

Resoloy[®]

by MeKo

The resorbable magnesium alloy for scaffolds

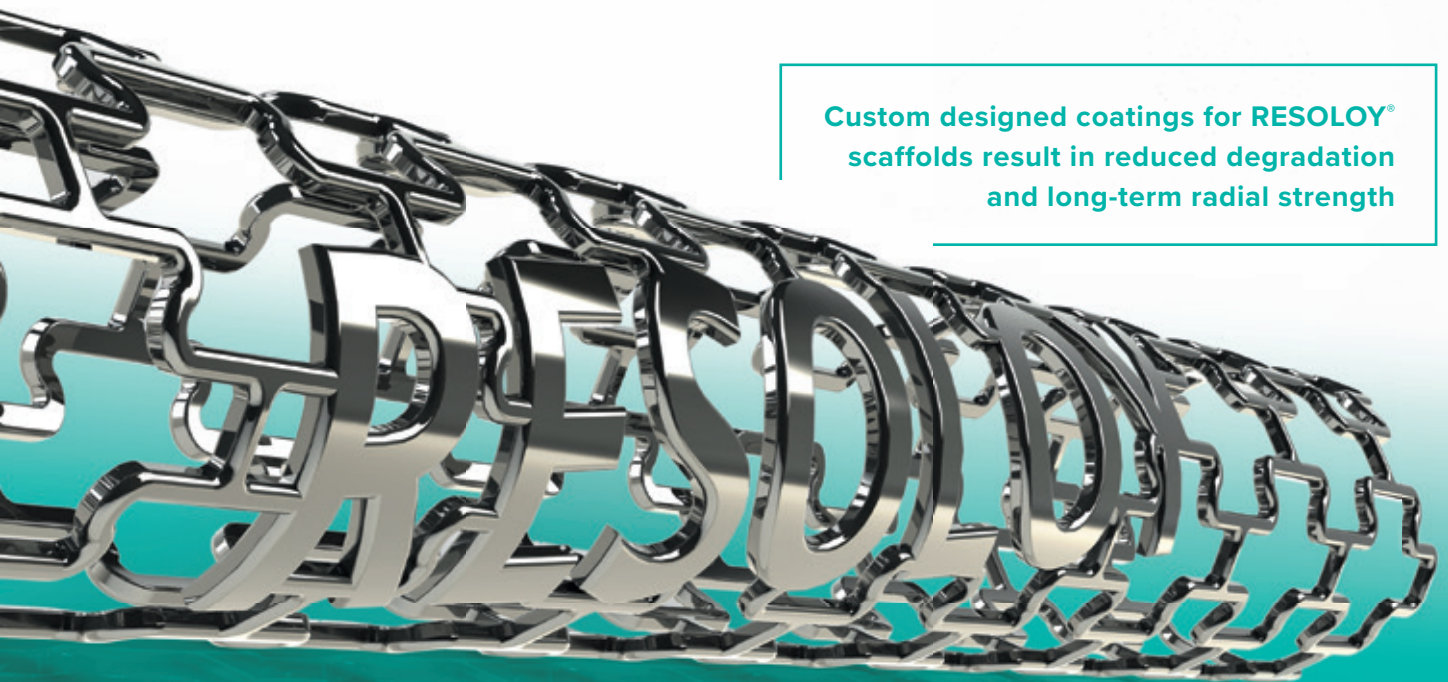
With **RESOLOY[®]** MeKo offers a bioresorbable magnesium-alloy with extraordinary properties. **RESOLOY[®]** is an attractive alternative to polymer scaffolds. In comparison to PLLA, it offers about 3 times higher strength, thinner struts, a higher radial force and is applicable for direct stenting. The degradation time of **RESOLOY[®]** is adjusted by coatings. It has a proven biocompatibility, no shelf life and no temperature issues.



Properties of **RESOLOY[®]**

- ✓ bioresorbable
→ „leaving nothing behind“
- ✓ biocompatible
- ✓ adjustable degradation time and mechanical properties
- ✓ MRI compatible

Custom designed coatings for **RESOLOY[®]** scaffolds result in reduced degradation and long-term radial strength



MeKo - competence in contract manufacturing of stents and vascular implants

MeKo capabilities for Mg-scaffolds

- ✓ laser cutting
- ✓ electro polishing
- ✓ heat treatment
- ✓ coatings for degradation adjustment
- ✓ X-ray marker
- ✓ degradation testing
- ✓ support for scaffold registration

Tubing in stock

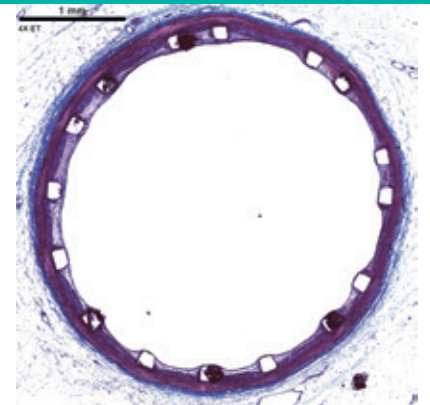
| | |
|----------------------|----------------------|
| Ø 1,80 mm x 0,160 mm | (Ø 0.071" x 0.0063") |
| Ø 2,20 mm x 0,160 mm | (Ø 0.087" x 0.0063") |
| Ø 3,15 mm x 0,215 mm | (Ø 0.124" x 0.0085") |

Other tubing dimensions upon request.

In-vivo studies

MeKo performs in-vivo studies for animal trials in renowned labs:

- ✓ favorable in vivo results for Resoloy® coronary-scaffolds
- ✓ degradation analysis ex-vivo with computed tomography and SEM/EDS
- ✓ OCT/QCA analysis
- ✓ Synchrotron investigation



Degradation Test Lab

MeKo performs in-vitro degradation tests for Mg-scaffolds:

- ✓ simulated blood circulation
- ✓ controlled flow rate, pressure, pulsation and temperature of circulation
- ✓ blood substitute solution for standardized tests: PBS, SBF, ...
- ✓ accelerated in-vitro degradation tests
 - ✓ fast and reproducible evaluation of degradation
 - ✓ monitoring and visualization of degradation process
 - ✓ prediction of in-vivo degradation behavior

RESOLOY® has been developed and internationally patented by MeKo Manufacturing e.K.
US patents: 9,566,367 B2 & 9,522,219 B2, EU patents: 2744531 & 2744532

PRECISION IS OUR PROFESSION

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