

Average Chemical analysis

C%	Si%	Mn%	P%	S%	C.E.(*)
0.19	0.31	1.44	0.014	0.02	0.43

*CE=%C+%Mn/6+(%Cu+%Ni)/15+(%Cr+%Mo+%V)/5

Mechanical Properties

Size	Yield Strength <i>ReH N/mm²</i>	PSI	Tensile Strength <i>Rm N/mm²</i>	Elong. <i>A5%</i>
AllΦ	≥520	≥75000	≥620	15%min

On request material with guaranteed impact test 27.5 J at -20°C can be provided.

Corresponding standards

ASO	EN	DIN	AFNOR	SAE/ASTM
A-TUBE 75	E355	St52-3	E36-4	1024

Tolerance range according to ISO 286-2

Table for ISO H8 in μm

ID (mm)	upper	lower
40-50	+39	0
>50-80	+46	0
>80-120	+54	0
>120-180	+63	0
>180-250	+72	0

Heat treatment

The tubes are delivered in stress and relived condition (+SR according to EN). On request other heat treatments can be offered.

Inside Surface Roughness

The inside surface roughness (Ra) for skived and roller burnished tubes is always less than 0.25 μm . For the honned tubes the inside surface roughness is less than 0.40 μm .

Straightness

The straightness deviation is less than 1mm/1000m. For the tubes with length smaller or equal to 6m the total deviation is less than 3.5mm, for each metre above 6m the tolerance must be increased by 0.5mm.

Eccentricity

The eccentricity is max. 10% of the WT according to the standard EN 10305-1. On request we can offer max. 7.5% of the WT.

Ovality

The ovality is within the limits of the ID tolerance.

Diameter tolerance

The outside diameter is according to EN 10305-1. ISO-H8 is standard; Other tolerance can be supplied upon request.

Delivery Lengths

Production lengths are between 4.5-10 m

Standard length for diam

ID \leq 75 mm ▶ 6000-8000 mm

ID > 75 mm ▶ 6000-9000 mm

Weldability & Machinability

A-TUBE 75 is based on a low carbon microalloyed steel combining high strength with excellent machinability and weldability. The particular chemical analysis makes the steel strong at low temperatures and confers good mechanical properties.

Packaging

Tubes are packed in standard bundles oiled inside with end cups.

Other packaging options are available, like: wooden boxes, pallets for cut and machined parts, aluminium vacuum bags (for sea freight) and special protection oiling



Our products packaging is recyclable

Marking

Tubes are marked with full traceability and following informations:

A-TUBE 75, outside diameter x inside diameter, heat number, steel grade and norm. Other packaging options are available, like: wooden boxes, pallets for cut and machined parts, aluminium vacuum bags (for sea freight) and special protection oiling.

Certifications

ISO 9001

ISO 14001

OHSAS 18001