welser profile

Your sun shading system

shown in the most favorable light

www.welser.com

We are YOUR Partner
in the area of profiles

The family run Welser business has been founded in 1664. What long time ago began as a pan-smith's shop in Ybbsitz, nowadays is one of the biggest and most up-to-date centers for profile production due to its focus on the production of roll-formed open special profiles, welded profile tubes and entire modules made of steel, stainless steel and non-ferrous materials; the company also includes a technology center, production sites in Austria, Germany and in the USA as well as sales offices around the world.

- > 360 years of experience in the metal working sector
- > 25,000 produced cross-sections
- A total production area of more than 784,000 m²
- > 75 profiling lines
- Everything from a single source

Our strengths:

- **Top scores** with respect to dimensional accuracy, material strength, straightness and twist tolerances
- **Planning reliability** through regular rolling campaigns
- **Complex perforation patterns** ensure a high degree of modularity
- **High repetition accuracy** for further processing
- **Cost-effective production** of large lot quantities

Our product program for dealers and manufacturers is based on the following:

- A defined **high quality steel grade**
- An optimized **zinc-magnesium surface**
- **Certified suppliers of materials**
- **Selected profile cross sections in top quality** with extremely tight tolerances
- **Defined lengths**
- **Standardized packaging** ideal for stacking, transportation and storage
- **Predefined ordering processes and delivery periods** including tracking (from the primary material to the end product)

Refined thin metal sheets

The all-rounders for sun shading

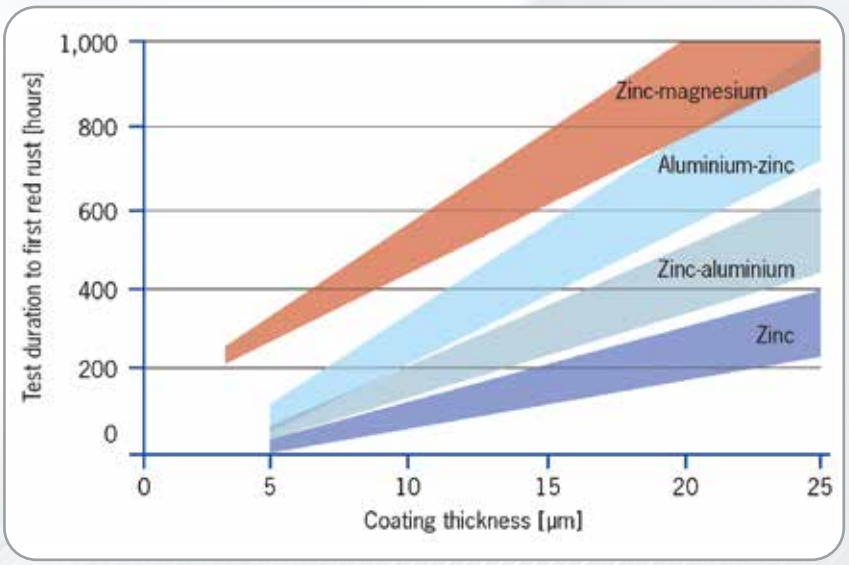
Thin metal sheets refined with zinc-magnesium are not only thinner and more durable, but they also offer a notably better corrosion resistance than common thin metal sheets with zinc coating and they also dispose of excellent protection against paint creep.

Besides zinc, the alloy of the zinc-magnesium coating also contains magnesium and aluminum of up to eight per cent. The excellent corrosion resistance is based on the interaction of two main mechanisms:

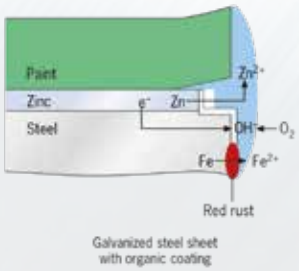
- the cathodic corrosion protection and
- the protective barrier effect

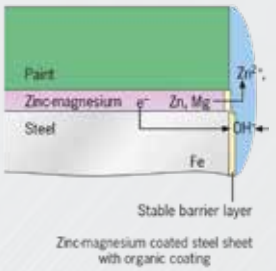
The general cathodic corrosion protection of a zinc-magnesium coating can be compared to the one of conventional zinc coating. However, the mixture of zinc-magnesium-aluminum alloy forms an additional tight, compact and structured surface layer against white rust corrosion, and this makes the difference. The layer offers a notably improved barrier against progressive corrosion. The result is as follows: Depending on the potential corrosion, the zinc-magnesium coating is only half as thick as a conventional zinc coating.

Coatings during a salt-spray mist test



Corrosion reactions





Advantages:

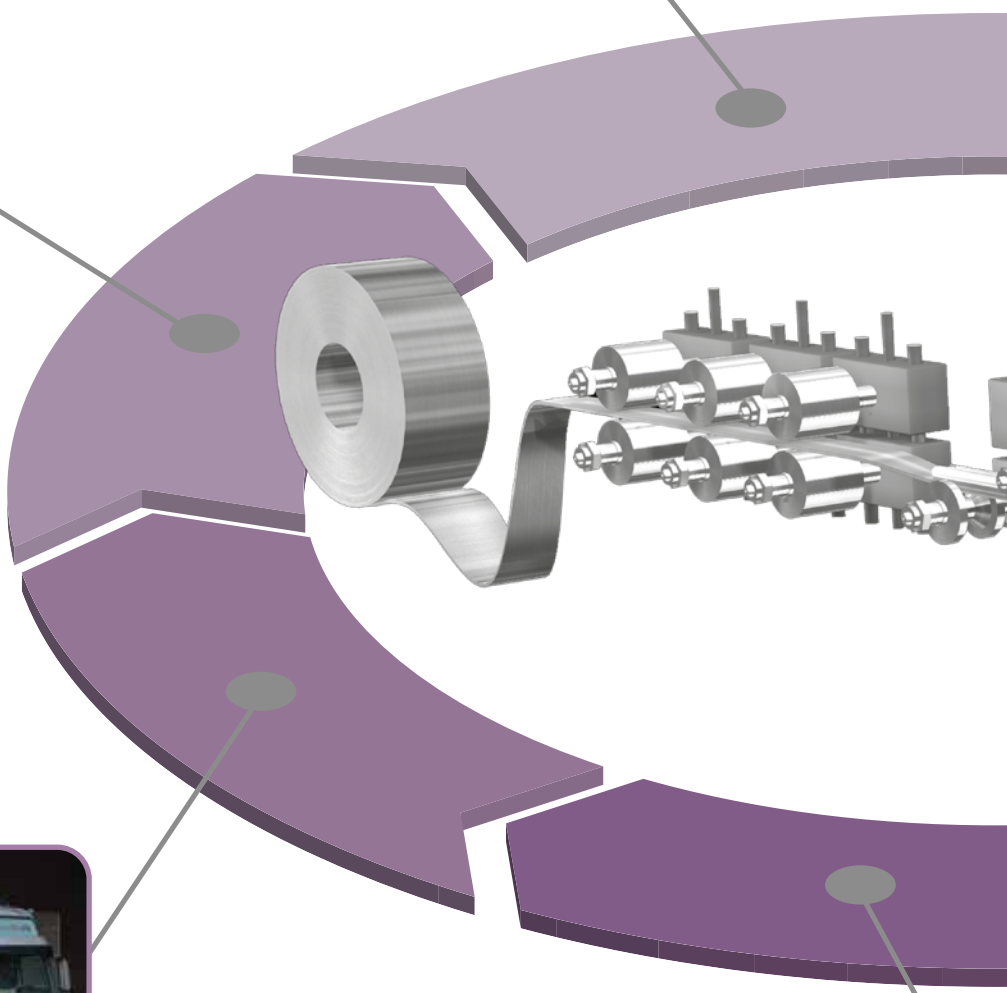
- Excellent corrosion protection, above all in a saline environment
- No limitations in product design and product characteristics with respect to corrosion resistance
- Material savings but identical corrosion resistance
- Capacity of "spontaneous healing" on edges and of scratches
- Notably increased forming capacity due to a harder surface and reduced abrasion
- Reduced cleaning efforts for tools and a minimum quantity of refuse disposal as from time to time there is no need for emulsion during the production process
- Increased lifespan and use cycles of the products
- Savings in valuable resources
- Environmentally friendly and energy-efficient production

