WHITE-STAGE ZIRCONIA POLISHERS

Zirconia in the pre-sintered state has a porous structure and a low strength. A subsequent sintering process can not eliminate defects such as cracks, steps and microchips developed after manufacturing or shaping and structure adjusting. Furthermore, polishing only at the zirconia sintering stage causes high material wear on the polishing tools and is very time-consuming. Therefore, white-stage polishing restoration is an essential step before the sintering process.

JOTA PRE-SINTERPOL does not change the color of the pre-sintered zirconia and improves the surface quality. The dark grey M-polishers grind away connectors, thin the margins and smooth the surface. The light grey F-polishers polish the surface of pre-sintered zirconia.

Recommendations:

- use gloves when polishing pre-sintered zirconia, as it is highly sensitive to any coloured impurities
- pre-sintered zirconia restorations should be polished only in the dry state
- rotation speed 4.000-7.000 RPM with light pressure

IMPROVE MECHANICAL PROPERTIES

STRENGTH OF THE RESTORATIONS IS 25-35% HIGHER

IMPROVE OPTICAL PROPERTIES

SMOOTHER SURFACE

WITHOUT A DYE

DON`T STAIN ZIRCONIA

VIDEO

PRE-SINTERPOL

DURABLE | TIME-SAVING | SMOOTHER | ECONOMICAL

ZIR9972M.HP.100
REF 658104275423100
L = 24.0 mm

ZIR9974M.HP.055
REF 658104275423055
L = 16.0 mm

ZIR9972F.HP.100
REF 658104275413100
L = 24.0 mm

ZIR9974F.HP.055
REF 658104275413055
L = 16.0 mm

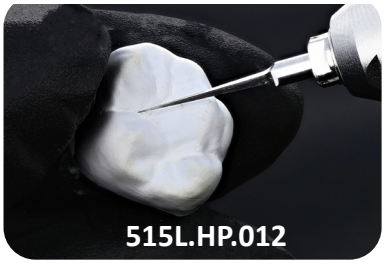
JOTA SWITZERLAND

KIT 1936 GREEN STATE REFINING

VIDEO

Separating

Connectors grinding and surface smoothing



Fissures retightening

Straight surfaces processing

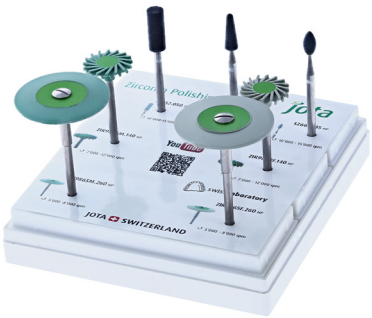
Surface texturing or fissures shaping

White-stage polishing

KIT 1446 ZIRCONIA POLISHING

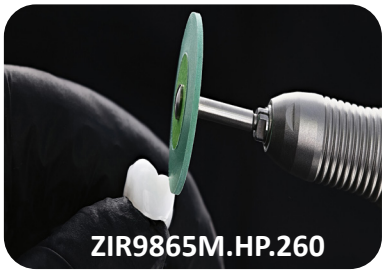
Straight surfaces smoothing and margins thinning

