

General processing indications for round-section wires made of Elasticor® and Ceramicor®

Protect eyes, hands and breathing when pickling.

When trimming alloys, wear safety glasses and a face mask and use a dust extractor.

With the publication of these instructions for use all previous editions are no longer valid.

The manufacturer refuses any liability for damages due to disregard of the instructions for use below.

In general:

These wires are supplied soft.

Fabricating clasps and friction-pins with Elasticor® wires:

Cold-forming

Bending wires supplied in a soft state (cold-forming) deforms their structure and is accompanied by hardening. If the wire reaches the stage where it is difficult to bend, it must be intermediate-annealed (soft-annealed).

Bending technique

When bending the wire with tools such as pliers, make sure that the wire is not damaged, e.g. notches, which could cause the wire to fracture at these points.

Soft-annealing

Soft-annealing is carried out in a porcelain furnace – Elasticor® at 700 °C for 10 mins. followed by quenching in water.

Hardening

This is achieved by glowing the wire in a porcelain furnace at 400 °C for 15 mins. followed by bench cooling to room temperature.

Processing

Once the clasps have been completed and soft annealed, they have to be hardened to give them their optimum mechanical properties.

Pickling

After heat treatment (soldering, soft annealing or hardening), the wire should be pickled in warm, clean 10 % (by volume) sulphuric acid (H₂SO₄).

Please note: When using other pickling agents, follow their manufacturers' instructions.

Polishing

After finishing and hardening the wire, any areas of exposed metal must be polished to a high lustre to remove the oxide layer completely.

Strengthening anatomically formed, cast root posts with Ceramicor® wires:

Ceramicor® is a non-oxidizing, high fusing alloy for casting-on with all precious metal alloys.

Allergies

This product must not be used for patients known to be allergic to one or several of the elements contained in the attachment materials. Should the patient be suspected of being allergic to one or several of the elements contained in any one attachment, this product can only be used after preliminary allergological testing and proof that no allergy exists.

The products carry the CE Mark.
See packaging for details.

Cendres+Métaux Wires

Cendres+Métaux round wires and wires with spiral- and longitudinal grooves

Physical and mechanical properties

Alloys	Colour	Composition in weight %									Melting range °C	Hardness HV 5			Young's Modulus GPa		
		Au + Pt-Met.	Au	Pt	Pd	Ag	Cu	Zn	Ir	soft		hardened	cast				
Elasticor®	Yellow	74.5	61.0	13.5		16.5	9.0				950–1050	700 °C/10'/H ₂ O	HV 205	400 °C/15'/air	HV 285	no casting-on	96
Ceramicor®	White	100.0	60.0	19.0	20.0					1.0	1400–1490	1000 °C/H ₂ O*	HV 145	cannot be hardened		HV 180–200	136

* For the foreseen use, do not anneal

Round wires, delivery forms

	Order N°	Diameter mm	Length mm
Elasticor®	10264	1	200
Elasticor®	10266	1.1	200
Elasticor®	10267	1.15	200
Elasticor®	10268	1.2	200

Wires with spiral- and longitudinal grooves, for casting-on with precious alloys, delivery forms

	Order N°	Diameter mm	Length mm
Ceramicor®	10683	0.965	200
Ceramicor®	10684	1.219	200
Ceramicor®	10685	1.473	200