Source: Stahl-Informations-Zentrum, 40039 Düsseldorf

Our service
Service beyond profiles

Simple ordering processes

Competent advice



Safe transportation in standardized packages

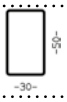
Certified suppliers
of materials

Certified quality
standards

Planning reliability
through regular
rolling campaigns

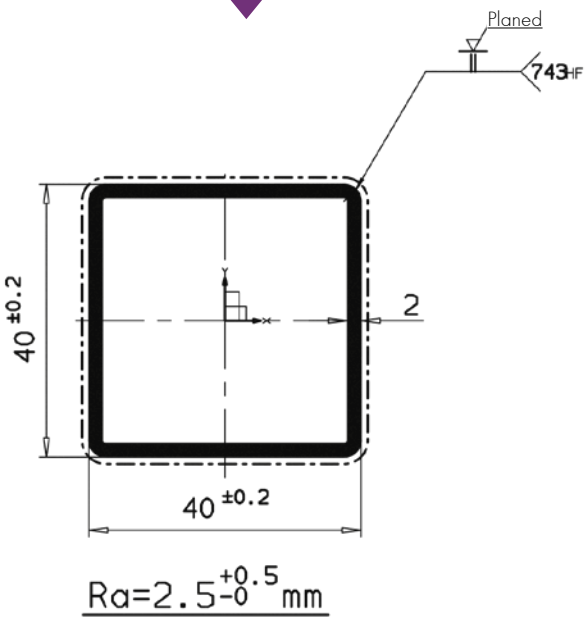
Transparent processes
including tracking

Our product portfolio
for sun shading systems

	Square profile 40/40/2	PP0009057-2	page 10
	**Square profile 50/30/2**	PP0003903-2	page 11
	Grooved tube 48 x 0.8	PP0005589-0.8	page 12
	Grooved tube 63 x 1	PP0007117-1	page 13
	Grooved tube 70 x 1	PP0000992-1	page 14
	Grooved tube 78 x 1, flat groove	PP0008362-1	page 15
	Grooved tube 78 x 1,25, flat groove	PP0008362-1.25	page 16
	Grooved tube 78 x 1, round groove	PP0005063-1	page 17
	Grooved tube 78 x 1,25, round groove	PP0005063-1.25	page 18
	Grooved tube 85 x 1,0	PP0009219-1	page 19
	Grooved tube 85 x 1,25	PP0009219-1.25	page 20
	Grooved tube 100 x 1,5	PP0015925-1.5	page 21
	Opti-grooved tube 80 x1	PP0017171-1	page 22
	Opti-grooved tube 80 x 1,25	PP0017171-1.25	page 23

Lengths currently available:
5,000 mm, 6,000 mm and 7,000 mm

Square profile
40 x 40 x 2 mm

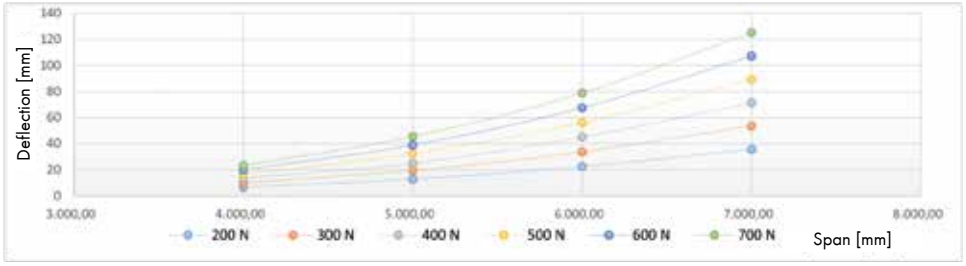


Material thickness: 2 mm
Product No: PP0009057-2
Weight: 2.36 kg/rm
Mechanical parameters:

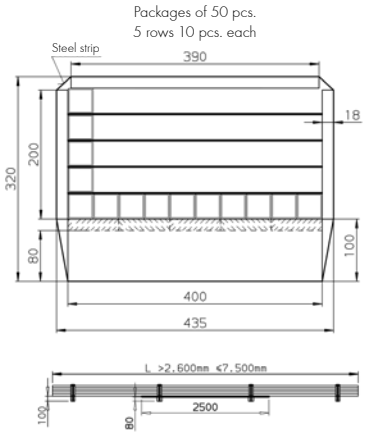
Ix	7.14 cm^4
Iy	7.14 cm^4
Wx	3.6 cm^3
Wy	3.6 cm^3

Length tolerance: 0 / + 3 mm
Material: Zinc-magnesium S250 GD.ZM130 MA
Quantity per package: 50 pcs.

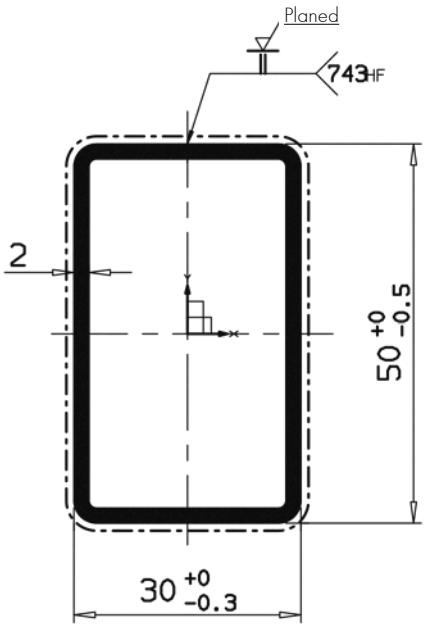
Load diagram:



Calculation diagram just for illustration. Average values of the load in colors (uniform load movable - rigid). Calculations carried out using the lowest moment of inertia.



Square profile
50 x 30 x 2 mm

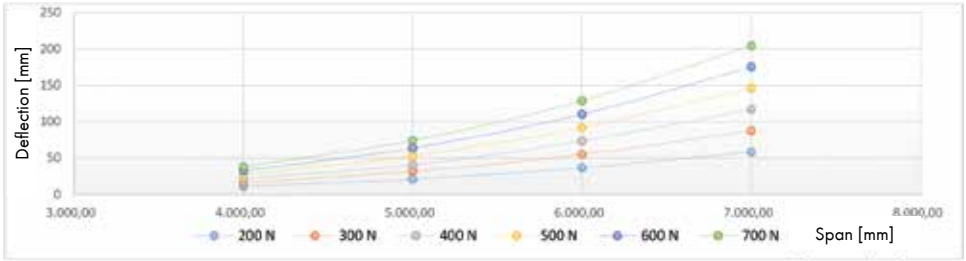


Material thickness: 2 mm
Product No: PP0003903-2
Weight: 2.36 kg/rm
Mechanical parameters:

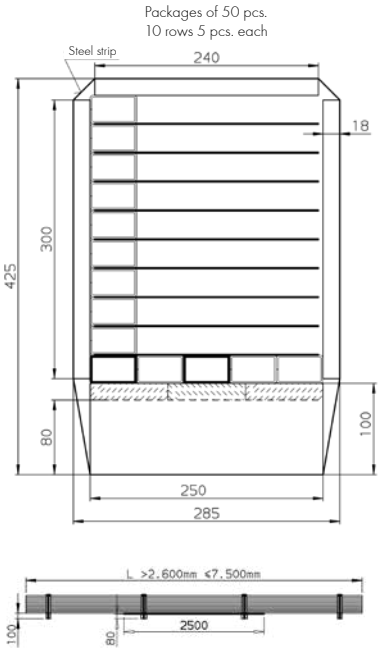
Ix	9.75 cm^4
Iy	4.37 cm^4
Wx	3.9 cm^3
Wy	2.9 cm^3

Length tolerance: 0 / + 3 mm
Material: Zinc-magnesium
S250 GD.ZM130 MA
Quantity per package:
50 pcs.

