Benefits:

- No abutment parallelism required. Corrects up to 24° divergence.
- Lowest force application on abutments.
- Applicable for direct placement into root, cast coping for root, or custom keeper for implants.
- Easiest patient insertion and removal--no path of insertion.
- Space friendly--2 sizes available.
- Double encapsulation ensures no corrosion.
Selection

Both a regular and mini size magnet are available. The mini magnet is reduced in size by 30% for when space is limited.

<table>
<thead>
<tr>
<th>Component</th>
<th>Retention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regular Magnet with Regular Keeper</td>
<td>1.5lbs retention</td>
</tr>
<tr>
<td>Mini Magnet with Mini Keeper</td>
<td>1.0lbs retention</td>
</tr>
<tr>
<td>Combination of Regular/Mini components</td>
<td><strong>1.25lbs retention</strong></td>
</tr>
</tbody>
</table>

Regular Magnet                  Mini Magnet
5.5mm Ø                           3.9mm Ø

3.4mm 3.6mm
6.9mm 2.4mm

4.0mm Ø                           3.5mm Ø
Regular Keeper                      Mini Keeper

The neodymium magnet has an indefinite life for long lasting retention.

Design Solution

* No abutment parallelism required
* No path of insertion/removal required
* Undercuts may be engaged
* No wear, no servicing requirements
* Overdentures may be root supported, or Implant supported

The Shiner SR system provides ideal retention and abutment protection for maxillary and mandibular overdentures. No abutment parallelism is required. **The prosthesis flange must be adapted to the ridge and undercut to ensure prosthesis stability.** The magnet system works especially well with implants as magnets reduce lateral loading.
**Dentist Instructions**

**Laboratory Instructions**

The Dentist may choose to cement the keeper/toothpiece, utilize a cast coping, or thread the implant keeper directly into the implant fixture. The new denture may either be laboratory processed, or picked up chairside.

**Direct Cementation Option**

1. Decoronate the tooth to the height of the crest of the ridge and complete endodontic therapy.

2. Select the appropriate regular or mini tooth keeper according to the size and position of the root. The mini keeper/toothpiece is used in small diameter or tilted roots.

3. Refine the canal with the **pilot diamond**. Use full length for the regular keeper, and only to the indentation on the diamond for a mini keeper. The pilot and sizing diamonds are only for use at slow speeds.

4. Use the appropriate (regular or mini) **sizing diamond** to create the recess for the keeper. Do not force the sizing diamond below the face of the root, as the keeper should be slightly elevated above the root face.

   Do not "pump" the diamond sizing bur as this will oversize the preparation.
5. Cement the keeper into the root. The **black impression piece** may be inserted in the keeper to be used as a handle during cementation.

6. Slightly chamfer the root away from the edge of the keeper to allow for free movement and rotation of the prosthesis. The keeper should be slightly above the face of the root. Do not polish or grind the actual keeper.

The Shiner Keepers cemented in place.

**Cast Coping Option** (see [Laboratory Instructions](#))

When the prognosis indicates a cast coping, complete the root preparation making sure there is adequate space for both the keeper and cast coping.

Take a normal abutment impression and send to the laboratory with prescription to construct a precious metal cast coping and keeper. Upon return from the laboratory, the cast coping and keeper are tried in and cemented.
New Denture Technique

7. After the toothpiece/keeper or coping is cemented, position the **black impression piece** so that it firmly seats in the recess in the keeper.

Make an accurate impression with material of choice.

8. Remove and inspect the impression. Be sure that the face of the impression piece is free of impression material. Using curved-beak cotton pliers, press the white model piece onto the black impression piece.

Be sure the model piece is fully seated and indexed to the impression piece.

Either pour master cast, or send the impression to the laboratory to pour master cast. Prescribe a "bite block" or occlusal rim for vertical registration.

Return bite block, or occlusal rim, to the laboratory. Prescribe esthetic wax set up with necessary information.

Return approved esthetic wax set up to the laboratory for acrylic resin processing.
9. Deliver the finished prosthesis to the patient. Use the appropriate tool (regular = blue, mini = gold) to vertically adjust magnet to keeper contact (retention) by threading the magnet up or down in small increments. Assure full contact between the magnet and keeper.

Marking indicators are excellent for this purpose.

Please note: If the magnet and keeper are in premature contact, the prosthesis will rock. If the magnet and keeper are out of contact, retention will be inadequate.

Chairside Pick-Up Option

10. Relieve the tissue or underside of the prosthesis to receive the magnet(s). Open a small hole or window access through to the lingual of the prosthesis.

Do not pick up the magnet with self cure resin.

11. Place the black threaded processing piece over the thin metal protector disk and on to the keeper. This
will eliminate acrylic resin from entering the holes in the processing piece.

12. Mix self-curing resin until it reaches a doughy consistency and place a small amount on top of the processing piece. Seat the prosthesis and let the resin set.

Do not have the patient bite.

Use finger pressure only above the magnets.

Remove the prosthesis.

13. Remove the thin metal protector disk with the AF Bur.

14. Unthread the black (threaded) processing piece from the prosthesis with the appropriate (regular = blue, mini = gold) tool.
15. The threaded recess created by the black processing pieces.

16. Thread the magnet into the prosthesis using the appropriate tool. **Go slow: Do not force the magnet into the prosthesis.** If the magnet does not easily thread in to the prosthesis, check for flash resin at the starting edge of the threads. Remove any flash with a bard parker blade or other sharp instrument.

Do not attempt to thread the magnet too far or too tight into the prosthesis. As soon as the magnet is **finger tight**, stop threading. Excess force may damage either the outer threaded Delrin housing or the magnet.

17. Deliver prosthesis and adjust magnet position vertically (if needed) to ensure proper magnet to keeper contact (retention).
Dentist Reline Procedure

Due to normal tissue resorption, the prosthesis should be relined on a regular basis.

1. Use the appropriate tool to unthread the magnet from the prosthesis.

2. Position the impression piece so the post seats in the recess of the tooth piece/keeper.

Relieve the denture base to insure that the prosthesis will fully seat without contacting or impinging upon the black processing piece.

Make a reline impression being sure that the index post on the black processing piece fully seats into the index recess in the keeper. Remove the impression. Be sure that the face of the black processing piece is free of impression material.

Fully seat the white model piece onto the black processing piece in the impression. Send to the lab.

Deliver the finished prosthesis to the patient. Use the appropriate tool to adjust retention by threading the magnet up or down in small increments to assure full contact between the magnet and keeper.

Patient Care

Patients should be instructed not to soak or clean the prosthesis in acidic or strong denture cleaning solutions or bleach. Mild soap and water may be used without any potential damage to the magnets.