Technical Data Sheet TDS-05-72
O-LOX posts

1 Scope

The rectangular O-LOX posts are made out of continuously hot-dip zinc coated steel strip (sendzimir) and subsequently polyester coated.
See figure 1

Figure 1: Post O-LOX post

1.1 Normative references

- EN 10346: Continuously hot-dip coated steel flat products – technical delivery conditions.
- EN 10088-3: Stainless steels - Part 3: Technical delivery conditions for semi-finished products, bars, rods, wire, sections and bright products of corrosion resisting steels for general purposes.
- ISO 3506-1: Mechanical properties of corrosion-resistant stainless steel fasteners - Part 1: Bolts, screws and studs.
- EN 10305-5: Steel tubes for precision applications – Technical delivery conditions - Part 5: Welded cold sized square and rectangular tubes.
- ISO 2768-1: General tolerances - Part 1: Tolerances for linear and angular dimensions without individual indications.
- ISO 9227: Corrosion tests in artificial atmospheres; salt spray tests.
- ISO 11507: Paints and varnishes - Exposure of coatings to artificial weathering - Exposure to fluorescent UV lamps and water.

2 Raw material

2.1 Steel used for the O-LOX posts and coverplates

Chemical composition: See table 1

Table 1: Chemical composition

Element	%
C	≤ 0,20
Si	Max. 0,60
Mn	Max. 1,70
P	Max. 0,12
S	Max. 0,045

The steel is in accordance with the European Standard EN 10346.
The designation of the steel is: S250.
The steel strip is continuously hot-dip galvanized, in accordance with EN 10346 Z275.

If DX51D or S220 quality is used in accordance to EN 10346, the yield strength shall be minimum 235 N/mm².

2.2 Steel used for the screws, bolts and fixing plate

The fixing plates are made out of stainless steel, grade 304, number 1.4301 in accordance with EN 10088-3.

The screws and bolts are made out of stainless steel, grade A2 in accordance with ISO 3506-1.

2.3 Polyester

The polyester is free of lead and cadmium.

O-LOX posts

3 Properties

3.1 Dimensions and tolerances

See table 2 :

Table 2 : Dimensions and tolerances of the O-LOX posts

Height of the post (mm)	Dimension of the side lengths (mm)	Plate thickness (mm)	Betafence technical drawings
1000	60 x 40	1,5	NYL31R500250
1300			NYL31R500260
1500			NYL31R500251
1700			NYL31R500261
2000			NYL31R500252
2200			NYL31R500262
2400		2,0	NYL31R500253
2600			NYL31R500263
2800			NYL31R500254
3000			NYL31R500264

Side section of the O-LOX post: 60 x 40 mm.
Tolerance on the side section: ± 0,35 mm in accordance with EN 10305-5.
Tolerance on the plate thickness : ± 0,20 mm in accordance with ISO 2768-1, class C (Coarse)
Tolerance on the post height: ± 2 mm

The O-LOX post is provided with M8 inserts.
Position of the inserts and other specific dimensions can be found back on the technical drawings, which are available on request.

Posts can be used in combination with following panels: Nylofor® 2D and Nylofor® 2D Super panels.

O-LOX posts with bottom plate are available as CSO.

The bottom plate is electro galvanized and afterwards polyester coated.

Other dimensions not mentioned in this technical data sheet can be found on the technical drawings, available on request.

3.2 Tensile strength

The strength is specified by :

- Tensile strength: Min. 330 N/mm²
- Yield strength: Min. 235 N/mm²

4 Coating

4.1 Metallic coating

Zinc coating:
Min. of 275 g/m² as an average of 3 measurements and double side determined.
In accordance with EN 10346. (Z275)

4.2 Polyester coating

Thickness: Min. 60 µm (Average of 10 measurements done on 1 O-lox post)

Colour: Green RAL 6005 and RAL 7016

Other standard colours are available and can be found in the technical data sheet TDS-99-03. (Polyester coating)

Adhesion:
Make two scratches by means of a hard metal pointed graving tool, penetrating through the metal and intersecting at an angle of 30° ± 5°. Lift a 30° peak with the point of a knife.
The coating shall not be able to be lifted from the metal by more than 5 mm.