Load diagram:

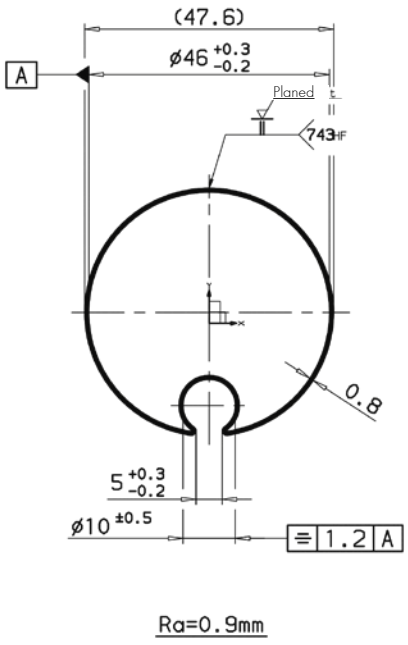


Calculation diagram just for illustration. Average values of the load in colors (uniform load movable - rigid). Calculations carried out using the lowest moment of inertia.



Grooved tube

48 x 0.8 mm



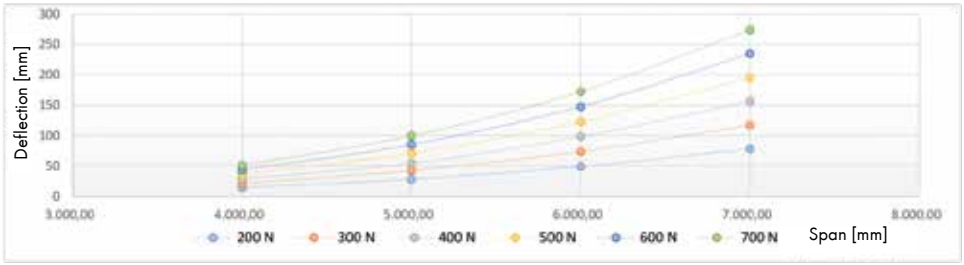
Ra=0.9mm

Material thickness: 0.8 mm
Product No: PP0005589-0.8
Weight: 1.07 kg/rm
Mechanical parameters:

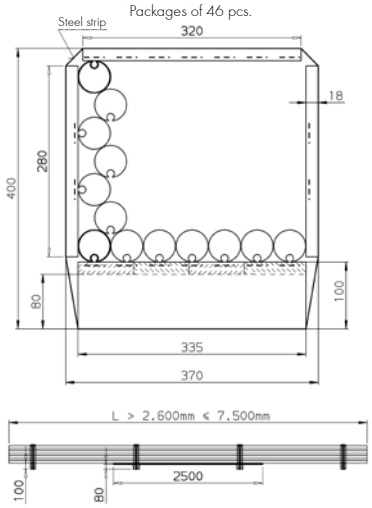
Ix	3.6 cm^4
Iy	3.26 cm^4
Wx	1.4 cm^3
Wy	1.4 cm^3

Length tolerance: 0 / + 3 mm
Material: Zinc-magnesium S250 GD.ZM130 MA
Quantity per package: 46 pcs.

Load diagram:

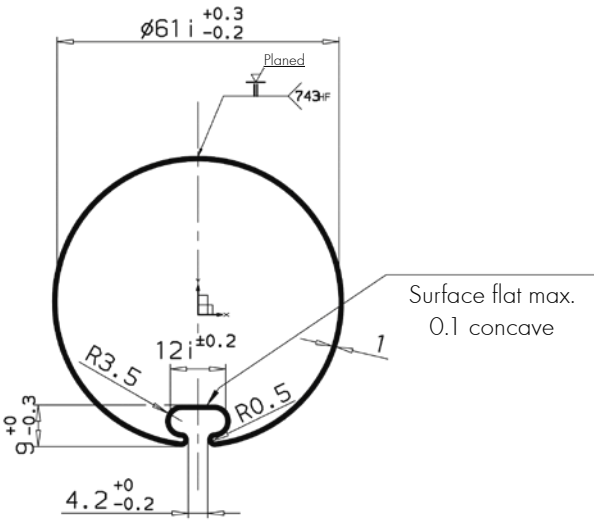


Calculation diagram just for illustration. Average values of the load in colors (uniform load movable - rigid). Calculations carried out using the lowest moment of inertia.



Grooved tube

63 x 1 mm

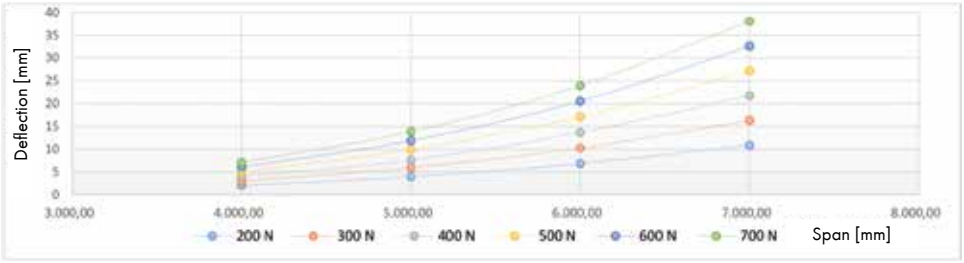


Material thickness: 1 mm
Product No: PP0007117-1
Weight: 1.73 kg/rm
Mechanical parameters:

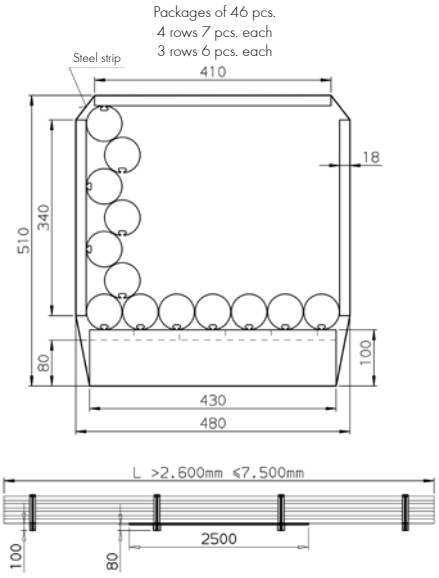
Ix	10.67 cm^4
Iy	9.42 cm^4
Wx	3.1 cm^3
Wy	3.0 cm^3

Length tolerance: 0 / + 3 mm
Material: Zinc-magnesium
S250 GD.ZM130 MA
Quantity per package:
46 pcs.

