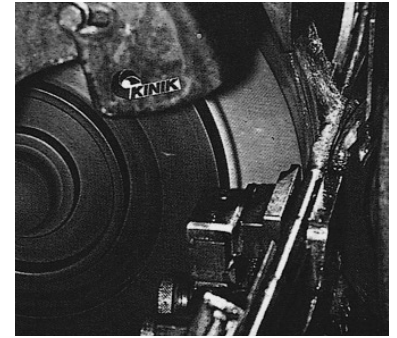
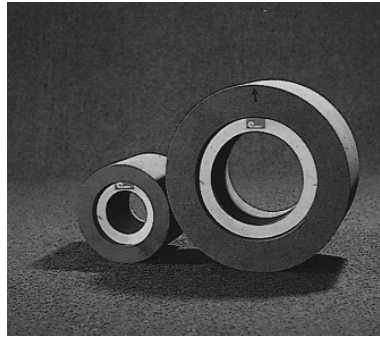
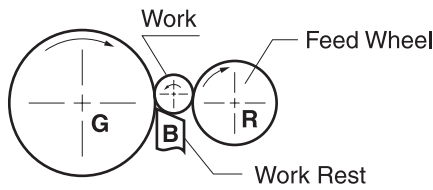
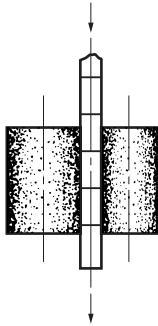


## Centerless Grinding

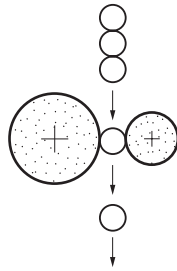


In centerless grinding, the work is supported on a work rest work "blade" between the regulating or "feed" wheel and the grinding wheel, The feed wheel controls and drives the work; the grinding wheel, running at normal speed, does the grinding. The work is not necessarily perfectly cylindrical but may be tapered Or otherwise formed. Frequently, several diameters are ground at once by step dressing the wheel or by spacing two or more wheels on the same wheel spindle (infeed grinding). Most jobs, however, are "through feed" of straight pieces where the work enters on one side of the machine and exits on the other.

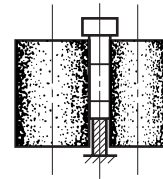
There are three types of centerless grinding method:



1. Through-feed grinding



2. In-feed grinding



3. End-feed grinding

### Recommendations (Grinding Wheels):

The table below is for throughfeed grinding. For plunge grinding, select an abrasive one size finer to maintain surface finish.

Application		Specification	Application	Specification	Application	Specification	
Steel	Soft	HRc < 25	Bolt	FA60MV	Alnico	FA60LV	
	Hard	HRc > 25		FSA60LV		32A60PB	
Alloy Steel	Soft	HRc < 55	Bushing	FA60KV	Bars: ø19 & smaller	FA54RB	
	Hard	HRc > 55	Bearing	FSA46LV		ø20~ ø65	FA54QB
Tool Steel High Speed		HRc < 60		Roller roughing finishing	FA100LV	over ø65	FA60PB
		HRc > 60	Ring		38A80LV	Tubing:	
Stainless Steel	400 series	WA60KV	Valve	Automotive	steel	FA60MV	
	300 series	GC54LV	Valve	Tappet	chrome nickel	FA60MV	
Cast Iron	Grey Cast Iron	C60LV	Piston	Aluminum	aluminum	AC46KV	
	Special Cast Iron	GC60LV	Cast Iron	Piston Pin	Roughing	38A46LV	
	Malleable Cast Iron	FA60MV				Finishing	38A80LV
Non-ferrous Metal	Brass	C60KV	Drill	Soft	FA60MV	Tungsten:	
	Bronze	FA60MV		Hard	WA80KV	rolled	32A46NV
	Aluminum Alloy	C60KV				sintered	C60KV
Magnetic Steel Casting		WA60KV					

### Centerless Feed Wheels

Standard Specification: A120R.R.

Centerless feed wheels control the speed of revolution and rate of traverse of the work piece.

Centerless Grinding Wheels					
Shape	Size D x T x H	Spec.	Max. rpm	min/std. Packing	Product Code
1	305 x 100 x 120	38A80-M8V2R	2,087	1	YVT75006-
7	305 x 140 x 120 P175, FG20	38A60-M8V2R 38A80-M8V2R	2,087	1	YWT75028-
7	305 x 150 x 120 P175, FG25	38A60-M8V2R 38A80-M8V2R	2,087	1	YWT75011- YWT75004-
1	405 x 100 x 254	FA80-L8V	2,357	1	
7	405 x 100 x 228.6 P245, FG25	FA60-M8V	2,357	1	
7	455 x 205 x 203.2 P300, FG25	FA60-K7V3W 38A60-0L8V2R 38A60-M8V4R	1,399	1	YWT77012- YWF77007-
1	510 x 50 x 304.8	FSA60-L8V	1,248	1	
1	510 x 100 x 304.8	FA60-M8V FA80-L8V	1,248	1	
1	510 x 150 x 304.8	FA60-M8V FA80-L8V	1,248	1	
1	510 x 205 x 304.8	FA60-M8V FA80-L8V	1,248	1	
1	610 x 75 x 304.8	FA60-L8V	1,043	1	
1	610 x 150 x 304.8	FA60-L8V	1,043	1	
1	610 x 205 x 304.8	FA60-L8V FA80-L8V	1,043	1	
1	610 x 255 x 304.8	FA60-L8V FA80-L8V	1,043	1	
1	610 x 305 x 304.8	FA60-K8V FA80-L8V	1,043	1	
1	610 x 305 x 355.6 P420, FG17	FA60-K8V FA60-L8V	1,043	1	
7	610 x 305 x 355.6 P420, FG17	FA60-K8V FA60-L8V	1,043	1	
1	610 x 510 x 304.8	FA60-L8V	1,043	1	

- Note: 1. Safety-MOS: General operating speeds under 2000m/min (33m/s) are for vitrified bond and under 3000m/min (50m/s) are for organic bonds. For special speeds contact your **KINIK** representative.
2. For form grinding or plunge grinding, Please specify the necessary thickness and shape according to your needs. The wheel thickness over 400mm (16") may be made by twin grip (Two pieces butted).
3. Other sizes may be made on request.

## Proper Wheel Mounting

1. Thoroughly clean the spindle and flange bearing area of all dirt and foreign material.
2. Inspect for worn, distorted or damaged areas on flanges and spindle.
3. If mounting a wide centerless wheel on a spindle (e.g twin-grip) do not use grease or other petroleum based lubricants. Use a silicone spray lubricant on the spindle to ease mounting the wheel, if necessary.
4. Insure mount up arrow is at the top of the wheel. In the case of butted sets, assemble so that the arrow is formed across the top of the wheel face.5. Ensure proper blotters supplied with the wheel are installed; one on each flange mating surface.
6. Ensure blotter flange and screw up the bolts only finger tight.
7. Using a torque wrench, tighten all the bolts in an alternating pattern from side to side to 2.1M. Kg.
8. Retorque the flange bolts to specification after the first 8 hours of operation.

Rubber Feed Wheels					
Shape	Size D x T x H	Spec.	Max. rpm	min/std. Packing	Product Code
1	180 x 100 x 90	A120-RR	5,305	1	YUA42002-
1	205 x 50 x 90	A120-RR	4,658	2	
1	205 x 100 x 90	A120-RR	4,658	1	YUA43004-
5	205 x 127 x 90 P130, F63.5	A120-RR	4,658	1	
1	205 x 140 x 90	A120-RR	4,658	1	YUA43005-
7	205 x 140 x 90 P130, FG20	A120-RR	4,658	1	
7	205 x 150 x 90 P130, FG25	A120-RR	4,658	1	YUA83001-
7	230 x 100 x 101.6 P140, FG16	A120-RR	4,151	1	
1	230 x 205 x 111.2	A120-RR	4,151	1	YUA54003-
5	255 x 150 x 111.2 P175, F50	A120-RR	3,744	1	
1	255 x 205 x 111.2	A120-RR	3,744	1	YUA54001-
5	255 x 205 x 111.2 P175, F75	A120-RR	3,744	1	
7	255 x 205 x 111.2 P175, FG25	A120-RR	3,744	1	YUA84025-
7	255 x 205 x 111.2 P175, F65, G38	A120-RR	3,744	1	
7	255 x 205 x 111.2 P175, F75, G20	A120-RR	3,744	1	YUA84003-
7	255 x 255 x 111.2 P175, F100, G45	A120-RR	3,744	1	
7	305 x 100 x 127 P200, FG13	A120-RR	3,131	1	
1	305 x 150 x 127	A120-RR	3,131	1	YUA45005-
7	305 x 150 x 127 P200, F38, G13	A120-RR	3,131	1	
7	305 x 150 x 127 P200, FG38	A120-RR	3,131	1	
1	305 x 205 x 127	A120-RR	3,131	1	YUA55004-
7	305 x 205 x 127 P200, FG20	A120-RR	3,131	1	YUA85008-
7	305 x 205 x 127 P200, F64, G38	A120-RR	3,131	1	YUA85019-
7	305 x 205 x 127 P200, F90, G38	A120-RR	3,131	1	
7	305 x 305 x 127 P200, FG70	A120-RR	3,131	1	YUA85004-
1	330 x 305 x 203.2	A120-RR		1	
7	355 x 205 x 127 P205, F50, G38	A120-RR		1	
7	355 x 255 x 127 P205, FG38	A120-RR		1	
7	355 x 305 x 152.4 P210, FG50	A120-RR		1	

- Note: 1. The thickness of feed wheels must be the same as grinding wheel.  
2. Other sizes may be made on request.

9. Repeat the same tightening sequence only increasing the torque to 5M.Kg.  
Note: a) For wide wheels thickness 18" ~ 20" (455 ~ 510mm) torque the bolts at 6 to 7M. Kg.  
b) For narrow wheels thickness 10" ~ 12" (250 ~ 305mm) a torque of 5M.Kg.