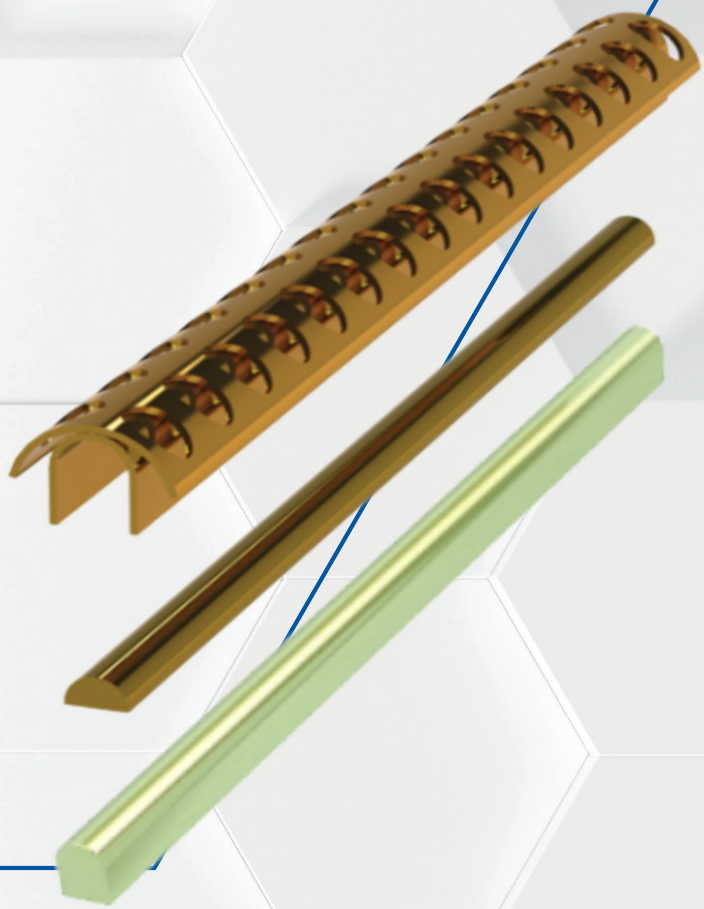
HADER SOLUTIONS



Bars

USER GUIDE

Swiss Made

www.hader.eu

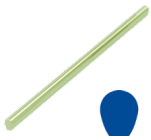
The Line of **Bars and Clips** from Hader brings together a selection of proven bar retention systems designed to support dental professionals in a wide range of implant and removable prosthetic applications. Developed over decades of clinical success, these solutions provide dependable stability, secure retention, and long-term performance for overdentures and implant-supported restorations. From horizontal bar systems with riders in high-quality alloys to Ackermann-type clip attachments for reduced pillars and root-supported cases, each product is engineered for efficiency, patient comfort, and ease of processing. With multiple diameter options and material choices, the Line of Bars and Clips from Hader offers flexible, reliable solutions that integrate easily into modern prosthetic workflows.

BARS

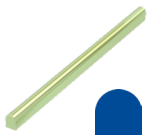
Plastic bars for casting - lab use only

STANDARD

L: 50mm, W: 2.2mm, H: 3mm



Oval Resilient
4 PCS - 5061022-4
50 PCS - 5061022-50
**Use with standard riders*



U-Shaped Rigid
4 PCS - 5061024-4
50 PCS - 5061024-50
**Use with standard riders*

MINI

Oval: L: 50mm, W: 1.6mm, H: 2.3mm
Rounded: L: 50mm, Ø: 1.8mm

Oval Resilient
4 PCS - 5061021-4
50 PCS - 5061021-50
**Use with mini riders*

Rounded
4 PCS - 5061023-4
50 PCS - 5061023-50
**Use with clips*

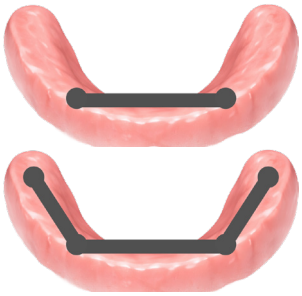
In a nutshell

Resilient bars: ideal for two-pillars overdentures with distal mucosal support.

Rigid bars: best when pillars are well distributed for full implant retention.

Clip systems: indicated for root-reduced pillars or combined gingival support and retention needs.

A **resilient construction** is typically indicated when treating overdentures supported by two implants in the canine region, especially when distal areas still rely partly on mucosal support. In these cases, controlled movement helps reduce stress, and an ovoid bar design parallel to the occlusal plane is often preferred to minimise torsion and long-term maintenance.



A **rigid construction** is recommended when implants or abutments are sufficiently spread across the arch, allowing the prosthesis to be purely implant-retained. This concept generally provides greater patient comfort and reduces ridge resorption. Both U-shaped and ovoid rigid bars perform well in these situations, and space maintainers are usually not required.

A **construction with clips** is especially suitable when working with pillars reduced to roots, or when posts are needed to combine gingival support with reliable dental retention. Clip systems offer excellent stability in cases with two or more supporting elements in different positions, while remaining simple for patients to adapt to.

RIDERS

Adjustable, with retentions for acrylic resin.