Resistance of the polyester to saltspray:
Make a diagonal cross by means of a hard metal pointed graving tool, penetrating through the metal. Test in accordance with ISO 9227.
After 1000 h there shall be no corrosion beneath the polyester or loss of adhesion in excess of 10 mm from the diagonals.

Resistance against UV: In accordance with ISO 11507.
After 1000 h QUV and after washing with pure water, the colour difference, expressed as ΔE^* is maximum 3.
Loss of gloss: After 1000 hours max. 50 % of the original one, measured after being washed with pure water.

5 Packaging

The O-lox® posts are packed on a wooden pallet.
An identification label with the Sapcode, product description, number of posts and colour shall be put on each side of the pallet.

6 Accessories

6.1 Post Caps

Each post is provided without post cap.

The customer can decide if he wants a post cap with Betafence logo made out of PA, alumimium or a post cap without Betafence logo with overhang.

Dimensions of the post cap: 60 x 40 mm

O-LOX PA post cap without overhang: NYL32P003001
Post caps are available in following colors: RAL 6005, RAL 7042 and RAL 9005.

Figure 2

O-LOX Aluminium post cap with overhang:
Post caps are available in following colors : RAL 6005, RAL 7016 and aluminium.

Figure 3

O-LOX posts

O-LOX PA post cap with overhang: NYL 32P004001
Post caps are available in following colors: RAL 6005, RAL 7042 and RAL 9005.

Figure 4

6.2 Clamps

The clamps are made out of PA6 material.

O-LOX clamp: NYL42P002001
The clamp is available in following colors: RAL 6005, RAL 7042, RAL 9005 and RAL 7016.

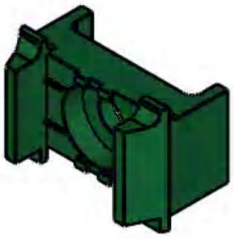

Figure 5

The clamps are mounted on the post by using M8 inserts.
The panel and fixing plate or cover plate are mounted on the post by using M8 screws.

The screws are made out of stainless steel, grade A2 in accordance with ISO 3506-1.

Hexagon socket button head screw: NYL40P005001
Sapcode: 7050634 (Bag 100 pc's)

6.3 O-LOX coverplates

The coverplates are made out of S250 steel (Sendzimir) and afterwards polyester coated.
Cover plate: See figure 6

Figure 6

Dimensions of the coverplate, see table 3

Table 3 : Dimensions of the coverplate

Height of the coverplate (mm)	Dimensions (mm)	Betafence technical drawings
660	40 x 4	NYL31R500230
860		NYL31R500240
1060		NYL31R500231
1260		NYL31R500241
1460		NYL31R500232
1660		NYL31R500242
1860		NYL31R500233
2060		NYL31R500243
2260		NYL31R500234
2460		NYL31R500244

6.4 O-LOX stainless steel fixing plates

The fixing plates are made out of stainless steel, grade 304, number 1.4301 in accordance with EN 10088-3.

Dimensions of the fixing plate = 30 x 30 x 2 M8

The fixing plates are made in accordance to technical drawing NYL34P500100.
See figure 7:

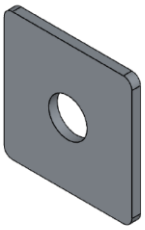

Figure 7

6.5 Butterfly fixator

The butterfly fixators are made out of stainless steel, grade 304, number 1.4301 in accordance with EN 10088-3.

The butterfly fixator is mounted on the post by using M8 x 40 bolts.
Sapcode of the butterfly fixator: 7069819 (Bag 100 pc's)

The bolts are made out of stainless steel, grade A2 in accordance with ISO 3506-1.
Sapcode of the bolts: 7050634 (Bag 100 pc's)

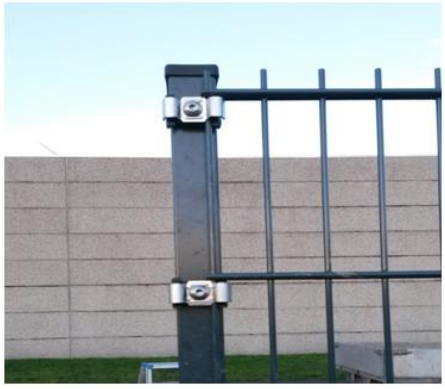

Figure 8