

WALTHER FLENDER TIMING BELT PULLEYS- SURFACE TREATMENTS

Metallic coating

		Layer thicknesses in μm	Tolerances in μm	Only for pitches $\leq 5\text{mm}$! Outer diameter-correction in mm	Material timing belt pulley	Characteristics
1.	Galvanizing	bis 80	± 10	depending on specification	St	Increases corrosion protection and chemical resistance <ul style="list-style-type: none"> Takes place in heated acidic electrolytes Good corrosion protection only with absolutely dense coatings min. 25 μm thick on iron Good hardening layer
2.	Nickel plating	20 - 25	± 3	DA - 0,04	St/AL	
3.	Chromating				St/AL	
3.1	Decorative	1 - 2		no correction		
3.2	Hard chrome plating	bis 100	± 5	depending on specification		

Non-metallic coating

		Layer thicknesses in μm	Tolerances in μm	Only for pitches $\leq 5\text{mm}$! Outer diameter-correction in mm	Material timing belt pulley	Advantages
1.	Burnishing	1 - 2		no correction	St	Medium corrosion resistance and improvement of optics Immersion of iron in heated caustic soda, alkali or sulfate solutions, followed by repeated rubbing with oil or wax
2.	Anodizing	10 - 25	± 5	no correction	AL	Increase of corrosion resistance Creation of an oxide layer by electrical oxidation on Al, Mg, Zn Colored coatings are possible
2.1	Decorative	1 - 2				
3.	Phosphating	5 - 15	± 3	DA - 0,02	St/AL	Medium corrosion resistance and Improvement of optics Production of phosphate coatings by dipping in phosphate acid solutions of heavy and alkali metals. Low corrosion resistance
4.	Hard coating / hard anodizing	< 40 >40	± 5 ± 10	DA - 0,04	AL	Increase in the surface hardness of the gearing and corrosion resistance
4.1	PTFE sealing	ca. 3				Improvement of the sliding properties Post-sealing of the hard-coated surface

Note: Holes/threads may need to be covered before coating.