## A component journey

## Steel bite - Dental implants

Dental implants must be exceptionally strong, resistant to corrosion and able to withstand repeated pressure. They require heat treatment processing to ensure they have the properties needed, such as mechanical strength, and surface hardness and corrosion resistance. Specific medical approvals ensure treatments meet strict criteria for processing and cleanliness.



Dental implants begin life as martensitic stainless steel bars, selected for their corrosion resistant properties as well as mechanical strength.



The implants are machined to shape.



The implants are finish ground to final dimensional specifications.



Implants are hardened under vacuum to avoid contamination, and to optimise fatigue resistance, with precise process parameters to limit distortion ensuring allowance for final grinding tolerances.



Implants are quality inspected to check for any contamination or evidence of pitting corrosion.



End application, **dental implant.** 

Denotes the parts of the component journey undertaken by Bodycote

