

National Steel Rule

Technical Tips

071119_Vbends

Incorporating 'V' bends to improve column strength of rule

When cutting high test corrugated and heavy solid fiber in rotary applications, the rotational impact of horizontal (across the cylinder) rule can be tremendous. When the thin cutting blade meets the material to be cut and the cutting anvil, the result is often a force so great, the rule will bend over. To combat this phenomena, a series of 'V' bends as shown below can add significant column strength to the cutting rule.

Note 1: The addition of these shapes will be visible on the finished product and it is recommended to seek customer approval before modification of the customer design.

Note 2: Buttresses can be added between 'V' bends or directly behind the 90° bend of the 'V' shape as shown. When locating support buttresses between 'V' bends it is best to locate directly in line with the trim breaker. Welding can also add strength to the assembly.

Note 3: For simplicity, 'V' bends can be shaped in approximate position along the length of the steel rule first. Clearance holes can then be mapped from the pre-formed steel rule to the die board.

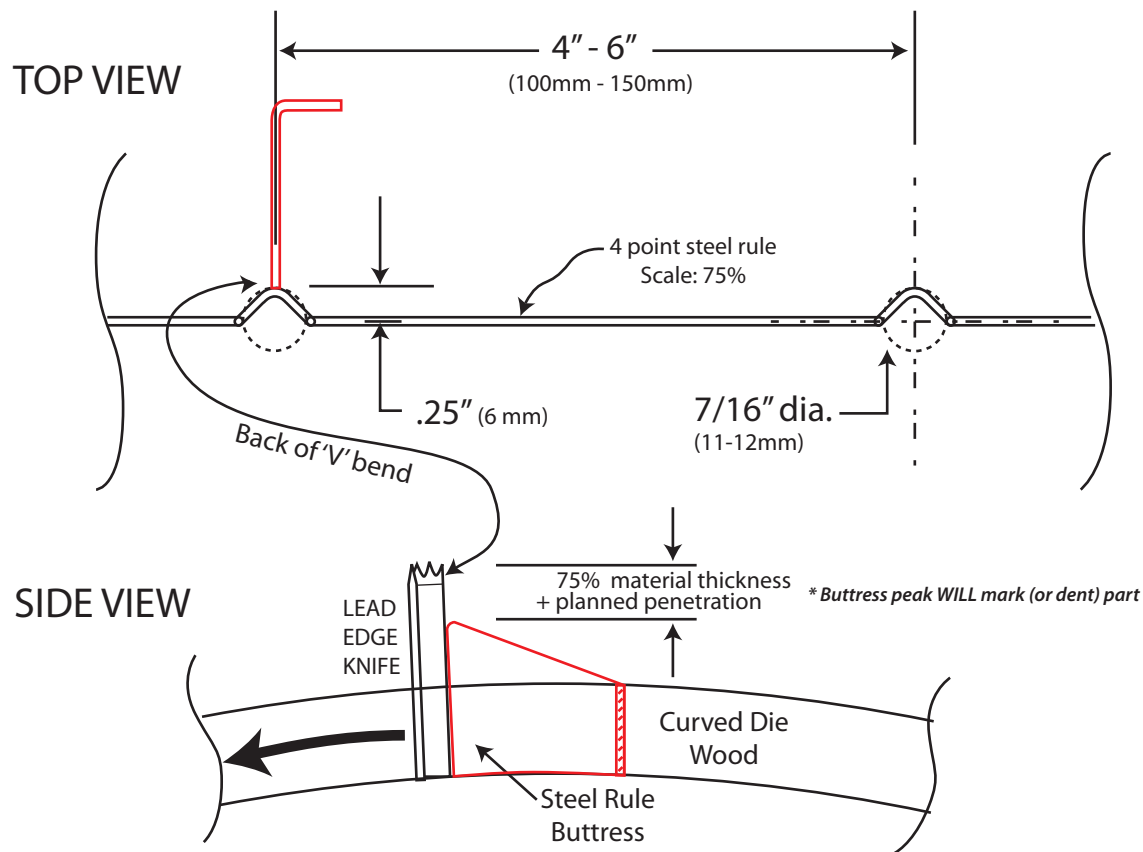


Illustration shown with 5/8" (15mm) wood and 1.5" (31 mm) high cutting rule (Scale = 75%)

National Steel Rule offers two grades of steel for this application: Medium Hard and No Flex!

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