R-Dent’s Most Advanced Zirconia

At R-Dent, we are dedicated to providing you with the absolute best in zirconia restorations. Our INspire™ UT and INspire™ HS zirconia are fabricated out of a carefully chosen, innovative material that allows for increased specification to ensure ideal esthetics and fit for various indications.

INSPIRE™ HS (High-Strength)

- **Indication:** Single units up to 6-unit posterior bridge
- **Features:**
  - Flexural strength of up to 1,150 MPa
  - Highly translucent
  - Pre-stained
  - Matches all 16 VITA® Classical Shades

INSPIRE™ UT (Ultra-Translucent)

- **Indication:** Anterior and posterior units, including up to 3-unit anterior or posterior bridges, and in some cases veneers.
- **Features:**
  - Flexural strength of up to 850 MPa
  - Smooth shade transitions
  - No abrupt shade edges
  - Matches all 16 VITA® Classical Shades
STEP ONE  
PREPARATION: Crowns & Bridges

General Guidelines:
• Ceramic-appropriate preparation, i.e. avoid sharp corners, edges, (incisal and occlusal), and internal angles
• Circumferential shoulder with rounded internal angle
• Structure-conserving preparation (Required minimum thickness of 0.5mm)
• Prepared tooth height: 3mm minimum
• Preparation margin should be clearly visible
• Increased occlusal space should be considered when preparing abutments for bridges

Contraindications:
• Shoulderless preparation
• Re-rising deep chamfers
• Undercut areas
• Parallel axial walls
• Sharp junctions particularly occlusal/incisal
• Highly divergent abutments with bridges

STEP TWO  
SEATING: Checking the Occlusion and Polishing

Occlusal
Check the static and dynamic occlusion, using articulating paper. Remove rougher occlusal interference using a water-cooled turbine and suitable diamond rotary instruments.

Polishing
To avoid leaving abrasions on opposing dentition or adjacent teeth, the contact surfaces of INSpire™ Zirconia restorations must be polished to a high luster after grinding. This is because zirconia has an incredibly abrasive surface if it is left unpolished or is inadequately polished.

STEP THREE  
FINISHING: Fitting and Cementation

INSpire™ High-Strength and Ultra-Translucent can be luted conventionally or adhesively.
One advantage of adhesive luting is the esthetics, as these luting materials are more translucent than conventional cements. A disadvantage, however, is the required conditioning of the prepared tooth and inside of the restoration.

Conventional Luting
Requirements:
• Minimum prepared tooth height of 3mm
• The shorter the prepared tooth, the smaller the conical angle must be
Cement groups:
• Zinc oxide phosphate cements
• Glass ionomer cements
• Resin reinforced glass ionomer cements

Adhesive Luting
Cement Groups:
• Panavia F 2.0 (Kuraray)
• Panavia 21 (Kuraray)
• Relay X Unicem (3M Espe)
• Variolink 2 (Ivoclar Vivadent)
• Variolink 2 (Ivoclar Vivadent)