Vanier Abrasive Saw

Sequence of Operation

I. To load pipe into cutting machine.

A. By crane or forklift pipe is loaded onto raw storage racks.
B. Operator powers up machine including pneumatic, electrical, and hydraulic power.
C. Operator raises cutter wheel and bevel grinder in full up position and lowers turning rolls below conveyor roller passline.
D. Operator manually transports pipe into machine on conveyor rollers to approximate cut mark.

II. To make front end cut, operator

A. Raises pipe rollers just below conveyor rollers.
B. Lowers cutoff blade to within ¼" of pipe.
C. Moves pipe longitudinally until cut mark lines up under cutoff blade.
D. Raise cutoff blade up for clearance.
E. Raise pipe in pipe rollers above conveyor passline height.
F. Lowers pneumatic holddown rolls to secure pipe in pipe rollers.
G. Sets pipe stop assembly at end of the pipe to prevent pipe from drifting.
H. Lower protective hood over entire cutting and beveling assembly.
I. Initiates pipe rotation and select proper rotational speed (usually full RPM for most cuts and bevels.)
J. Starts cutoff blade rotation and grasps left hand hydraulic control lever.
K. Feed blade into pipe, scoring the complete circumference lightly before applying maximum cutoff pressure. Pipe typically makes 4-5 revolutions per cut of continuous pressure.
L. After cut is finished, cutoff blade is raised, all rotating assemblies are halted, and protective hood is raised. Pipe is lowered down on to the conveyor rolls to be positioned for beveling operation.

III. To make front end bevel, operator

A. Lowers bevel wheel down to approximate height.
B. Repositions pipe against bevel wheel to desired bevel angle according to the degree of angle marks on the grinder wheel flange, usually 37½ degree.
C. Raises the bevel assembly for clearance.
D. Raises pipe in turning rolls above conveyor roll passline and lowers grinder

wheel to confirm proper bevel angle.

E. Resets the pipe stop assembly to prevent drifting and lower holddown rolls. Lowers protective hood and initiates pipe rotation and beveling motor. Be certain to have grinder rotating CCW for left end bevel and CW for right end bevel.
F. Using right hand hydraulic lever, lowers bevel wheel against pipe until the appropriate land meets specification. A light pass on the final revolution will remove discoloration.
G. Reverses this procedure and lowers pipe from the turning rolls to the conveyor rolls.

IV. To make rear end bevel, operator

A. Repeats this sequence using the opposite side pipe stop assembly

V. To cut Victaulic groove, operator

A. Refers to the Victaulic specifications to select the proper grinding wheel. 3/8" and ½" width wheels will grind most pipe sizes up to 20" O.D.
B. Replaces the cutoff blade, if necessary, and follows the cutoff procedure without severing the pipe. It will necessary to occasionally dress the cutoff blade to insure a 90 degree angle between the blade side and circumference.

The key to quality is continuous measurement before and after every operation!