

316LWCQ+ / 4435WCQ+

Staybrite® 4435WCQ+ is a state-of-the-art, fully austenitic, remelted stainless steel (ESR), CrNiMo type with about 18 % Cr, 14 % Ni, 2.7 % Mo.

Excellent polishing is one of the main requirements for the highly qualified materials used in the watch industry. This is why **Staybrite® 4435WCQ+** has been specially developed: A very high polishability and improved corrosion resistance, for the production of cases, bottoms, rings, circles, and watch straps.

The obtaining of a polishing of very high level and an incomparable shine, results from a specific chemical analysis and a very great mastery of the remelting process of the alloy. This allows also to guarantee a homogeneous and controlled structure (inclusions) as well as a very fine grain and the absence of ferrite.

Staybrite® 4435WCQ+ was developed by Hempel Special Metals AG, Dübendorf/Zürich, Switzerland.

Gehe zu



Chemical composition of 1.4435WCQ+ - basic composition DIN 1.4435 / X2CrNiMo18-14-3

C	Si	Mn	P	S	Cr	Mo	Ni	Fe
≤ %	≤ %	≤ %	≤ %	≤ %	%	%	%	
0,03	0,8	2,0	0,03	0,005	17,0-19,0	2,5-3,0	13,0-15,0	bal

Mechanical properties of Staybrite 4435 WCQ+

	typical values
solution heat treated	
Yield strength Rp 0,2	> 190 N/mm ²
Tensile strength Rm	490 - 690 N/mm ²
Elongation A	> 35 %
Hardness	> 150 HB

Heat treatment

Staybrite® 4435WCQ+ must be annealed under the same conditions as standard grade 1.4435WCQ. From

Temperatures of 1000-1050°C are recommended with fast cooling.

Grain size

Staybrite® 4435 WCQ+ is a material with a controlled and fine grain size, thanks to the remelting process.

(thickness 6 and thinner) and this allows for optimum cold forming, better corrosion resistance and a better polish.

Delivery program

Cold-rolled sheets 2000 x 1000 mm, up to thickness 6.00 mm

Hot-rolled sheets 2000 x 1000 mm, from 6.50 mm thickness upwards

Strips sheared from sheet metal, or cut by laser or water jet

Surface finish: Grinded on 2 sides, Ra ≤ 1

Contact us



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Weight Calculator

