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Recommendations for processing and polishing non precious alloys in the crown and bridge technique



General information

The higher physical characteristics of the non precious alloys such as *remanium*[®] *star*, *remanium*[®] *secura*, *remanium*[®] *LFC*, *remanium*[®] 2000+, *remanium*[®] 2001, Triloy, *remanium*[®] CS or *remanium*[®] CSe, require grinding and polishing tools other than those normally used for processing precious metal alloys. Highly accurate modeling and the assistance of investment materials such as Castorit[®]-super C, Castorit[®] all speed or Trivest, which are adapted specifically to the requirements, make processing and finishing work much easier. The grinding tools selected should only be used for one alloy.

Processing and polishing steps

Steps	Tools	REF	Remarks
Removal of casting sprues	STM separating discs	130-110-00	High cutting power and long life span
	T separating discs	130-324-00	Universal in application
Processing, rough	Grinding wheel	131-322-00	Grinding of sprue attachments
	STM separating discs	130-110-00	Rough processing, e.g. of interdental spaces (surfaces intended for ceramic coating must be processed with tungsten carbide tools)
Processing, fine	Tungsten carbide burs	123-582-00 123-584-00 123-585-00 123-601-00	General processing with "rough" tungsten carbide burs. Fine grinding work can be done with fine tung- sten carbide burs
Fine grinding	Aloxin stones	135-852-00 135-853-00	Pure aluminium oxide abrasives for smooth even transitions, especially metal masticatory surfaces
Buffing	Silichrom polishers	138-645-00 138-640-00	Fast effective material removal (rough buffing)
	Grey rubber polishers	138-102-00 138-302-00	Medium abrasive effect
	Green rubber polishers	138-101-00 138-301-00	Fine abrasive effect
Polishing	Polishing brushes	141-800-00	Universal polish with hand tool
	Polishing paste "Tiger brillant"	190-350-00	Fast acting high lustre polishing paste
	Universal Finishing Paste Tiger Starshine	190-301-00	The ideal paste for final finishing
Burnishing of crown's inner surfaces	Al ₂ O ₃ (50 μm), high lustre shot blasting beads	128-017-00 128-211-00	For use with pen-type blasting tool. Important! Cover ceramic edges with wax.

Preparation of surfaces for ceramic coating

Grind the metal surfaces with tungsten carbide tools to ensure a gradual transition. Blast the surfaces with a fine "pen-type" shot blasting tool using pure aluminium oxide of medium grain (125 μ m) at a low pressure of 2 - 3 bars. Clean with ultrasound in distilled water.

Minimum wall thicknesses

Due to the high physical properties of non precious alloys, both the wall thickness of the crown and the thickness of the bridge connecting points can be reduced by approx. 30% in comparison to average precious metal alloys.

