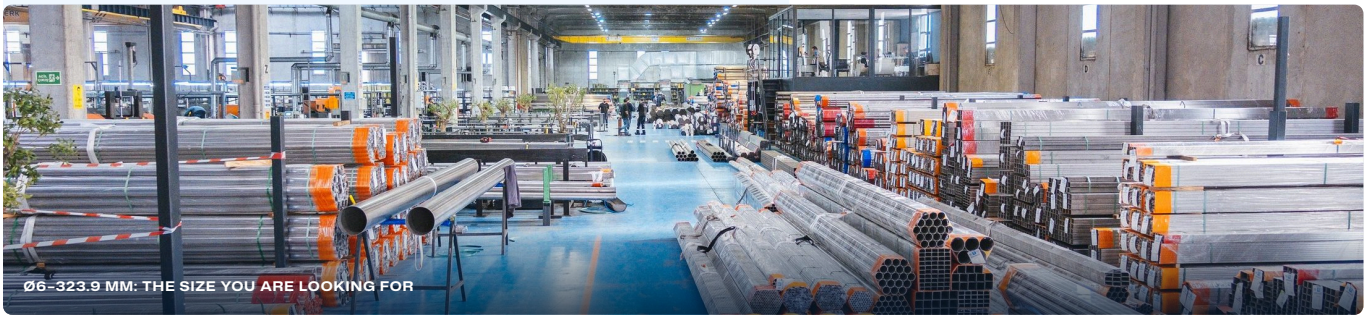
01	Product type · tube, square or rectangular
02	Material grade · AISI / EN no.
03	Size · diameter or A × B (mm)
04	Wall thickness (mm)
05	Length (mm)
06	Surface · grit or annealed
07	Product standard
08	Quantity · pieces, metres or tonnes
09	Delivery place and required date
10	Inspection certificate · 3.1 / 3.2

REQUEST A QUOTATION

Send us your technical request.

satis@erkinox.com.tr
+90 554 536 16 51
+90 228 355 00 35

Scan the code, have your email ready.



Ø6–323.9 MM: THE SIZE YOU ARE LOOKING FOR

05 · SHIPPING AND EXPORT

From production to the world, planned shipments.

In addition to domestic customers, we export mainly to the United Kingdom, Canada and European Union countries. We plan technical and commercial requirements within the same order scope, from production to delivery.



1 STEP 01

Technical product definition

Standard, grade, size, surface and delivery terms are defined together at the start of the order.

2 STEP 02

Documentation and reporting

EN 10204 3.1 / 3.2 inspection certificates, additional tests and customer documentation requests.

3 STEP 03

Packing and delivery

Packing, destination and delivery schedule are planned within the order scope.

MARKETS ·

Turkey, United Kingdom, Canada and European Union

Customs tariff positions (HS): 7306.40 for round and 7306.61 for square and rectangular welded stainless products. Classification is confirmed for each shipment.

CONFORMITY ·

CE
Certificate and declaration of conformity

PED
2014/68/EU · AD 2000-W0

REACH
Declaration of conformity

RoHS
Technical file declaration

05 · FREQUENTLY ASKED QUESTIONS

Your questions, our short answers.

PRODUCTS AND PRODUCTION ·

01 Are you a manufacturer or a trading company?

We are a manufacturer. Our products are made at our facility in Bozüyük OSB, Bilecik. We have been in the stainless steel sector since 1992; we started tube and profile production in 2022.

02 Which products and sizes do you make?

Welded stainless round tube Ø6–323.9 mm, square profile 10 × 10 – 200 × 200 mm and rectangular profile 20 × 10 – 200 × 100 mm. Standard combinations are in the tables in this catalogue.

03 What are your wall thickness and length ranges?

The standard tables include wall thicknesses of 0.5–8 mm for both tube and profile. Production length is 1,500–24,000 mm, with a length tolerance of −0 / +5 mm.

04 Which grades do you make?

Austenitic: AISI 304, 304L, 316, 316L, 316Ti, 321. 200 series: 201, 201J1, 201J3, 201J4, 204. Duplex 2205 (1.4462) is special production.

05 Which standards do you produce to?

EN 10217-7, EN 10357, EN 10296-2, ASTM A312, ASTM A270, ASTM A269 and ASTM A554. Dimensional tolerances are EN ISO 1127 D4/T3; the test category is TC1 or TC2.

06 Which welding technologies do you use?

TIG welding and computer-controlled laser welding, followed by weld seam flattening. Heat treatment is carried out as bright annealing in a fully automatic in-line furnace.

07 Which surface options are there?

180, 240, 320, 400, 500 and 600 grit. Custom surface work is done on request; critical surfaces are defined by sample and Ra target.

08 What tests do the tubes go through?

The weld seam is checked in-line by eddy current during production; sample tubes taken at set intervals undergo a hydrostatic pressure test.

09 Do you make non-standard sizes?

Yes. We evaluate requests for sizes, surfaces and lengths outside the tables; send your size with the quotation form.

10 How are the products packed?

Bundles are strapped and wrapped in protective stretch film. The label carries batch no., size, grade, surface, length, quantity, metres, weight, standard and production date.

11 Which markets do you export to?

In addition to domestic sales, we export mainly to the United Kingdom, Canada and European Union countries.

