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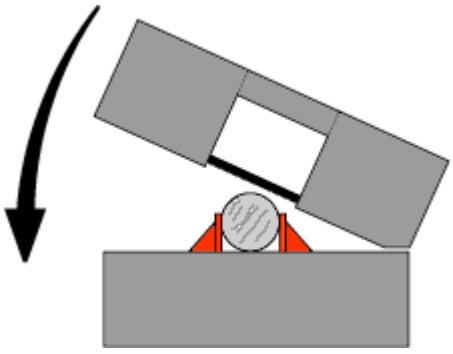
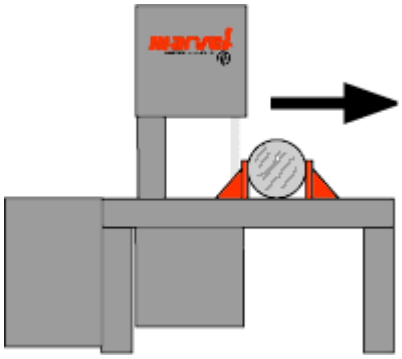


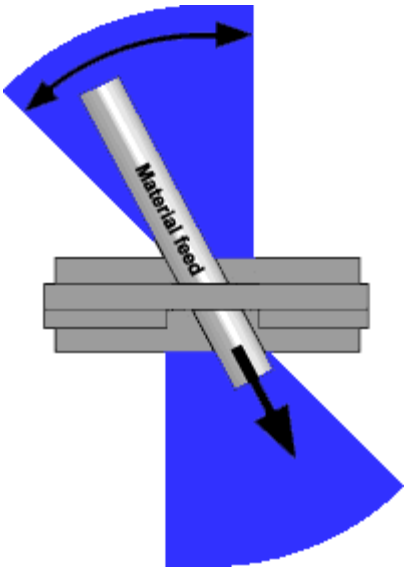
With horizontal saws the feed force increases as the frame descends.



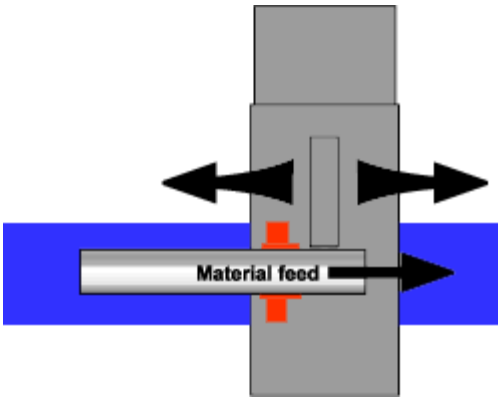
Vertical saws produce consistent feed pressure.

- **Manual measurement of material is easier on a vertical saw.** If the machine is non-automatic most, if not all cut off pieces will be manually measured. It is easier to manually measure from the blade on a vertical than a horizontal. On a vertical saw the stationary vise jaws will be the rear jaws, which are close to the blade. When measuring from the blade on a horizontal, the blade must be positioned down next to the material, requiring additional time. Also, with the horizontal cutting, there is always the risk of running the blade too far down and into the material, destroying the teeth.

- **Vertical tilt frame saws make cutting miters fast and easy while allowing for straight line feeding of the material.** There are two different configurations of horizontal angle cutting saws. The most common is a design where the vise jaws swivel to cut angles. This is the least expensive design but causes the operator to swivel the material as well. If the piece you are working with is long, the support tables also need to be moved. This requires additional set up time and floor space. With a vertical tilt frame, the material is always in the same line and the saw frame pivots to accommodate for the angle.



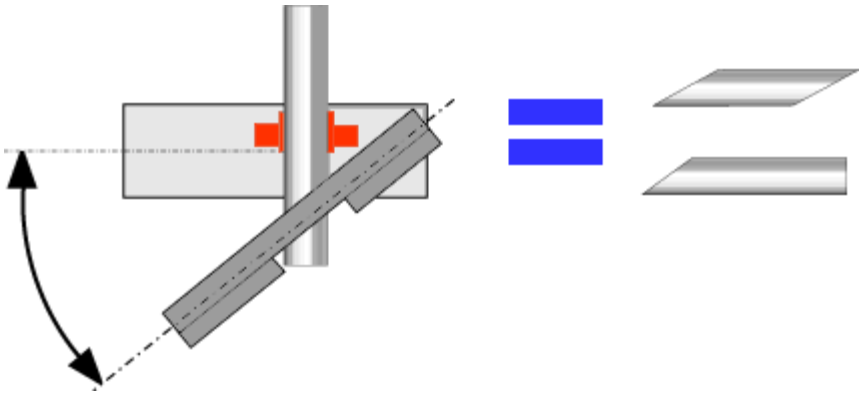
Horizontal saw - top view.
Material must be moved to match angle of vise.
Material handling area increases dramatically.