Load diagram:

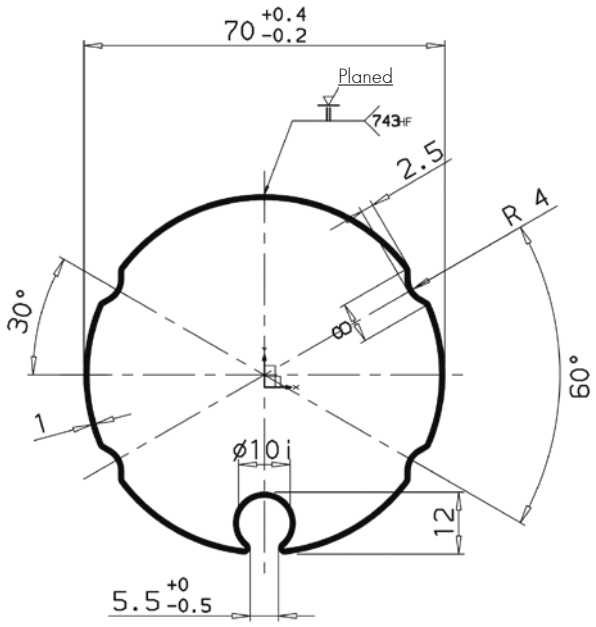


Calculation diagram just for illustration. Average values of the load in colors (uniform load movable - rigid). Calculations carried out using the lowest moment of inertia.



Grooved tube

70 x 1 mm

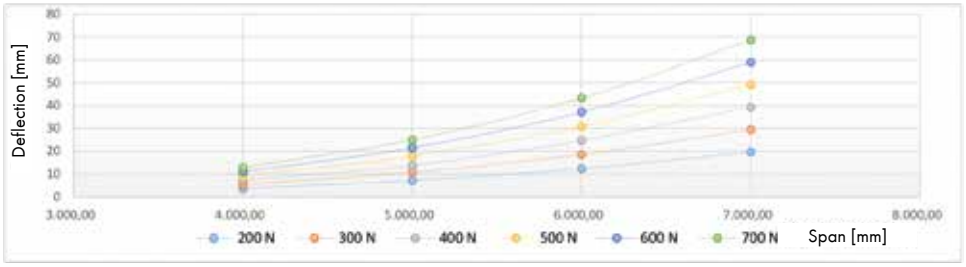


Material thickness: 1 mm
Product No: PP0000992-1
Weight: 1.89 kg/rm
Mechanical parameters:

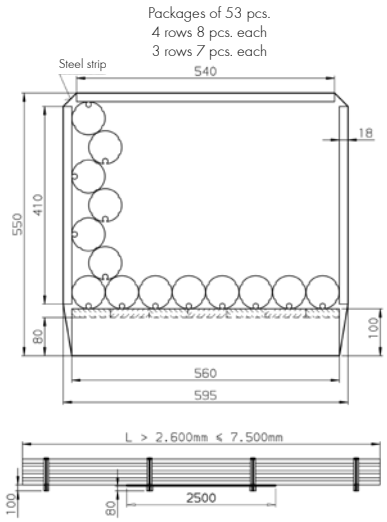
Ix	14.28 cm^4
Iy	13.00 cm^4
Wx	3.8 cm^3
Wy	3.7 cm^3

Length tolerance: 0 / + 3 mm
Material: Zinc-magnesium S250 GD.ZM130 MA
Quantity per package: 53 pcs.

Load diagram:

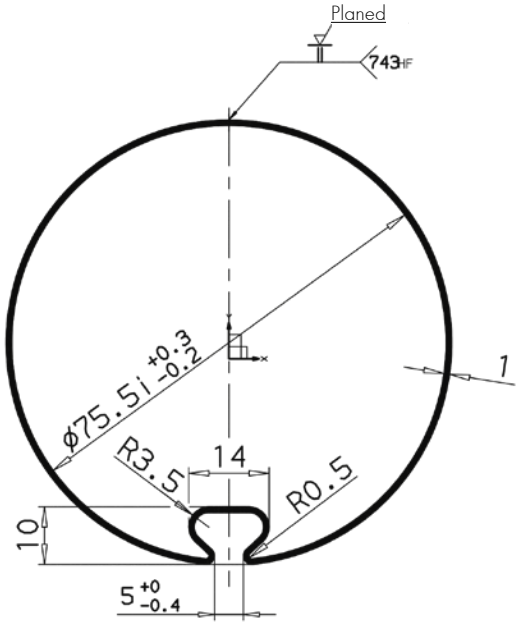


Calculation diagram just for illustration. Average values of the load in colors (uniform load movable - rigid). Calculations carried out using the lowest moment of inertia.



Grooved tube

78 x 1 mm, flat groove

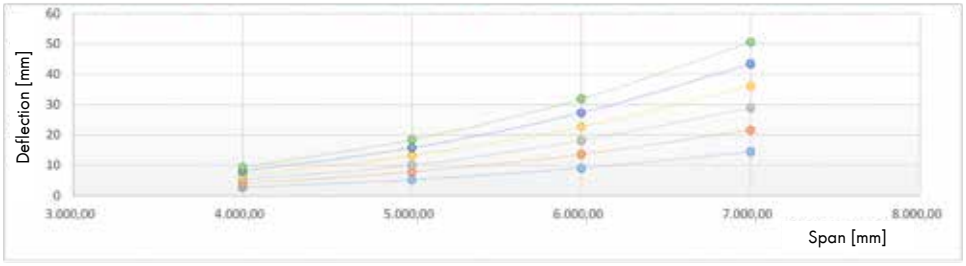


Material thickness: 1 mm
Product No: PP0008362-1
Weight: 2.08 kg/rm
Mechanical parameters:

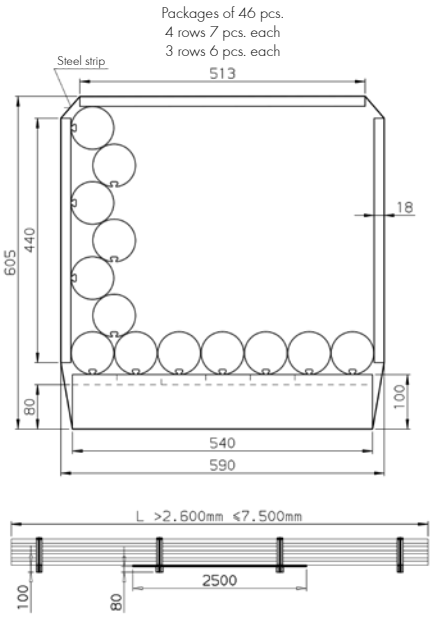
Ix	19.62 cm^4
Iy	17.65 cm^4
Wx	4.7 cm^3
Wy	4.6 cm^3

Length tolerance: 0 / + 3 mm
Material: Zinc-magnesium
S250 GD.ZM130 MA
Quantity per package:
46 pcs.

Load diagram:

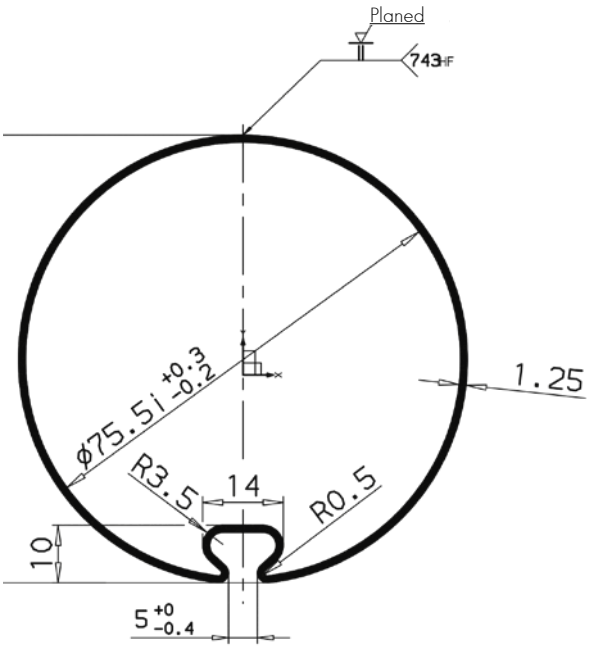


Calculation diagram just for illustration. Average values of the load in colors (uniform load movable - rigid). Calculations carried out using the lowest moment of inertia.



