

## Model systems

- Master-Pin System
- Master x-tray
- Master pls 44
- Master-Split model system

## Master-Pin System



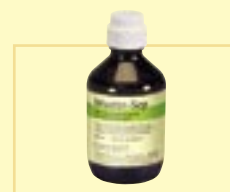
The Master-Pin system simplifies daily fabrication of models since the system components have been matched with each other. Processing is simple and no new techniques need to be learned. The main advantages of the Master-Pin system are the small drilling depth and the small diameter of the drillhole. Soft integration and removal of the Master-Pin is ensured by the design of the inner wall of the Master-Pin sleeve. This is a particular advantage for bridge restorations. Easy assembling is achieved thanks to the tapering of the Master-Pin.



**Master-Pins**  
1000 pieces  
Order No. 360 P122 5



**Master-Pin sleeves**  
1000 pieces  
Order No. 360 H122 5



**Master-Sep**  
Special insulating liquid  
for sawcut models  
200 ml  
Order No. 520 0029 0

### Assortment

402 pieces  
200 Master Pins  
200 Master-Pin sleeves

- 1 Master-Pin Diatit tungsten carbide step drill standard/green
- 1 Working box

Order No. 360 0122 6



**Master-Pin Diatit tungsten carbide step drill standard/green**  
3 mm shaft, 1.5/2, 1 piece  
Order No. 360 0119 2



**Master-Pin Diatit tungsten carbide step drill special/yellow**  
3 mm shaft, 1.5/2, 1 piece  
Order No. 360 0119 3

If glueing in of the Master-Pin is too difficult, the special/yellow Master-Pin Diatit tungsten carbide drill can be used to prepare a larger drillhole. The diameter of this drill is 0.1 larger than the one of the standard/green Master-Pin Diatit tungsten carbide drill.



**Master-Pin Diatit tungsten carbide step drill special/red**  
3 mm shaft, 1.5/2, 1 piece  
Order No. 360 0119 4

If the drilled hole is too large to receive the Master-Pin, the special/red Master-Pin Diatit tungsten carbide drill can be used to prepare a smaller drillhole. The diameter of this drill is 0.01 mm smaller than the one of the standard/green Master-Pin Diatit tungsten carbide drill.



1 Weigh resp. measure plaster and water to obtain constant results.



2 A thermoforming foil is placed on the impression. Uniform thickness of the arch is obtained.



3 The arch is trimmed to achieve uniform low height.

	<p>The correct height of the trimmed arch is essential.</p>		<p>The trimmed surface can be optimized with wet grinding paper.</p>		<p>The inner surface of the dry arch is ground with a plaster bur slightly conically (6°) toward the base.</p>
	<p>The drillholes are positioned with the Master-Pin Diatit tungsten carbide drill.</p>		<p>Drillholes are prepared- 2 for each die – beginning from the buccal direction: 1. drillhole = center of fissure 2. drillhole = approx. 2-3 mm away toward the palatal or lingual direction.</p>		<p>The Master-Pins are precisely glued in the drillholes using cyanoacrylic adhesive.</p>
	<p>The correct alignment of drillholes in the arch.</p>		<p>The upper course of the palatal resp. lingual 6° ground edge is marked with a red pen.</p>		<p>The thicker end of the Master-Pin sleeves is put on the Master-Pins.</p>
	<p>Arch with Master-Pins glued in.</p>		<p>The arch as well as the Master-Pins are separated with Master-Sep.</p>		<p>The Master-Split system is used to prepare base for the arch.</p>
	<p>Even in case of Master-Pins that have only very little distance to each other, the Master-Pin sleeve can be easily used due to the lateral flattening.</p>		<p>The Master-Pin sleeves rise from the Master-Pins by approx. 0.5 mm so that uniform, constant height of the arch is always ensured.</p>		<p>After the plaster has hardened, remove the model by pressing it out of the Master-Split model former.</p>
	<p>Place the prepared arch into the model former and align it.</p>		<p>Base plaster is filled up to 1 mm below the deepest point of the red marking line (fig. 10).</p>		<p>The sawcut model is trimmed to the smallest size possible.</p>
	<p>The removed model will receive a Split-Cast separation: the Master-Split during the preparation of the arch without any additional work.</p>		<p>Prior to trimming the model, the Master-Split base former is removed.</p>		<p>The base of the arch and the model base must be thoroughly cleaned after trimming to ensure high precision and perfect aesthetics.</p>
	<p>The trimmed and dried working model.</p>		<p>The arch is removed from the model base towards the pins – parallelly and without tilting.</p>		<p>Perfect fit of the working dies on the model base.</p>
	<p>The green Master-Pin sleeves are all on the same level and can be clearly recognized on the underside of the model.</p>		<p>The die segments are separated using a Giflex diamond disc.</p>		<p>A fine and precise dental restoration is created on a fine model.</p>
	<p>It is also possible to place interdental Master-Pins that are not glued in.</p>		<p>Aesthetically appealing and functional models simplify daily work.</p>		