STANDARD

L: 50mm, W: 5mm, H: 3.5mm

INOX - 5061007-1
ORAX - 5061008-1
PALLAX - 5061009-1

MINI

L: 50mm, W: 4mm, H: 2.8mm

INOX - 5061014-1
ORAX - 5061015-1
PALLAX - 5061016-1

CLIPS

With retentions for acrylic resin.
L: 3.5mm, H: 3.65mm

LATERAL RETENTION

ORAX
2 PCS - 5061031-2
20 PCS - 5061031-20
INOX
2 PCS - 5061032-2
20 PCS - 5061032-20

OCCLUSAL RETENTION

ORAX
2 PCS - 5061033-2
20 PCS - 5061033-20
INOX
2 PCS - 5061034-2
20 PCS - 5061034-20

Choosing the right rider material. - Riders are available in ORAX, PALLAX, or INOX, allowing professionals to select the most suitable option for each case. ORAX is a trusted first choice thanks to its proven reliability and long-term performance. INOX offers an economical alternative, while PALLAX provides an excellent balance of strength and durability.

With or without a space maintainer? - A space maintainer used with an ovoid bar allows the bar segment to remain unloaded, providing retention and stability without force distribution. This is especially beneficial in bar extensions, helping to reduce torsion on the implants, screws, and rider. In rigid constructions with sufficient implant spread, a space maintainer is generally not recommended.

Occlusal or lateral retion for clips? - Occlusal clips engage the bar from above and are typically chosen when sufficient vertical space is available, offering direct and stable retention. Lateral clips engage from the side and can be useful in more limited space situations or when minor angulation needs to be accommodated, providing reliable retention with easier integration into the denture base.

Manufacturing overdenture with riders

Processing Plastic Bars

1. Take a full-arch impression and wax up the post-copings or crowns (implant analogues must be fitted with plastic or castable cylinders).
2. Cut the plastic bar pattern to the exact length and position it using the paralleling mandrels ref-5061001-1 (standard) or 5061002-1 (mini) between the copings or cylinders.
3. Add any sprue or vent only on the tissue side, then cast the construction in a hard alloy.
4. Finish and polish carefully, avoiding excessive material removal from the bar.
5. After polishing, place the corresponding riders, block out undercuts, and proceed with prosthesis polymerisation.

Fabrication of new prosthesis

1. Take a full-arch impression and pour a stone model (the bar area must be made of epoxy or self-curing acrylic resin).
2. Reduce the rider to the required length (minimum 9 mm) and place it on the bar.
3. For resilient bar designs, always use the space maintainer during processing.
4. Block out all undercuts and leave the rider extensions free for later activation or deactivation.
5. Process the acrylic using the technique of choice, then remove the space maintainer, clean the rider, and activate it if needed.

Activation

1. Using a wide blade of an instrument, gently apply pressure between the exposed sections of the rider and the surrounding acrylic.
2. Adjust both sides uniformly to obtain even and stable retention.
3. Verify that the desired level of retention is reached before completing the prosthesis.

Rebasing / Relining

1. Take a reline impression with the rider in place inside the prosthesis.
2. Block out the rider and bar area with silicone, then pour a stone model using a reline flask or jig.
3. Perform the relining procedure following the standard technique, then finish and polish the prosthesis.
4. Activate the rider if necessary to achieve the desired retention.

Manufacturing overdenture with clips

Processing Plastic Bar

1. Take a full-arch impression and wax up the copings or implant cylinders on the master cast.
2. Cut the Ø 1.8 mm rounded plastic bar pattern to the exact required length.
3. Position the bar accurately between the supporting elements.
4. Cast the bar in a hard alloy, then finish and polish carefully without altering its dimensions.

Fabrication of new prosthesis

1. Reposition the finished bar structure on the model and place the corresponding clips on the bar.
2. Block out all undercuts around the bar area so that only the clips remain partially free for retention.
3. Fill the base of the clip housings to allow activation or adjustment after processing.
4. Process the overdenture using the standard acrylic technique, then finish and polish as usual.
5. After polymerisation, adjust the clips if necessary to obtain the desired retention.

Rebasing / Relining

1. Take a relining impression with the clips incorporated in the existing prosthesis.
2. Remove the clips from their housings before pouring the stone model.
3. Block out the bar area and housings with silicone or plaster, then separate prior to casting the model.
4. Perform the relining or rebasing procedure following the conventional technique.
5. Reinsert the clips at the final stage and verify proper retention and stability.

Visit our website at www.hader.eu or simply scan the **QR code** to download our comprehensive product catalogue. Inside, you'll find a wide array of attachment systems, instruments, and innovative solutions designed for dentists and dental laboratories. Explore our offerings and discover how we can support your practice with high-quality, reliable products.

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General Recommendations

- The assembly of the components with the prosthesis must be performed by a properly trained dental technician, dentist or prosthodontist.
- Any element which is visibly altered or damaged (corrosion, breakage, cracks) must be immediately disposed.
- Products made from plastic through injection moulding may exhibit a slight change in coloration, but this does not affect their quality or characteristics.

Alloys and Materials

- ORAX - Yellow - Au 58.8 - Pt 1.6 - Pd 3.2 - Ag 22.4 - Cu 12.7 - Zn 1.3 Melting range: 870-920 °C
- PALLAX - White - Au 2 - Pt 9.5 - Pd 37 - Ag 37 - Cu 12.5 - Co 2 Melting range: 1055-1130 °C
- INOX (STAINLESS STEEL) - White - Fe 69 - Cr 17 - Ni 11 - Mo 2 - Mn 1 Do not heat! Contains Ni.

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