Grooved tube

78 x 1.25 mm, flat groove

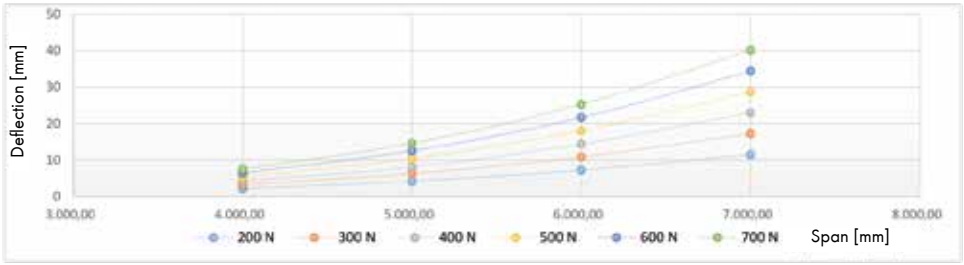


Material thickness: 1.25 mm
Product No: PP0008362-1.25
Weight: 2.60 kg/rm
Mechanical parameters:

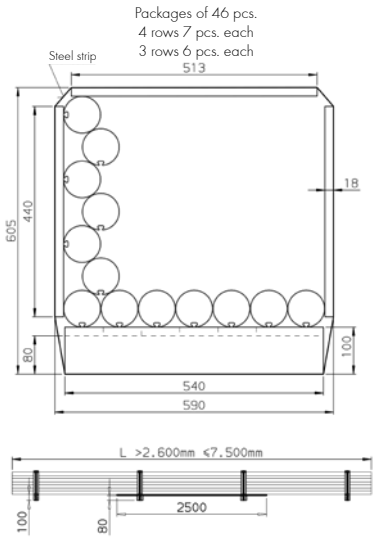
Ix	24.64 cm^4
Iy	22.27 cm^4
Wx	5.9 cm^3
Wy	5.7 cm^3

Length tolerance: 0 / + 3 mm
Material: Zinc-magnesium S250 GD.ZM130 MA
Quantity per package: 46 pcs.

Load diagram:

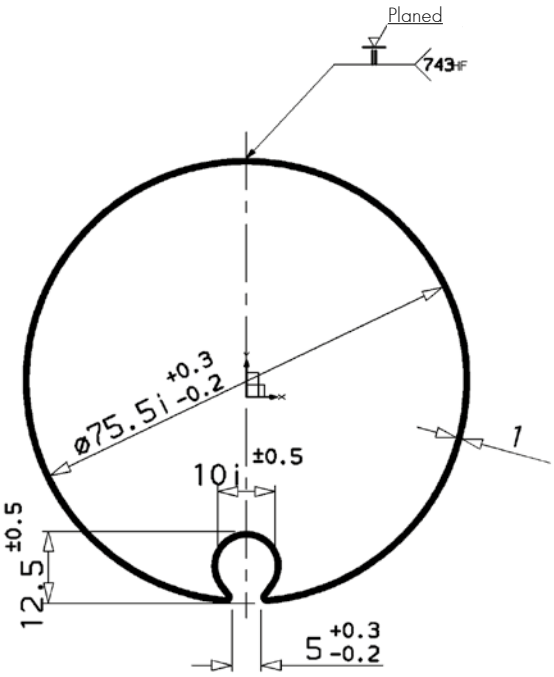


Calculation diagram just for illustration. Average values of the load in colors (uniform load movable - rigid). Calculations carried out using the lowest moment of inertia.



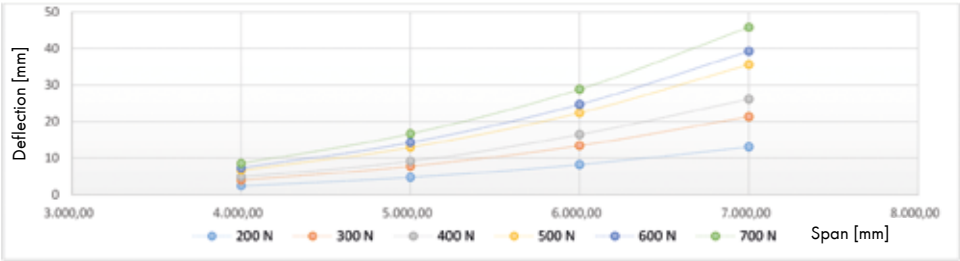
Grooved tube

78 x 1 mm, round groove

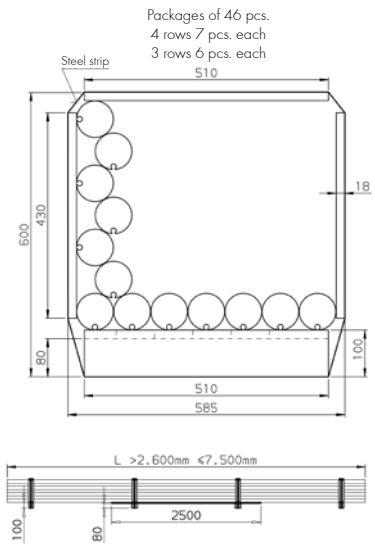


Material thickness: 1 mm
Product No: PP0005063-1
Weight: 2.08 kg/rm
Mechanical parameters:
Ix 19.51 cm^4
Iy 17.64 cm^4
Wx 4.7 cm^3
Wy 4.6 cm^3
Length tolerance: 0 / + 3 mm
Material: Zinc-magnesium S250 GD.ZM130 MA
Quantity per package: 46 pcs.

Load diagram:

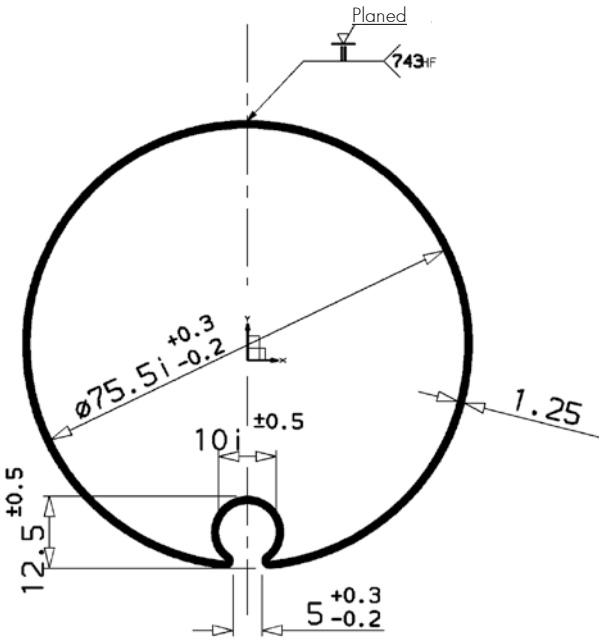


Calculation diagram just for illustration. Average values of the load in colors (uniform load movable - rigid). Calculations carried out using the lowest moment of inertia.



