

LASERING BARS AND IMPLANT CYLINDERS

The laser technique was developed to make a connection between implant cylinders and bars made of identical or similar materials. Carefully observe the following procedure to retain (laser) the bars in their correct position to the cylinders.

It must be distinguished between the elements to be connected:

- titanium bars and cylinders (grade 4),
- ORAX bars and cylinders (Au-Pt).

CYLINDERS		IMP-BC-081	titanium grade 4
Standard dimensions according to prof Brånemark		IMP-BC-031	ORAX

BARS	PRECI-BAR standard	1003/B	titanium grade 4
		1100/B/OR	ORAX

	PRECI-BAR mini	1004/B	titanium grade 4
		1103/B/OR	ORAX

	PRECI-CLIP	1109/B	titanium grade 4
		1105/B	ORAX

1. Strictly follow the safety instructions from the laser device manufacturer prior to processing the attachment parts. The working method is identical for both parts, only the laser values must be determined for each specific alloy or combination of alloys. Always make a test case first to determine all values (intensity, diameter and depth).
2. Determine the path of insertion of the prosthesis on the model.
3. Select the cylinders to be used and mark their orientation.
4. Reduce the bar to its proper length and place it in the appropriate paralleling mandrel.
5. Grind the proximal side of the cylinders where the bar connection must be made to a well-fitting cavity.
6. **Attention:** always keep sufficient distance to the cylinder base during finishing to avoid any future contact.
7. Place the working model with the construction in the laser device and check the correct values for the specific alloy or combination of alloys (see point 1) and for the use of Argon gas.
8. Initially connect each cylinder in 1 place to the bar – labially and lingually – on the model.
9. Finish (completely surrounding) the laser connection.
10. In case of widespread parts, use **CEKA SOL TI** (titanium) or **CEKA SOL OR** (ORAX) as a filling material.
11. Finish the laser joints.
12. Check if the female rider is properly seated.