



# *The new* **Fixe 1**

**18 MONTHS OF WORK  
TO ACHIEVE MORE  
STRENGTH, LIGHTNESS AND RELIABILITY**

It is **37 years** since the first Fixe 1 hanger, and a total of three geometric evolutions of what is probably the most used hanger in history.

The entire development and production of the new Fixe 1 is placed a few kilometers from the headquarters of Fixe Climbing, located in **Sant Quirze de Besora (Barcelona)**.

Working with the **local metallurgical industry** has allowed us to gain total control over every step we have taken throughout this process, adding knowledge and precision during 18 months of work that have been required to conceive this hanger. The result has been a **lighter, more reliable hanger with better torque control, more durable and safe**.



# Why is it the strongest, lightest and most reliable hanger in Fixe's history?

## More reliability by bolting

### Tightening torque control

METHODS FOR BETTER FIXING

#### **Fixe Conical Washer**

The rim of the bolt anchor hole protrudes slightly into a conical shape, away from the wall. The act of pulling the bolt anchor will generate a spring effect that provides constant pressure against the wall, multiplying the strength of the torque. It also allows to have a better touch upon the torque tightening.

#### **Fixing pin**

By increasing the distance between the hole of the bolt anchor with the three fixing pins, a greater resistance (tightening torque) to the hanger once installed is achieved.

### Geometry Optimization

REDUCTION OF SURFACE AREA AND THICKNESS

#### **Lighter**

With a thickness of 3.5mm (previously 4mm) we managed to approach the weight of the hangers that stand out for their lightness, reducing their weight by 12.5% in the 316L Inox steel version. It has gone from 64g to 56g in the new version and it is the most robust on the market.

#### **Better contact**

Walls are irregular by nature, causing a partial contact of the hanger against the wall. The optimization of the hanger surface reduces the possibility of finding irregularities that prevent a complete contact of both elements.

## Better Climbing performance

#### **Reducing wear**

The edge that contacts the carabiner has been rounded to reduce the wear that receives, managing to extend the period of the carabiner

#### **Guiding the carabiner**

Thanks to its shape, when placed on a roof, the carabiner will be routed so that it never comes into contact with the projecting head of the bolt anchor.

#### **Fixing pin**

Applying more force to prevent the hanger from rotating and becoming mobile.

#### **Fixe Conical Washer**

It maintains a constant pressure that expands the force between the bolt anchor and the wall.

Over the years, bolt anchors can undergo small rotations, which lead to a space between the bolt and the wall, causing a movement in the hanger. The total of fixing pins and the conical washer allow the bolt anchor to be removed by rotating up to 45° without losing contact with the wall (previously it only supported 20°).



Entirely developed and manufactured in Barcelona



## ECOTRI-TREATED STEEL

### Replacing bichromate

This hanger is perfect for bolting indoor installations, such as gyms, climbing walls, and so on. It is the first line in the range of hangers and it offers the highest performance to withstand conditions in enclosed or covered spaces.

With an 8 micron layer of EcoTri treatment, it provides greater resistance to corrosion (96h W +360h Red) and is able to incorporate thermal shock resistance (200°C). Also, thanks to the new geometry, it is possible to reduce the weight, from the 66g of the old bichromate version to the 56g of the new steel hanger with EcoTri treatment.

Fixe does not recommend its use in outdoor or marine environments.

# NEW MATERIALS

## 316L STAINLESS STEEL

### Replacing PLX (duplex steel)

In 2016 Fixe launched the PLX to respond to the different cases of SCC (corrosion under stress). In this one was found a material of easy production, located in the 2nd highest link of the table of the UIAA.

In December 2018 the European Committee for Standardization (CEN) published the update of the EN959, but this time making official a table of recommended materials where stainless steel was again included in the 2nd link, reserving the first link only to titanium.

Henceforth, following the current recommendations in materials implementation, Fixe begins the process of evolution of the geometry of its Fixe 1 hanger, incorporating 316L stainless steel as a substitute for PLX towards outdoor environments and titanium for marine environments.

To make the final leap in the prevention of SCC in marine environments, the glue-in titanium anchor line is integrated as the only one recommended for this type of environment which is so aggressive with metals.





# Hanger

## Product Catalog

8mm

10mm

12mm



ref: V00210



ref: V00212

category: **3 (EN959:2018)**  
emplazamiento: **indoor**  
material: **Steel with EcoTri Treatment**  
weight: **56g - 57g**  
resistance: **25kN**  
replacing: **bichromate**  
(ref: 013D-10 ; 013D-12)



ref: V00410



ref: V00412

category: **2 (EN959:2018)**  
emplazamiento: **outdoor**  
material: **Inox Steel 316L**  
weight: **56g - 57g**  
resistance: **25kN**  
replacing: **PLX**  
(ref: 038D-10PLX ; 038D-12PLX)



ref: V30600

category: **1 (EN959:2018)**  
emplazamiento: **marine environments**  
material: **Titanium**  
weight: **52g**  
resistance: **25kN**