Grooved tube

78 x 1.25 mm, round groove

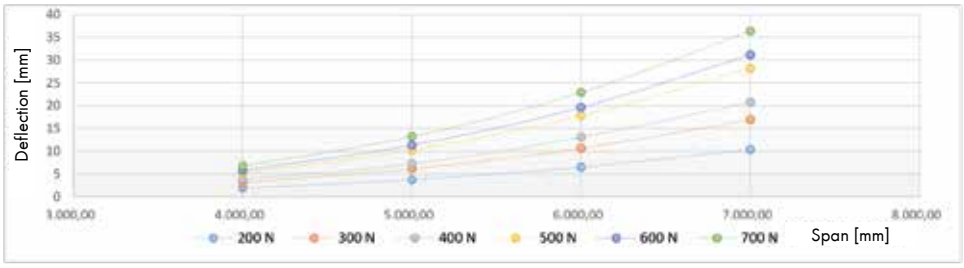


Material thickness: 1.25 mm
Product No: PP0005063-1.25
Weight: 2,60 kg/rm
Mechanical parameters:

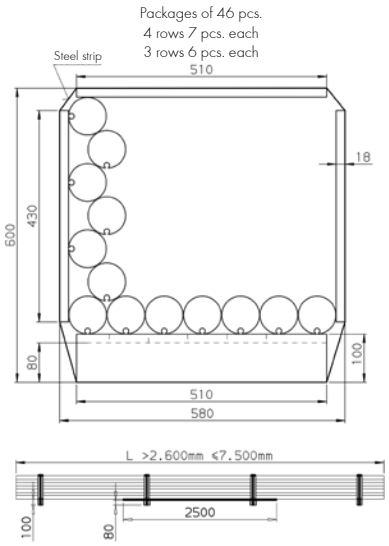
Ix	24.58 cm^4
Iy	22.26 cm^4
Wx	5.9 cm^3
Wy	5.7 cm^3

Length tolerance: 0 / + 3 mm
Material: Zinc-magnesium
S250 GD.ZM130 MA
Quantity per package:
46 pcs.

Load diagram:

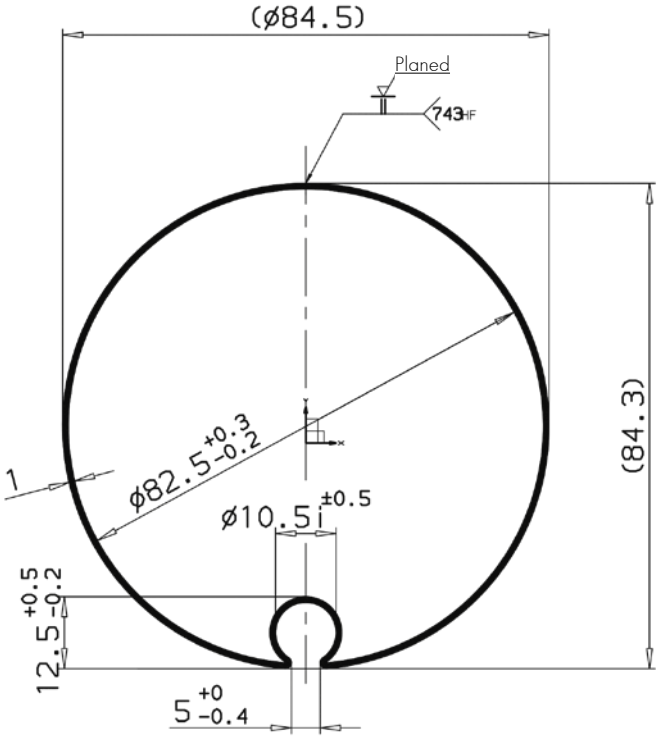


Calculation diagram just for illustration. Average values of the load in colors (uniform load movable - rigid). Calculations carried out using the lowest moment of inertia.



Grooved tube

85 x 1 mm

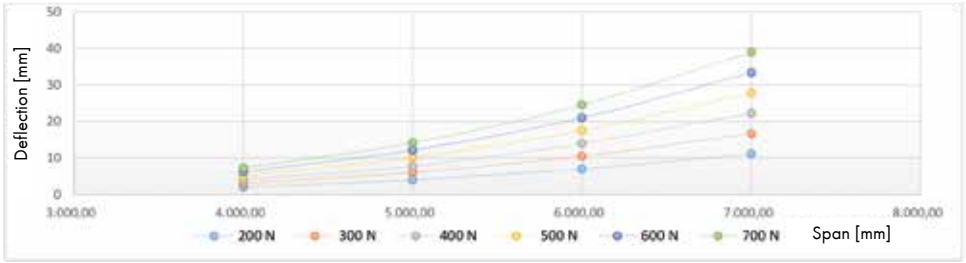


Material thickness: 1 mm
Product No: PP0009219-1
Weight: 2.26 kg/rm
Mechanical parameters:

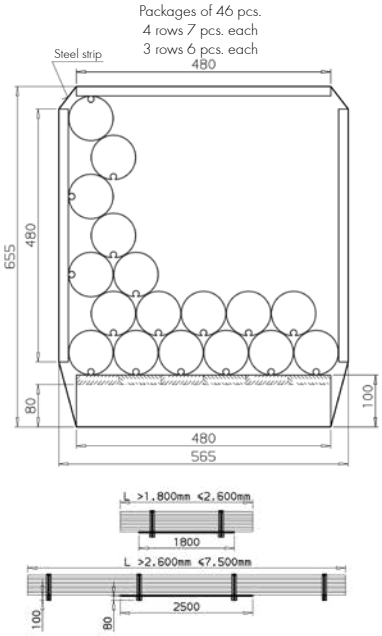
Ix	25.39 cm^4
Iy	22.92 cm^4
Wx	5.6 cm^3
Wy	5.4 cm^3

Length tolerance: 0 / + 3 mm
Material: Zinc-magnesium
S250 GD.ZM130 MA
Quantity per package:
39 pcs.

Load diagram:

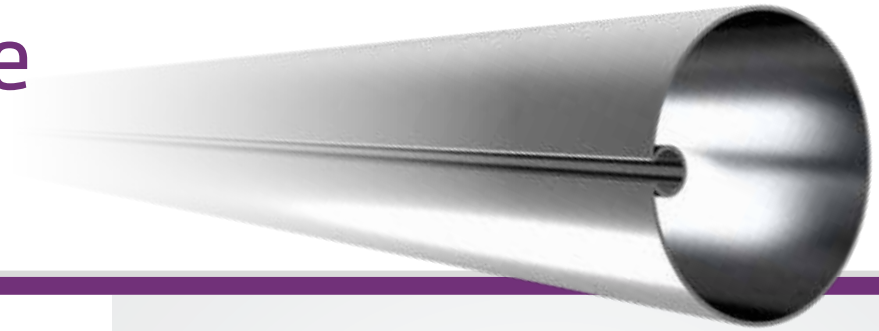


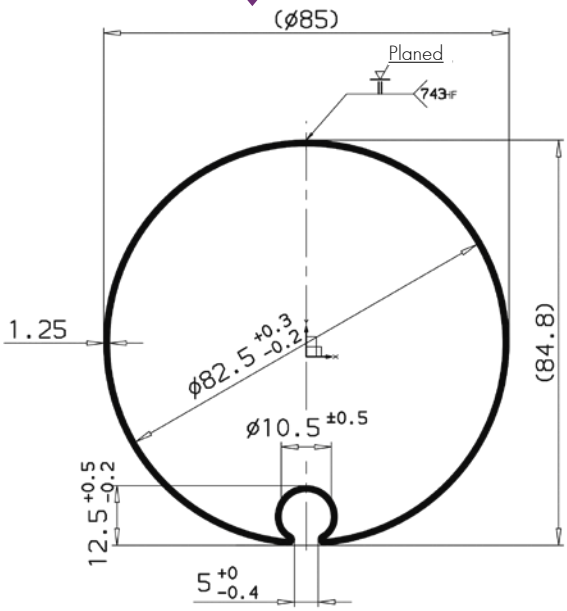
Calculation diagram just for illustration. Average values of the load in colors (uniform load movable - rigid). Calculations carried out using the lowest moment of inertia.