VIDEO

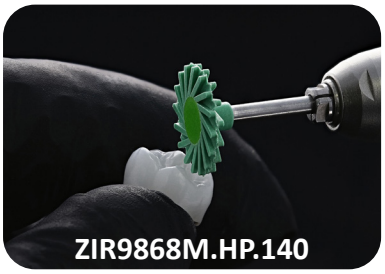


Supracontact points adjusting

Interdental spaces finishing



All surfaces pre-polishing

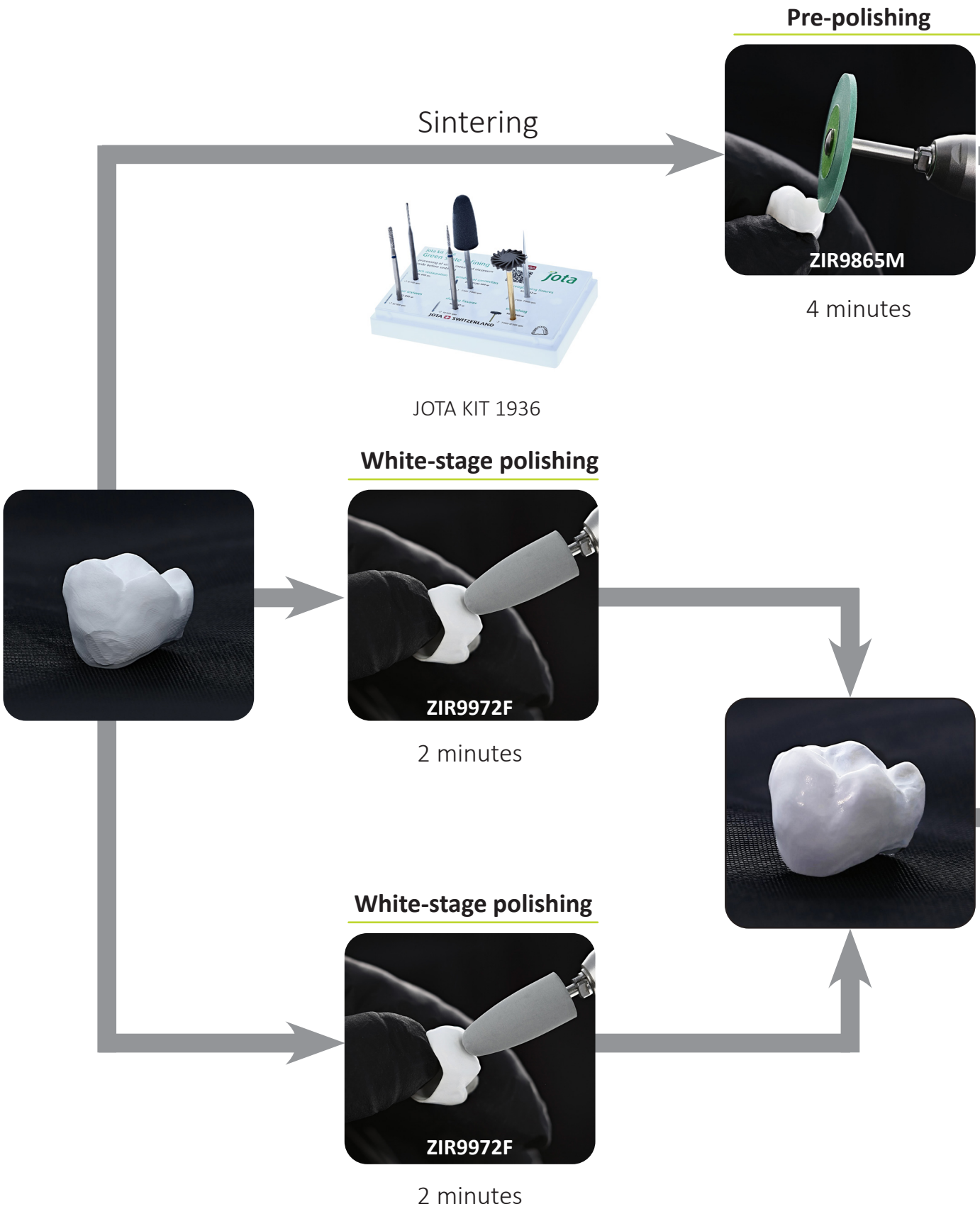


Occlusal surface pre-polishing

High-lustre polishing of all surfaces

High-lustre polishing of occlusal surface

ZIRCONIA POLISHING WORKFLOWS

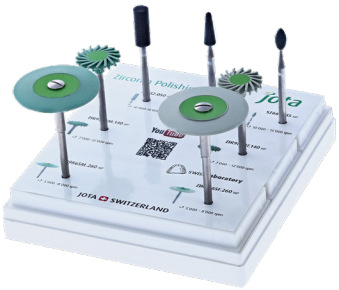


White-stage polishing **improves the optical and mechanical properties of zirconia**, and polishing after sintering takes **less time** therefore, the pre-polishing step (green polisher ZIR9865M) can be skipped. Nevertheless, the two-steps polishing protocol increases flexural strength. Additional polishing step removes more surface defects and thus achieves a smoother surface.

High-gloss polishing

4 minutes

Biaxial strength 1000 MPa
Surface roughness Ra=0,258 µm



JOTA KIT 1446

High-gloss polishing

2 minutes

Biaxial strength 1250 MPa
Surface roughness Ra= 0,23 µm

Sintering

Pre-polishing

2 minutes

High-gloss polishing

2 minutes

Biaxial strength 1350 MPa
Surface roughness 0,121 µm