


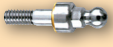




















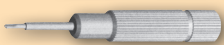
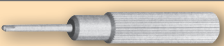


The placement of implants using a ball attachment system is a proved and tested therapy which excels by its favourable cost-benefit ratio in particular. Ball posts are capable of compensating abutment divergences of up to 14° for the rigid ball and of up to 22° for the movable ball. They are suitable for direct chair-side fixing of implant-retained dentures. For the implant system of Servo-Dental, Trias®, different ball posts are available.

	Article No.	
	881xxx	Set, ball abutment, 1.8 mm ball dia. for implant dia. 3.3 / 3.8 / 4.4 / 5.0 / 6.5 mm, gingival height 2 / 3 / 4 mm
	882xxx	Set, ball abutment, 2.5 mm ball dia. for implant dia. 3.3 / 3.8 / 4.4 / 5.0 / 6.5 mm, gingival height 2 / 3 / 4 mm
	8801xxx	Ball post, 1.8 mm ball dia. for implant dia. 3.3 / 3.8 / 4.4 / 5.0 / 6.5 mm, gingival height 2 / 3 / 4 mm
	8802xxx	Ball post, 2.5 mm ball dia. for implant dia. 3.3 / 3.8 / 4.4 / 5.0 / 6.5 mm, gingival height 2 / 3 / 4 mm
	884xxxx	Ball post with movable ball, 2.5 mm dia. for implant dia. 3.3 / 3.8 / 4.4 / 5.0 mm, gingival height 2 mm, ball motion up to 8° from abutment axis
	8302xxx	ZrO ₂ ball abutment, 2.5 mm dia., without post, for implant dia. 3.3 and 3.8 mm, gingival height 4 mm
	8300xx	Titanium post for ZrO ₂ ball abutments for implant dia. 3.3 or 3.8 mm
	260000	Central screw for titanium post for ZrO ₂ ball abutment

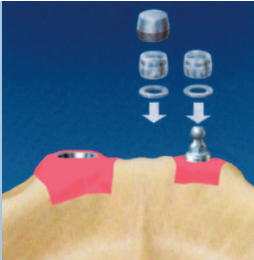
Attention: The ZrO₂ abutment consists of two parts, the titanium post and the zirconium dioxide abutment. These two parts are joined using a suitable cement (e.g. Panavia® of Kuraray Dental). This allows the titanium post to be fixed on the implant at a defined torque (25 Ncm) and to join it to the ZrO₂ abutment without stress.

	Matrices for ball posts with 1.8 mm ball dia.	
	240307503	pink, draw-off force 750-850 g (single or packs of 6)
	2400317503	yellow, draw-off force 450-500 g (single or packs of 6)
	240327503	white, draw-off force 1000-1100 g (single or packs of 6)
	240337503	green, flexible (single or packs of 6)
	240372003	stainless steel housing for matrices (single or packs of 2), outside dimensions: 4.2 mm dia., 2.8 mm height
	3120	metal matrix (Ag/Pd, packs of 2)
	881027	titanium matrix with O-ring (single)

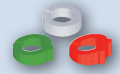
	Matrices for ball posts with 2.5 mm ball dia.	
	240267503	pink, draw-off force 800-950 g (single or packs of 6)
	240277503	yellow, draw-off force 500-550 g (single or packs of 6)
	240287503	white, draw-off force 1200-1300 g (single or packs of 6)
	240297503	green, flexible (single or packs of 6)
	240352003	stainless steel housing for matrices (single or packs of 2), outside dimensions: 4.8 mm dia., 3.1 mm height

	Article No.	
Tools for ball posts		
	140251tix	ball post wrench for ball post 1.8 and 2.5 in dia.
	240609803	inserting pin for matrices 1.8 and 2.5 mm in dia.
	240583203	reamer for matrices 1.8 mm in dia.
	2400573203	reamer for matrices 2.5 mm in dia.
	140533	torque ratchet 10-40 Ncm
	140534	ratchet wheel for torque ratchet, to be used with ball post wrench

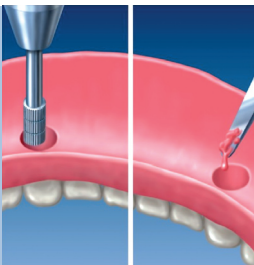
For information about impression taking (open-/closed-tray), please obtain the implant prosthetics instructions for Trias®. The ball post is used either for chair-side operation after re-opening when an existing prosthesis can be re-used, or in connection with a prosthesis reinforced with a removable partial denture manufactured in the dental laboratory.



After the ball posts have been screwed to the model analogs, the selected matrices are placed. Equalizing rings contained in the pack help ensure the alignment of the matrices (white 0°, green 7° and red 14°).

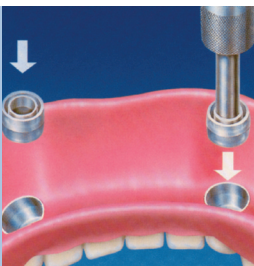


For chair-side application the required torque of 25 Ncm is to be complied with. A silicon sleeve contained in the pack fulfils the function of a coffer dam. It is placed over the ball post and adjusted to the gingiva.

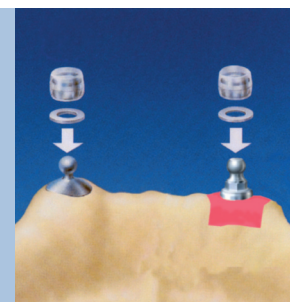


The prosthesis is amply relief-ground for the matrices. Then self-hardening plastics material is filled in sparingly.

Hint: Arrange an opening on the lingual side to avoid formation of air bubbles. The prosthesis is placed over the matrices on the ball post and cemented with the matrices. After hardening of the plastics material, the excessive amount is removed and the prosthesis is polished.



Use of the stainless steel housing is recommended for two reasons: 1. When used in a plastic prosthesis, exchange of the matrices is easier and there is no risk of damaging the prosthesis. 2. In the manufacture of a removable partial prosthesis, after placement of the matrix on the ball posts, all undercuts are blocked out and doubled for the prosthesis. On the duplicate model the prosthesis framework is modelled as usual, including the stainless steel sleeve. After completion of the prosthesis, the matrix can be set into the integrally cast stainless steel sleeve.



The use of ball attachment systems is not restricted to ball posts. Ball posts are an inexpensive and good devices to combine conventional denture on natural roots with implant-retained prostheses or to integrate existing prostheses or holding elements into a new design with implants. For this the most varied construction elements are available a small selection of which is shown below: