



The Seven Wonders about Lace Pins

All that you wanted to know about pins but were afraid to ask. There are seven parameters needed to identify a pin and we are going to introduce them to you.

- 1 WIRE.** Wire is the primary material from which all pins are manufactured; this wire may be made from several different metals and alloys. The three main materials used are steel, stainless steel and brass of various qualities as outlined below.
The wire strength depends on its chemical composition, manufacturing process and final diameter of the finished product.
Steel (A) Steel is an alloy of iron and carbon and generally the higher the carbon percentage, the harder steel pins and thus the greater the resistance to bending and will eventually break if bent more than 90° pins made from steel are heat treated in specially developed furnaces to attain optimum properties.
Mild steel (F) This steel is of low carbon percentage and mild steel pins are not commonly used in lacing but are available for general use.
Stainless steel (AI) Stainless steel wire is probably the best material of all for its bright appearance, high corrosion resistance and good bending resistance, these parameters will remain for the life of the pin in most environments. The strength of this wire allows the production of pins with fine diameters which are excellent for lace-makers requirements.
Brass (LL) Brass is an alloy of copper and zinc in various proportions, we use the better quality which is 67% copper and 37% zinc. It is rustproof, and its natural colour is like yellow gold and for this reason is specially used for golden finishes.
- 2 DIAMETER.** This is one of the most important parameters; some of the other parameters are related to this one like the strength which is linearly direct. Thin pins are the most appreciated by lacers and choosing the right pin diameter, depends upon the thread to be used, the lace design, specific patterns and the lace technique used. Our minimum pin diameter is 0,40 mm and the maximum is 1,20 mm.
- 3 LENGTH.** This is the easiest parameter to check and the length of pin required depends on lace technique used. Usually the techniques that need pins longer than 30 mm have to be worked with vertical pillows and the techniques that need pins of 10, 16, 17, 18 or 20 mm are used with round or horizontal pillows, the longer pins are also

- high appreciated.
- 4 POINT.** This is a critical property of any straight pin, which should push into your pillow easily. The pin is ground and polished to a fine point, as are our *Jabali* pins. Depending on the pin type we have short point, blunt point, and standard pin point, this last one is the most common point for lace pins. Point length and shape is strictly controlled and is three times the pin diameter.
- 5 HEAD.** Three parameters are required to define a pin head, the shape, the material and its size (diameter).
Shape. This can vary and we currently produce flat, dome, ball, flower and dipped (pear) shaped heads, all designed to give maximum comfort to the lacer.
Material. As the pin wire, glass and plastic, which may be nylon, polythene or polyester.
Pins head size. The head size on the pin head formed from the wire depends mainly on the wire diameter and there is a relation where. **Head diameter = 2,5 x wire diameter.** For specific patterns and techniques, we manufacture pins with small head of 1,2 mm diameter.
- 6 FINISH.** Determines the kind of surface and the corrosion resistance of pins.
Nickel plate (N) This is a protective coating on the pin, the nickel plating gives the pin a bright finish with a high resistance to corrosion. When nickel plated, pins made from brass, have better corrosion resistance than pins made with steel.
Inox finish (I) Polished mirror bright using a proprietary finishing process and is only used on stainless steel pins which has the highest resistance to the corrosion.
Gold finish. (D) A chemical polish that gives the brass a bright, smooth yellow finish. This has only limited resistance to corrosion.
- 7 BENDING RESISTANCE.** The bending resistance is the capacity of pin to recover its straight shape after being pushed into the fabric, or any other material, this property depends on some of the other six wonders, such as the wire material, wire strength, diameter, length and surface treatment given. We have learnt that the lacers need to have long pins with thinnest diameter, with high bending resistance. It is important that the pin will not bend when it is pushed into the hard pillow and for that reason we have created a scale, so that every lace pin will have his own bending resistance value, so each lacer can find their favourite style of pin for each lace technique and lace learning status. You will find this value on each box of pins as shown below.

BENDING RESISTANCE



PIN MAKER SINCE 1924



Foto cedida per la revista "La encajera"



LACE PINS

Our company Metalurgica Folch based in Catalunya, Spain, since 1924 one of the few remaining lace and dress pins manufacturers in Europe. Pins are made, using traditional skills, on modern machines and finished equipment, using the finest materials available. During the last twenty years we have been developing pins to handle the different lace styles, lace pillows, country tradition, design techniques, and learning status.

We are happy to introduce our range of quality lace pins with our "Seven wonders about lace pins" to help to all the lacers around the world to identify the anatomy of every pin, and help each one to discover which one is the most suitable for each lace and pattern, the seven wonders on lace pins has been possible thanks to all the lacers, lace teachers and lace associations around the world that have encouraged us to discover the seven wonders.