Grooved tube

85 x 1.25 mm



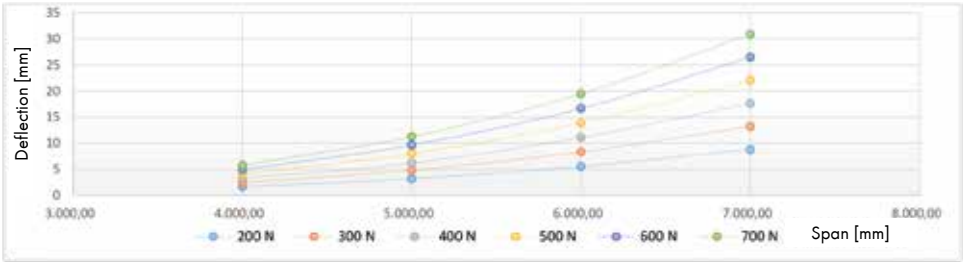


Material thickness: 1.25 mm
Product No: PP0009219-1.25
Weight: 2,83 kg/rm
Mechanical parameters:

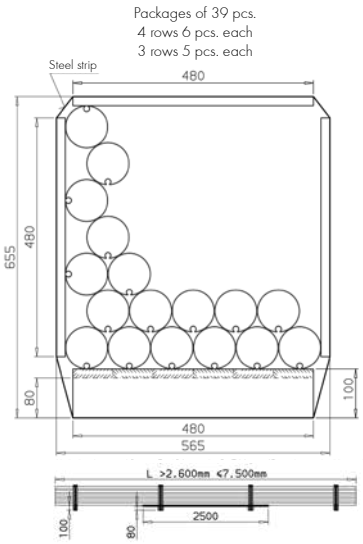
Ix	31.98 cm^4
Iy	28.92 cm^4
Wx	7.1 cm^3
Wy	6.8 cm^3

Length tolerance: 0 / + 3 mm
Material: Zinc-magnesium S250 GD.ZM130 MA
Quantity per package: 39 pcs.

Load diagram:

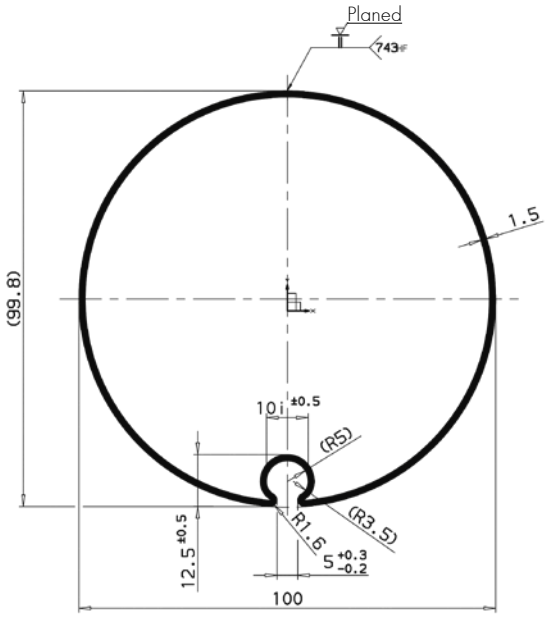


Calculation diagram just for illustration. Average values of the load in colors (uniform load movable - rigid). Calculations carried out using the lowest moment of inertia.



Grooved tube

100 x 1.5 mm

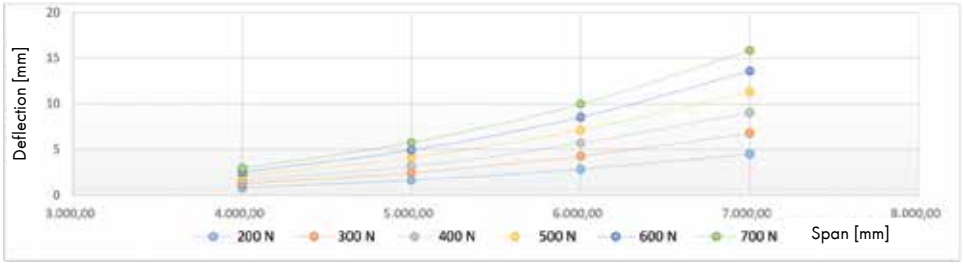


Material thickness: 1.5 mm
Product No: PP0015925-1.5
Weight: 3.91 kg/rm
Mechanical parameters:

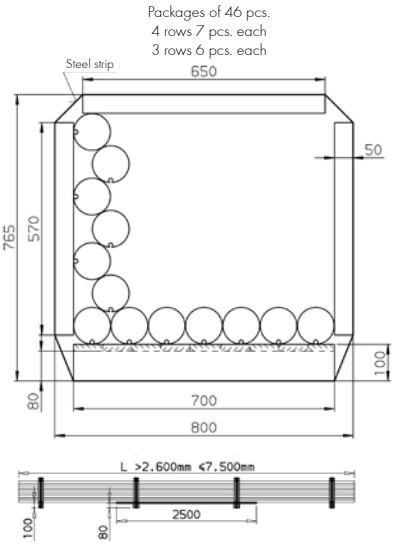
Ix	61.64 cm^4
Iy	56.38 cm^4
Wx	11.7 cm^3
Wy	11.3 cm^3

Length tolerance: 0 / + 3 mm
Material: Zinc-magnesium S250 GD.ZM130 MA
Quantity per package: 46 pcs.

Load diagram:

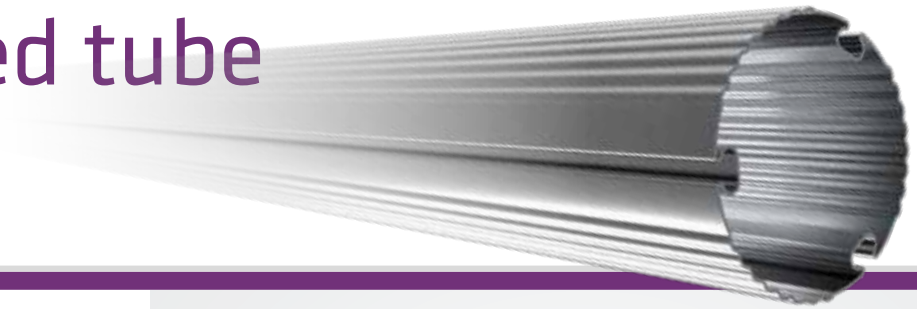


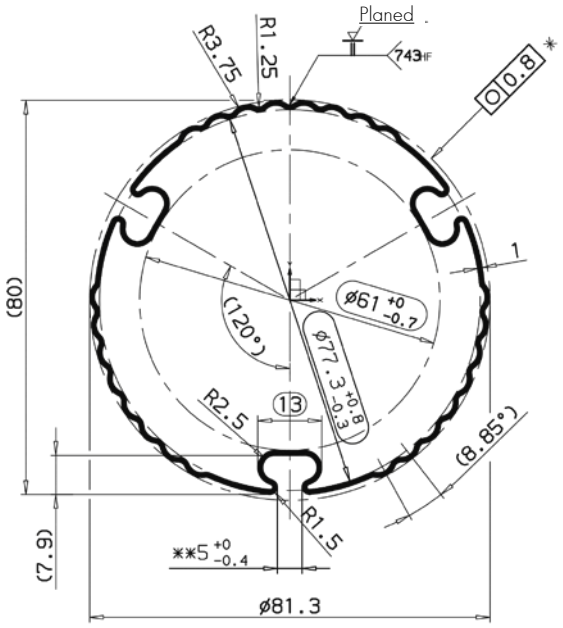
Calculation diagram just for illustration. Average values of the load in colors (uniform load movable - rigid). Calculations carried out using the lowest moment of inertia.



