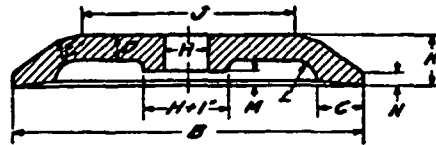


Machine Tools

TABLE 26-E

MINIMUM DIMENSIONS FOR TAPERED SAFETY FLANGES FOR WHEELS
OPERATING BETWEEN 6500 AND 9500 PERIPHERAL FEET PER MINUTE



Wheel Diam (in)	Wheel Thick- ness (in)	B (in)	C		D (in)	E (in)	J (in)	K (in)	L (in)	M (in)	N (in)
			Max (in)	Min (in)							
16	4	10	1 1/2	1	3/4	3/4	6	1 1/2	3/4	5/16	3/8
18	4	12	2	1 1/2	7/8	7/8	6	2	7/8	3/8	3/8
20	4	14	3	2	1	1	7	2 1/4	1	7/16	3/8
24	4	18	4	3	1 1/4	1 1/4	8	3	1 1/2	7/16	3/8
30	4	24	5	3 1/2	1 1/2	1 1/2	10	4	2	3/4	3/8

NOTE Flanges made to these dimensions are extremely large and heavy, and it is not practical to use them on ordinary floor stand grinders. For the larger sizes, it is usually advisable to use outboard bearings.

flanges Blotting paper not more than 0.025 in thick or rubber or leather compression washers not more than 0.125 in thick may be used for this purpose. If flanges with babbitt or lead facings are used, the thickness of the facing should not exceed 0.125 in and the diameter of washers, regardless of the material, should not be less than the diameter of the flange.

Allowance for the mounting fit of the wheel should be made in the wheel hole rather than in the arbor or wheel mount (Fig. 26-14). The wheel should not be forced on the spindle, because such forcing may loosen or otherwise damage the wheel bushing or crack the wheel. A wheel that is too loose on the spindle will run off-center. Table 26-F gives minimum spindle diameters. Spindle end nuts should hold the wheel firmly but not too tightly. Too much pressure may spring or distort the flange or may even break the wheel.

If rebushing is necessary to make the wheel fit the spindle, the job should be done by the manufacturer, or in the plant by an experienced man with suitable equipment.

Immediately after mounting the wheel and before turning on the power, the operator should turn the wheel by hand for a few revo-

lutions to see that it clears both the work rest and the hood guard.

Disk mountings

Abrasive disks of the inserted nut, inserted washer, and projecting stud types are mounted on steel disk wheels (machine face plates) approximately the same diameter as the wheel. The diameter of the disk determines the minimum thickness of the steel disk wheel upon which it is mounted (Table 26-G). Figs. 26-15, 26-16, and 26-17 demonstrate the differences between the three types of mountings.

The screw holes in the machine face plate are located to match the threaded holes in the inserted nuts in the wheel. The holes should be large enough so the screws will not bind. The screws for the inserted nut type should have square ends, be threaded clear to the end, and engage all the threads in the inserted nuts. Under no circumstances should the screws be so long that the end of the screw touches the bottom of the hole of the inserted nut.

Plate mounted wheels usually need a steel disk wheel (machine face plate) to reinforce the steel mounting plate provided when man-