Benefits:
A time tested and proven inexpensive extracoronal attachment system that is:

- Easy for a patient to insert and remove
- Requires minimal servicing and maintenance
- Adapts to all situations
- Provides super esthetics--See below!

Case Study using Preci Vertix P Instructions

The Vertix Male is incorporated parallel to the path of insertion, and on the crest of the ridge, using the Vertix Paralleling Mandrel (FIG 1). The 45° gingival inclination may be further adapted to the tissue, as may the vertical height of the male. The male may be reduced to a minimum of 3mm. If the vertical of the male is adjusted, the female rider and housing must also be appropriately reduced. Contour the proximal plate of the male into the crown (FIG 2). When possible, a lingual shoulder for a lingual bracing arm is recommended.
Cast the abutments and male pattern (FIG 3). It is important to obtain a smooth surface without altering the size and shape of the male. **Do not sandblast** to remove investment, as this leaves a rough surface. **Do not rubber wheel**, as this reduces the size of the male. The Vertix male allows for an open embrasure and light gingival contact. Seat the finished casting on the master model (FIG 4). The occlusal of the male is rounded (to facilitate insertion) after finishing the removable partial denture. If the Preci Vertix Pre-Cast Hood is used, [click here](#). Otherwise, continue on instructions for the castable hood.

Assemble the **castable female housing** pattern with the reduced retention white hader clip (FIG 5). Reduce the vertical (at the gingival, not the occlusal!) of the housing to adapt to the soft tissue. Adapt the shape of the housing to a sub-structure for porcelain or acrylic veneering. Using was or pattern resin, incorporate the lingual bracing arm into the pattern (FIG 6).

Sprue the housing on the occlusal, and remove the female housing from the model. Remove the white Hader clip from the housing (FIG 7). Cast in the same alloy as the abutment crowns (FIG 8). Sandblast the inside with coarse aluminum oxide. Do NOT polish the inside of the housing.
Veneer the cast housing to match the abutment crowns (FIG 9). The first tooth of the prosthesis now has the same shade and material as the abutment crowns (FIG 10).

The "tail", or extension, of the female housing may be retained in the prosthesis by acrylic or solder retention techniques (FIG 11-12). Prepare for duplication and cover the extension with a thin layer of wax. The housing is now ready for incorporation into the prosthesis (FIGS 12a-c).

The progression of the Vertix Castable Housing. The tail of the housing is incorporated into acrylic resin.
The Vertix Insertion tool is used to align and insert the standard retention Hader clip into the unpolished, sandblasted housing (FIG 13). The finished prosthesis (FIG 14).

It is a good idea to slightly reduce and round the occlusal of the male for easy patient insertion (FIG 15). The finished bilateral removable partial denture (FIG 16).

**Servicing**

**Changing the Vertix Females**
The Yellow (standard) females are included with the Preci Vertix kit. If the friction/retention of these females does not meet requirements, they may be replaced with either the White (reduced) or Orange (increased) retention females.

1. Use a small sharp instrument to remove the female from the prosthesis.
2. Position the required female on the Vertix Insertion Tool and press it into the prosthesis.
3. Check if the required friction/retention is obtained.

Please note that if the male has been vertically reduced, the female will have to be reduced as well.