Table III. Copper Roll Groove Specifications

1	2		3	4	5	6	7	8
Nom. Size Inches	Tubing Outside Diameter O.D.		A Gasket Seat A ±0.03	B Groove Width +.03 –.000	C Groove Dia. +.00 –.02	D Groove Depth Ref.[1]	T Min. Allow. Wall Thick.	Max. Allow. Flare Dia.
	Basic	Tolerance						
2"	2.125	±0.002	0.610	0.300	2.029	0.048	DWV	2.220
2½"	2.625	±0.002	0.610	0.300	2.525	0.050	0.065	2.720
3"	3.125	±0.002	0.610	0.300	3.025	0.050	DWV	3.220
4"	4.125	±0.002	0.610	0.300	4.019	0.053	DWV	4.220
5"	5.125	±0.002	0.610	0.300	5.019	0.053	DWV	5.220
6"	6.125	±0.002	0.610	0.300	5.999	0.063	DWV	6.220
8"	8.125	+0.002/-0.004	0.610	0.300	7.959	0.083	DWV	8.220

1. Nominal Groove Depth is provided as a reference dimension. Do not use groove depth to determine groove acceptability.

Troubleshooting

SYMPTOM	POSSIBLE REASONS	SOLUTION
Roll groove too narrow or too wide.	Grooving roll and/or driving shaft worn.	Replace grooving roll and/or drive shaft.
Rolled groove not perpendicular to pipe axis.	Pipe length not straight.	Use straight pipe.
	Pipe end not square with pipe axis.	Cut pipe end square.
Pipe will not track while grooving/Groover will not track on pipe while grooving.	Pipe and drive shaft not parallel.	Adjust stand to make pipe parallel.
	Pipe axis not offset ½ degree from driving roll axis.	Offset pipe ½ degree.
	Driving roll knurl plugged or worn flat.	Clean or replace drive roll.
	Feedscrew not tight.	Tighten feedscrew with ratchet for every revolution as per directions.
	Turning ratchet wrong direction.	Turn ratchet in proper direction.
	Inside of pipe has too much scale.	Clean inside of pipe.
	Excessive weld seam.	Grind weld seam flush 2" from end of pipe.
	Not applying pressure to pipe.	Apply pressure to pipe. *(See Figure 10.)*
	Pipe end not square/deburr.	Properly prep end of pipe.
	Feedscrew too tight.	Only advance feedscrew in ¼ turn increments.
Pipe flared at grooved end.	Pipe and drive shaft not parallel.	Adjust stand to make pipe parallel.
	Feedscrew too tight.	Only advance feedscrew 1/4 turn.

Troubleshooting *(continued)*

SYMPTOM	POSSIBLE REASONS	SOLUTION
Pipe drifts back and forth on driving roll axis while grooving.	Pipe length not straight.	Use straight pipe.
	Pipe end not square with pipe axis.	Cut pipe end square.
Pipe rocks from side to side on driving roll while grooving.	Pipe stand is too close to end of pipe.	Move pipe stand in to match set-up Instructions.
	Pipe end flattened or damaged.	Cut off damaged pipe end.
	Hard spots in pipe material or weld seams harder than pipe.	Use different pipe.
	Grooving roll feed rate too slow.	Feed grooving roll into pipe faster.
	Power drive speed exceeds 57 RPM.	Reduce speed to 57 RPM.
	Pipe supports stand not in correct location.	Position pipe stand rollers correctly.
Groover will not roll groove in pipe.	Maximum pipe wall thickness exceeded.	Check pipe capacity chart.
	Pipe material too hard.	Replace pipe.
	Adjustment screw not set.	Set depth.
	Power drive does not supply required minimum torque.	Use RIDGID No. 300, 38-RPM Power Drive.
Groover will not roll groove to required diameter.	Maximum pipe diameter tolerance exceeded.	Use correct diameter pipe.
	Depth adjustment screw not set correctly.	Adjust depth setting.
	Pipe too hard.	Use different pipe.
Pipe slips on driving roll.	Grooving roll feed rate too slow.	Feed grooving roll into pipe faster.
	Driving roll knurls plugged with metal or worn flat.	Clean or replace driving roll.
Groover will not rotate pipe while grooving.	Power drive does not supply minimum required torque.	Use RIDGID No. 300, 38 RPM Power Drive.
	Chuck not closed on drive shaft flats.	Close chuck.
Pipe rises or tends to tip Groover over backwards.	Pipe support stand not properly set up.	Properly set up stands.