Opti-grooved tube

80 x 1 mm



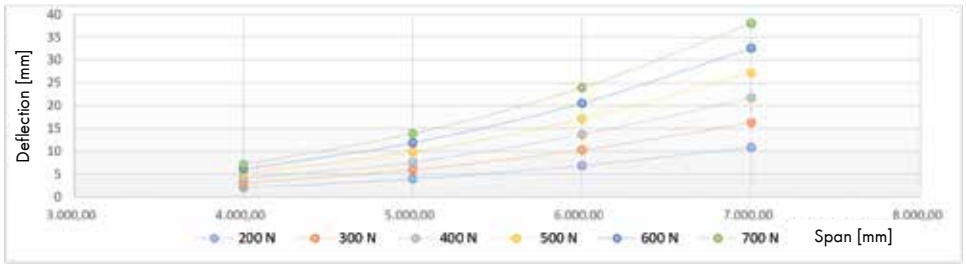


Material thickness: 1 mm
Product No: PP0017171-1
Weight: 2.52 kg/rm
Mechanical parameters:

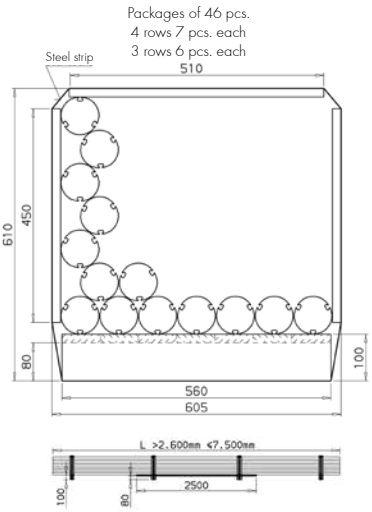
Ix	23.48 cm^4
Iy	23.48 cm^4
Wx	5.8 cm^3
Wy	5.8 cm^3

Length tolerance: 0 / + 3 mm
Material: Zinc-magnesium S250 GD.ZM130 MA
Quantity per package: 46 pcs.

Load diagram:

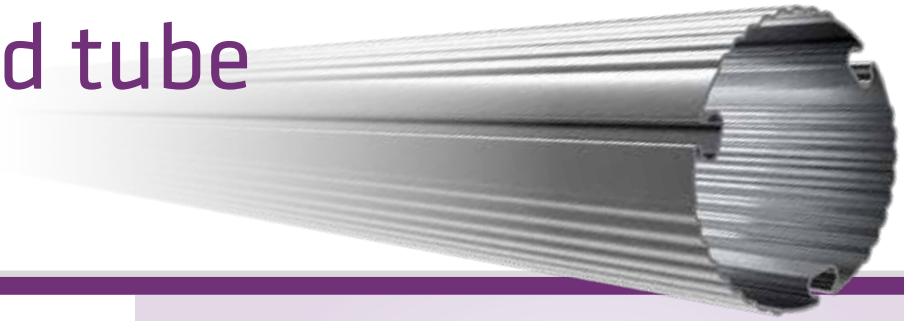


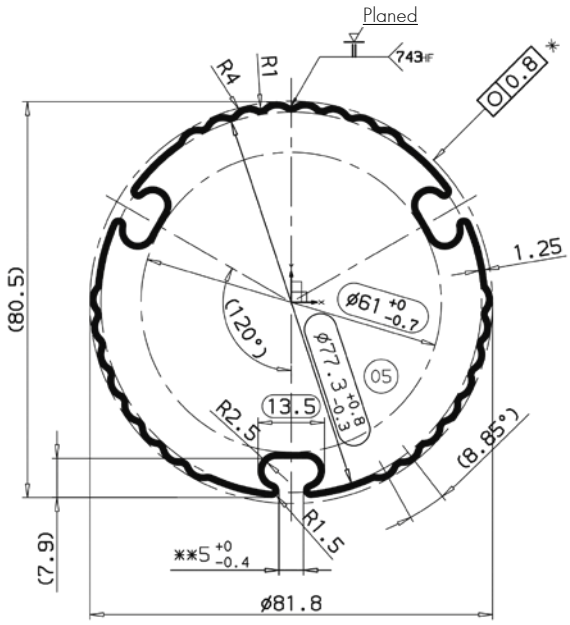
Calculation diagram just for illustration. Average values of the load in colors (uniform load movable - rigid). Calculations carried out using the lowest moment of inertia.



Opti-grooved tube

80 x 1.25 mm



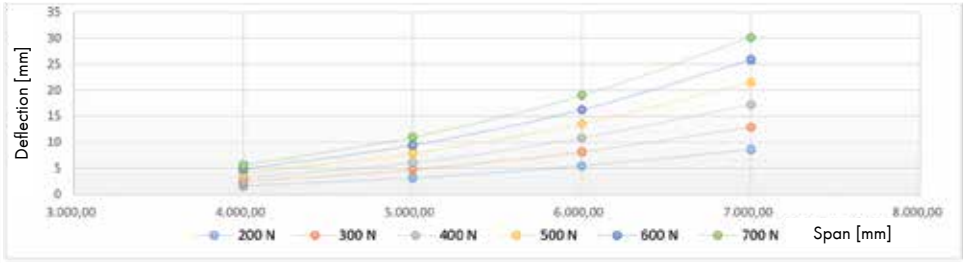


Material thickness: 1.25 mm
Product No: PP0017171-1.25
Weight: 3.13 kg/rm
Mechanical parameters:

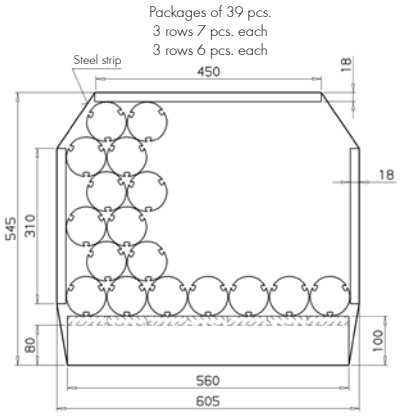
Ix	29.63 cm^4
Iy	29.63 cm^4
Wx	7.3 cm^3
Wy	7.2 cm^3

Length tolerance: 0 / + 3 mm
Material: Zinc-magnesium S250 GD.ZM130 MA
Quantity per package: 39 pcs.

Load diagram:



Calculation diagram just for illustration. Average values of the load in colors (uniform load movable - rigid). Calculations carried out using the lowest moment of inertia.



In addition to our standard profiles for sun shading
we offer you also individual profile solutions.
Do not hesitate to contact us. We are pleased to help you!

welser profile

More than 2,400 employees across the sales offices and the 4 production plants in Ybbsitz, Gresten (Austria), Bönen (Germany) and Valley City (USA) are continually working to successfully bring the requirements of our international customers to fruition.

Welser Profile GmbH
Am Welser Platz 1
A-3264 Gresten / Austria
Tel (+43 7487) 410-0
at@welser.com

IMPRINT:
© Welser Profile Austria GmbH, A-3264 Gresten
Layout: reichlundpartner.com, Outwork: Welser Profile, © Photos: Markilux, Warema, Weinor, Welser Profile.
Printed by Druckerei Queiser, 3rd edition-EN-07.2025

www.welser.com