12 What is the difference between 3.1 and 3.2 inspection certificates?

A 3.1 certificate is approved by the manufacturer's inspection representative, who is independent of production. For 3.2, an independent inspection representative designated by the buyer or by regulation also takes part. If you need 3.2, state it in the order.

13 What information is needed for a quotation?

Product type, grade, size, wall thickness, length, surface, standard, quantity and delivery place; inspection certificate type (3.1 / 3.2).

ABOUT STAINLESS STEEL ·

What is the difference between 304 and 316?

316 contains roughly 2–2.5% molybdenum; it has higher resistance to chloride and pitting corrosion. It is preferred in marine, chemical and salt-water environments. 304 is the most common general-purpose grade.

What does the "L" in 304L and 316L mean?

Low carbon (at most 0.03% C). It reduces the formation of chromium carbide at grain boundaries in the weld zone and lowers the risk of intergranular corrosion.

What is bright annealing?

It is heat treatment carried out in a protective gas atmosphere. It restores ductility and corrosion resistance after welding and forming; because there is no oxidation, the surface stays bright.

Is stainless steel magnetic?

Austenitic grades such as annealed 304 and 316 are generally non-magnetic; cold forming can create slight magnetism. Duplex grades are magnetic because of their ferrite. Magnetism alone is not an indicator of grade.



Is your question not here?

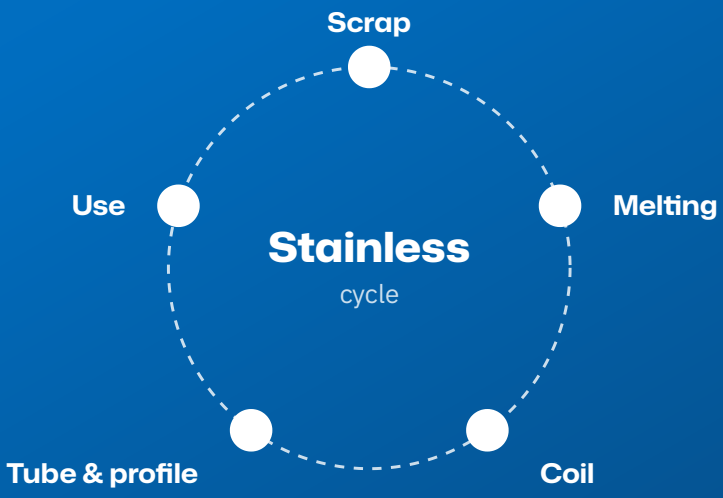
Write to our technical team; we will answer your questions on size, grade, standard and certificates.

satis@erkinox.com.tr
+90 554 536 16 51

STAINLESS STEEL ·

At end of life, it becomes steel again.

Stainless steel scrap is melted without loss of quality and becomes coil, tube and profile again. Long service life is the first step of this cycle.



05 · SUSTAINABILITY

Long-lasting material, managed impact.

1 Recyclable

At the end of its service life, stainless steel returns to steelmaking without loss of quality.

2 Long life

Thanks to corrosion resistance, the need for maintenance and replacement is reduced; the product's lifetime impact is lower.

3 Hygiene

Easy-to-clean surface; safe use in food and process applications.

4 Managed impact

Environment (ISO 14001), energy (ISO 50001) and occupational health and safety (ISO 45001) are managed with certified systems.

DOMESTIC PRODUCTION Made at Bozüyük OSB, Bilecik. Strengthening domestic production is part of our corporate goals.

05 · CONTACT

The size you need, let's make it together.



BOZÜYÜK OSB · PRODUCTION FACILITY

SALES

satis@erkinox.com.tr

+90 554 536 16 51

GENERAL

info@erkinox.com

+90 228 355 00 35

WEB

www.erkinox.com

YouTube · @Erkinox

FACTORY ·

Bozüyük OSB 11. Cadde No: 5
11300 Bozüyük / Bilecik / Türkiye

Erkinox Paslanmaz Boru Profil A.Ş.

For visits and sample requests, please make an appointment in advance.

DIGITAL RESOURCES · SCAN THE CODE ·

Web · E-catalogue · YouTube · Location · Email

MANUFACTURER

ERKINOX
Paslanmaz Boru Profil A.Ş.

Made to measure.

Welded stainless steel tube, square and rectangular profile.
Ø6–323.9 mm · 10 × 10 – 200 × 200 mm · 20 × 10 – 200 × 100 mm.

DON'T FORGET IN THE ORDER

3.1 **3.2**

EN 10204 inspection certificate

Write the certificate type in your order.

Every delivery comes with the inspection certificate you specify in the order. **3.1**, a document approved by the manufacturer's independent inspection representative. **3.2** additionally requires the participation of an independent inspection representative designated by the buyer or by regulation, and must be notified before production is planned.

Details on p. 13 and p. 19 · test category TC1 / TC2

FACTORY

Erkinox Paslanmaz Boru Profil A.Ş.
Bozüyük OSB 11. Cadde No: 5
11300 Bozüyük / Bilecik / Türkiye

PHONE

+90 228 355 00 35
+90 554 536 16 51

EMAIL · WEB

satis@erkinox.com.tr
info@erkinox.com
www.erkinox.com

ASD www.asd.web.tr

Product Catalogue 2027 · EN · Version 1.1 · November 2026. The information in the catalogue is for general information; the right to make technical changes is reserved.

MADE IN TÜRKİYE