

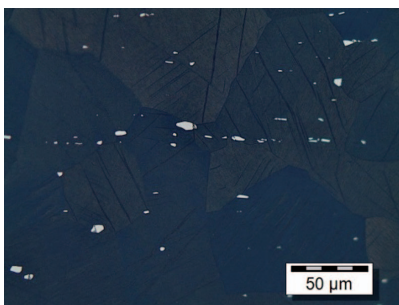
ADVANCED NITINOL ULTRA-FINE HCF-SE

Based on the worldwide proven standards of excellence for strength, superelasticity, formability, corrosion resistance and biocompatibility as our standard Nitinol material for implants, Nitinol HCF-SE is a consequent evolution. It allows to design next generation improved generation components, which will become smaller and more sophisticated in size and fields of application.

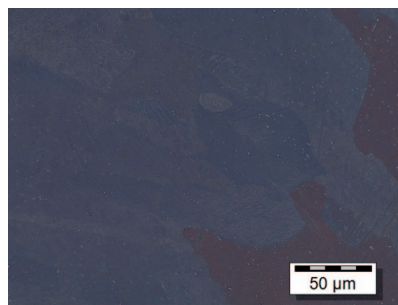
The ultrafine dispersed secondary phases in the range of 4 μm and smaller have a significant impact on fatigue behavior. A more than 10 times higher fatigue life has been reported. This makes the material the first choice for high-cycle fatigue devices like heart-valve frames and spine implants.

Material type	Area percentage of inclusions	Average inclusion size	St. Dev. inclusion size	Max. Inclusion size
VAR standard	0,73 %	2,80 μm	2,49 μm	16,5 μm
VAR extra low inclusions	0,14 %	1,11 μm	0,98 μm	8,1 μm
VIM/VAR extra low inclusions	0,49 %	1,32 μm	1,11 μm	10,9 μm
VAR/HCF-SE ultra fine inclusions	0,11 %	0,49 μm	0,21 μm	2,4 μm

- reported measurement -



Standard VAR



HCF-SE

