

# Wiron® light

The new non-precious alloy for metal-to-ceramic work, with lighter oxide  
– beryllium-free –



## > Simple casting

- Casting temperature only 1350 °C
- Preheating temperature only 800 °C

## > Easy finishing

- Light-coloured, thin oxide

## > Risk-free working

- Outstanding strength values



## Wiron® light – casting made simple

The 6 g casting ingots can be melted either with a flame or inductively before casting by the centrifugal or vacuum pressure method. The proper moment for casting is clearly recognisable and the excellent melting properties of the alloy ensure reliable filling of the mould. The lower mould preheating temperature of only 800 °C gives a very smooth surface, cuts electricity costs and saves time.

## Wiron® light – for effortless finishing

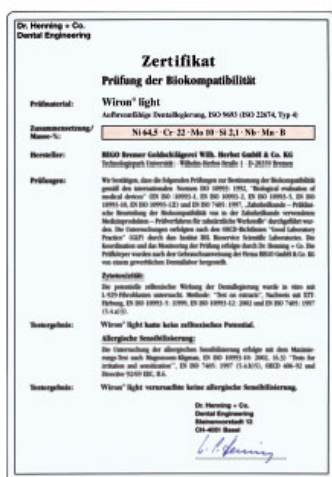
The lower casting temperature of only 1350 °C and the preheating temperature of just 800 °C reduce the reaction of the alloy with the investment material. This produces a smooth surface and makes finishing much easier. The oxide of Wiron® light is considerably lighter in colour compared to conventional NiCr alloys and is very easy and fast to remove (see picture).

## Wiron® light – for reliable results

The outstanding strength values of Wiron® light make it possible to produce delicate work without the risk of breakage. The low casting temperature gives excellent accuracy of fit. Many commercially available ceramics display very high bond strength, with normal cooling, when used for veneering. If an excellent, high-lustre polished finish is required, we recommend the new polishing paste Wiropol. The tried and tested Wiron® system gives extra certainty of excellent results.

## Wiron® light – the alloy you can rely on

Of course, a biocertificate is available for Wiron® light.



| Wiron® light                                |             | Guide values                |
|---------------------------------------------|-------------|-----------------------------|
| <b>Alloy characteristics:</b>               |             |                             |
| Density [g/cm <sup>3</sup> ]                |             | 8.2                         |
| Melting range [°C]                          |             | 1200 – 1280                 |
| Casting temperature [°C]                    |             | approx. 1350                |
| CTE [10 <sup>-6</sup> K <sup>-1</sup> ]     | 25 – 500 °C | 13.8                        |
|                                             | 20 – 600 °C | 14.1                        |
| Ductile yield (A <sub>5</sub> ) [%]         |             | 10                          |
| Elongation limit (R <sub>p</sub> 0.2) [MPa] |             | 470                         |
| Tensile strength (R <sub>m</sub> ) [MPa]    |             | 880                         |
| Modulus of elasticity [GPa]                 |             | approx. 200                 |
| Vickers hardness (HV10)                     |             | 260                         |
| Preheating temperature [°C]                 |             | 800                         |
| <b>CE 0197</b>                              |             | <b>ISO 9693 / ISO 22674</b> |

| Composition in % by weight:                    |           |               |              |
|------------------------------------------------|-----------|---------------|--------------|
| Ni 64.5 · Cr 22 · Mo 10 · Si 2.1 · Nb · Mn · B |           |               |              |
| Availability and accessories:                  | Unit      | Contents:     | Order no.    |
| Wiron® light                                   | 1 pack    | 1000 g        | <b>50270</b> |
|                                                | 1 pack    | 250 g         | <b>50272</b> |
| Wiweld NC, NiCr laser wire, carbon-free        | 1 roll    | approx. 5.5 m | <b>50006</b> |
| Wiron® soldering rods                          | 1 pack    | 4 g           | <b>52625</b> |
| Wiropol polishing paste                        | 1 Packung |               | <b>52306</b> |
| Certificate                                    |           |               | <b>82944</b> |

Subject to modifications in design and composition. Our instructions for use and recommendations are based on our own experience and trials and can only be regarded as guidelines. Date of issue: 15.2.07.