



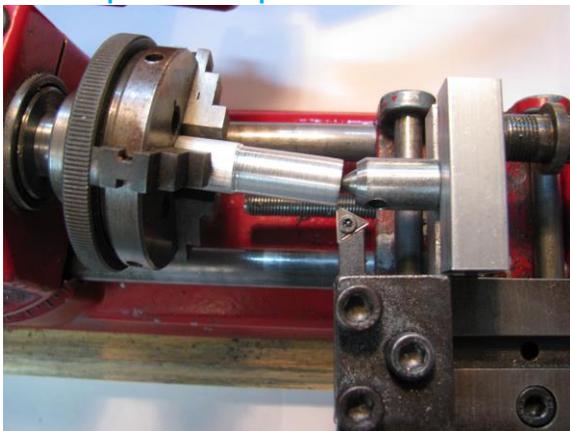
Benchtop Tailstock Accessories for UNIMAT SL DB

Adjustable Tailstock Center

For current prices see our website.

Tailstock accessories for benchtop lathes: the adapter has a pin on one side that fits into an UNIMAT tailstock spindle and a dead center on the other side. Both steel pieces are mounted on a thick aluminum plate. In order to adjust the dead center to tailstock spindle distance the plate has a T-slot keyway and the dead center comes with a T-nut.

Typical application: Cutting taper in longer and/or larger diameter stock without a center is dangerous and basically impossible. This adjustable tailstock center compensates for the offset when cutting taper by rotating the headstock. Note that this accessory is designed for cutting small taper angle as those common on machine taper. **The dead center can be moved in and out of the center line. Therefore, very small and large adjustments of the dead center's position are possible.**



Procedure: Insert pin end into UNIMAT tailstock. Slide the dead center along the T-slot until it aligns with the center hole of your work piece. Tighten the dead center using a spindle bar.



Safety Notes, Trouble Shooting, Limitations, and Disclaimer: General safety rules for machine/power tools are in place. For an extended list of safety notes, consult the literature or go to our website. You can download free of charge a safety booklet, which is also typically included (free of charge) for first-time customers.

Use protective clothing including, most importantly, safety glasses for metal work.

This accessory is designed for assisting to machine small taper angle as those common on machine taper. For large angle settings (>5°) unstable and dangerous working conditions may appear. Don't use this accessory for large

taper angles. A typical application may be machining MT2 or MT1 ends in somewhat longer stock rods.

The plate used to mount the dead center cannot be tilted (typically not required), i.e., use this design for small taper angles on not too long (metal) rods. Alternatively, a tilted pin (1-2°) can easily be machined. In doing so use a short aluminum round, drill and tap (10-32) it at one end to mount it on the T-slot table. Drill a 1/4" hole in the other end which is tilted by 1-2°. Use a milling attachment for that. Insert the toolsteel pin in that hole and you have a tilted dead center. However, again, this is typically not required.

Be aware of that you may generate significant side forces on the tailstock. The PIN used to mount that plate in the tailstock is only about 0.5". Therefore, don't overdo it with the size of the work pieces. In addition, working on hard to machine materials such as stainless steel will generate larger forces and is in any case not recommended on a small benchtop lathe. Similarly, the screws and bold end holding the dead center must be tight. Large forces on the adapter may loosen these screws which may result in a sudden change of the position of the dead center.

RPM maximum are 2800. The adapter is tested only on UNIMAT and Sherline standard lathes.

We do not warrant that any accessories can be used for any particular application. Usage of accessories or damage caused by unprofessional use is at the risk of the customer. Neither LatheCity nor its owner shall be liable for damage arising from unprofessional use or misuse of LatheCity accessories.

Returns in resalable conditions are accepted within 30 days after shipment. All shipping costs will be covered by the customer. No restocking fees, no questions asked. No

returns of custom designs or customized designs. No returns of bulk orders. All shipping costs are up to the customer. We also do not reimburse credit card fees (2-3%). For merchandise where the shipping costs were included in the price we reserve the right to charge these shipping costs to the customer in case of returns. Note, however, that the return rate of LatheCity products is below 2%.

General sells and business terms as given on our web site are active.

Mounting pin. There are manufacturing tolerances of these 40-50 years old lathes. (We have more than one spindle set in the shop...). Therefore, a pin with a small angle taper is included. That one will fit to any UNIMAT SL DB lathe.

Pricing: This is a rather specialized application. Job-shops easily charge \$60/work hour + materials + tooling. Machining that piece takes longer than 60 min. Our price is fair and reasonable, in our opinion. We offered a low budget version for \$30 some time ago. However, that one does not allow for moving the dead center through the center line of the lathe which restricts its application rather severely. The current version is an improved design which allows one to machine very small and larger taper angles in short and longer stock rods.

Sherline version: We do also offer a version of this accessory for Sherline lathes which has a different tailstock adapter and is a little larger due to the larger swing over the carrier of Sherline lathes. When ordering an UNIMAT & Sherline package we provide two different tailstock adapters. The base design and size of the accessory is in that case the same.

Uwe Burghaus
(LatheCity)
Fargo, North Dakota, USA
www.LatheCity.com
sales@lathecity.com
©, 2012, LatheCity