

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 indentify a pin and we are going to introduce them to you.

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 lacemakers 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** = $2.5 \times 10^{12} \times 10^{$

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.

Folch

PIN MAKER SINCE 1924





LACE

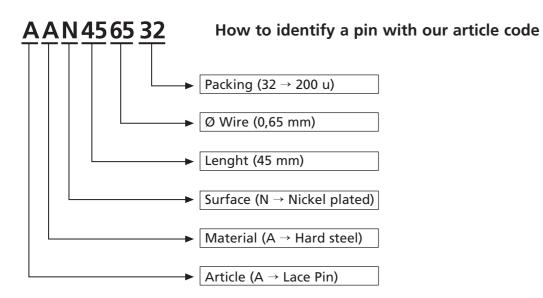
ur company Metalurgica Folch based in Catalunya, Spain, since 1924 one of the few remaining lace and dress pins manufacturers in Europe. Pins are made, using traditional skills, on modern machines and finished equipment, using the finest materials available. During the last twenty years we have been 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 whichone is the most suitable for each lace and pattern, the seven wonders on lace pins has been posible thanks to all the lacers, lace teachers and lace associations around the world that have encouraged us to discover the seven wonders.

BENDING RESISTANCE



PINS www.folch.com



BRASS LACE PINS RUSTPROOF

			king				
CODE	Lenght mm	Shaft wire diameter	Head size mm	Finish	Code 25 (400) Code 32 (200)	Code 03	BENDING RESISTANCE Folch scale
ALD1055	10	0,55 mm	1,45 ±0,1	gold	400 u	100 g	0 100
ALD1855	18	0,55 mm	1,45 ±0,1	gold	400 u	100 g	0 100
ALD1865	18	0,65 mm	1,55 ±0,1	gold	400 u	100 g	0 100
ALD2665	26	0,65 mm	1,55 ±0,1	gold	400 u	100 g	0 100
ALN2665	26	0,65 mm	1,55 ±0,1	nickel	400 u	100 g	0 100
ALN3080	30	0,80 mm	1,80 ±0,1	nickel	200 u	100 g	0 100
ALN4210	42	1,00 mm	2,00 ±0,1	nickel	200 u	100 g	0 100

HARD STEEL PINS RUST RESISTANCE

					Pac	king	
CODE	Lenght mm	Shaft wire diameter	Head size mm	Finish	Code 25 (400) Code 32 (200)	Code 03	BENDING RESISTANCE Folch scale
AAN1745	17	0,45 mm	1,20 ±0,1	nickel	400 u	100 g	0 100
AAN3050	30	0,50 mm	1,40 ±0,1	nickel	400 u	100 g	0 100
AAN3060	30	0,60 mm	1,50 ±0,1	nickel	400 u	100 g	0 100
AAN3460	34	0,60 mm	1,50 ±0,1	nickel	400 u	100 g	0 100
AAN3765	37	0,65 mm	1,55 ±0,1	nickel	200 u	100 g	0 100
AAN4360	43	0,60 mm	1,50 ±0,1	nickel	200 u	100 g	0 100
AAN4565	45	0,65 mm	1,55 ±0,1	nickel	200 u	100 g	0 100

GLASS AND PLASTIC HEADED PINS RUSTPROC

						Pack	ing	
CODE	Lenght mm	Shaft wire diameter	Head	Head size mm	Finish	Code 29 (100) Code 05 (20)	Code 03	BENDING RESISTANCE Folch scale
ACV3060	30	0,60 mm	vidrio	3	nickel	100 u	75 g	0 100
ACV3870	38	0,70 mm	vidrio	3,7	nickel	100 u	75 g	0 100
ACV4978	49	0,78 mm	vidrio	4,2	nickel	100 u	75 g	0 100
AAV4865	48	0,65 mm	plástico	4	nickel	100 u	75 g	0 100
AIC3259	32	0,59 mm	plástico	4	polished	100 u	75 g	0 100
APS6480	64	0,80 mm	perla	6,3	nickel	20 u	75 g	0 100
ASL6480	64	0,80 mm	perla	6,3	nickel	20 u	75 g	0 100



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STAINLESS STEEL DIPPED PINS

JSTPROOF -	INOXIDABLE
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7	CODE	Lenght mm	Shaft wire diameter	Head	Head size	Finish	Code 29 (100)		BENDING RESISTANCE Folch scale
	AIP2659	26	0,59 mm	dipped	1,60 ±0,1	silver	400 u	100 g	0 10cm scale
	AIP2654	26	0,54 mm	dipped	1,50 ±0,1	silver	400 u	100 g	0 100
	APS2659	26	0,59 mm	dipped	1,60 ±0,1	assorted	400 u	100 g	0 100
	APS3059	30	0,59 mm	dipped	1,60 ±0,1	assorted	200 u	100 g	0 100
	APS3452	34	0,52 mm	dipped	1,40 ±0,1	assorted	200 u	100 g	0 100

Packing

STAINLESS STEEL PINS

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Î	CODE	Lenght mm	Shaft wire diameter	Head size mm	Code 25 (400)	Code 03	BENDING RESISTANCE Folch scale
	AIN1852	18	0,52 mm	1,40 ±0,1	400 u	100 g	0 100
	AIN2259	22	0,59 mm	1,50 ±0,1	400 u	100 g	0 100
	AIN2640	26	0,40 mm	1,00 ±0,1	400 u	100 g	0 100
	AIN2653	26	0,53 mm	1,40 ±0,1	400 u	100 g	0 100
V	AIN2659	26	0,59 mm	1,50 ±0,1	400 u	100 g	0 100
	AIN3059	30	0,59 mm	1,50 ±0,1	400 u	100 g	0 100
	AIN3249	32	0,49 mm	1,20 ±0,1	400 u	100 g	0 100
	AIN3452	34	0,52 mm	1,40 ±0,1	400 u	100 g	0 100
	AIN3840	38	0,40 mm	1,00 ±0,1	400 u	100 g	0 100
	AIN3859	38	0,59 mm	1,50 ±0,1	400 u	100 g	0 1100

