The invention relates to the field of metal cutting and may be used for turning of long bars or shafts at the turner. The device for bar or shaft turning contains two flanges (1, 13) coaxially fixed between them, into each being made a central hole (2, 15) with shoulder (3, 16), into which it is installed a ball bearing (4, 14), into the inner ring of which it is mounted a bush (5, 17). The inner diameter of one bush (5) is equal to the diameter of the turned bar or shaft (20), and of the other bush (17) – to the diameter of the unturned bar or shaft (20). Between the flanges, onto the end face of one of them, it is welded a cutter support (8), into which it is fixed with a screw (9) a cutter (10). For bar or shaft feeding into the cutter support of the turner there is installed a bush (18) with a screw (19), the inner diameter of which is equal to the diameter of the unturned bar or shaft (20).

The process for bar or shaft (20) preparation and installation for turning consists in that there are turned and made threaded holes on both end faces of the bar or shaft (20), there are turned two bearing tips (23, 24) with a threaded end, the diameter of one of which is equal to the diameter of the turned bar or shaft (20), and the other – to the diameter of the unturned bar or shaft (20), and there are screwed the bearing tips into the end faces of the bar or shaft (20). Into the turner chuck it is clamped the turning device, having the cutter (10) mounted to the turning diameter, and onto the stand guides there is mounted in the center of the turner a steadyrest. Through the steadyrest, the bush (18) installed into the cutter support and the bushes (5, 17) in the ball bearings it is introduced up to the cutter (10) the bar or the shaft (20) from the end of the tip, the diameter of which is equal to the turning diameter, then the bar or shaft (20) is fixed with a screw (19) into the bush (18) installed into the cutter support.