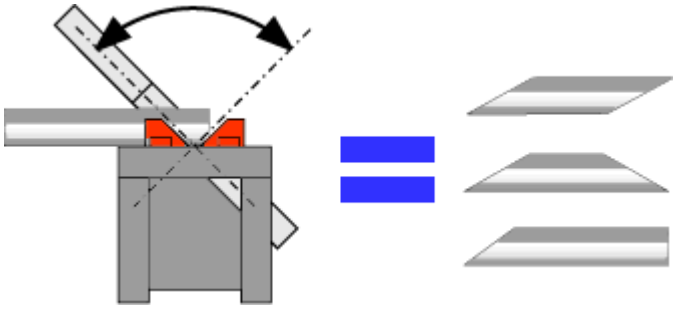
Vertical saw - top view.
Column tilts up to 45º left and right.
Material always feeds in a straight line.
Material handling area remains constant.

• **The design of the vertical tilt frame saw provides for ease of loading material on the machine's worktable.** With a vertical tilt frame machine, the saw frame retracts back behind the table when not cutting which makes it easier to load the machine with either an overhead crane or forklift. On a horizontal saw the material must be placed on a support table and then run into the machine and under the blade. There is always the risk of the saw frame not being high enough to clear the work piece or the moveable guide not being open wide enough. In either case, the blade or the guide arm could be damaged. The table being clean and open on a vertical allows the material to be dropped into place without additional material handling being required.

• **Vertical saws allow for cutting both directions from 90º and provide for more versatility and less material handling.** The nature of the vertical tilt frame design makes it much easier to cut trapezoid angles because most tilt frame verticals tilt both directions. If one was to cut this same type angle on a horizontal swivel head saw one would have to remove the piece from the machine and turn it around. Depending on the size of the material being cut, this could be a material handling problem, but in any case, will take more time.



Horizontal saws can cut miters and parallelograms without additional material handling.



Vertical saws can cut miters, parallelograms and trapezoids without additional material handling.

- **Operation of the machine is easier with a vertical saw.** Generally, the controls are
- located directly on the front of the machine right in line with the blade.
- With the controls located in front on the machine, in line with the blade, the operator
- can easily see both sides of the cut.
- The infeed and discharge sides of the machine are open and observation of both
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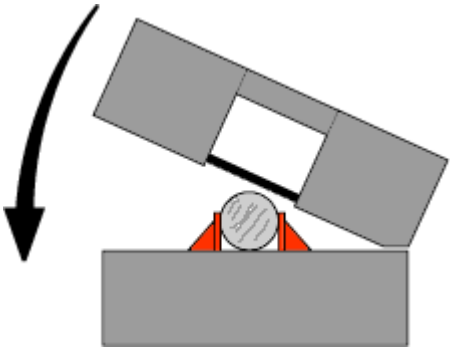

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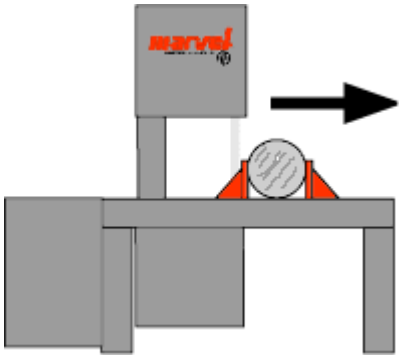

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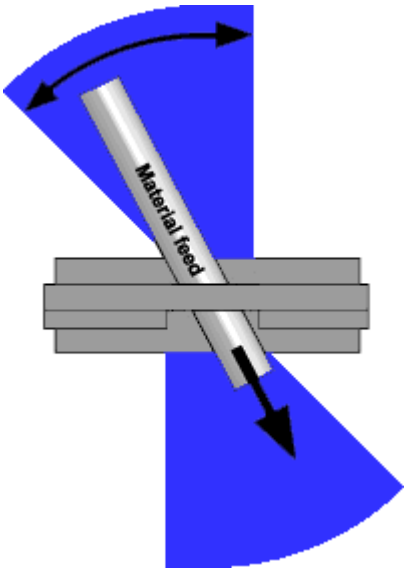

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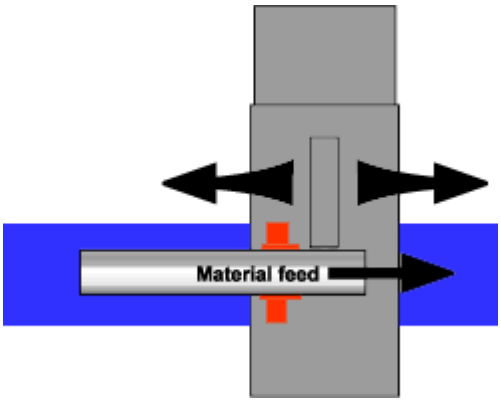

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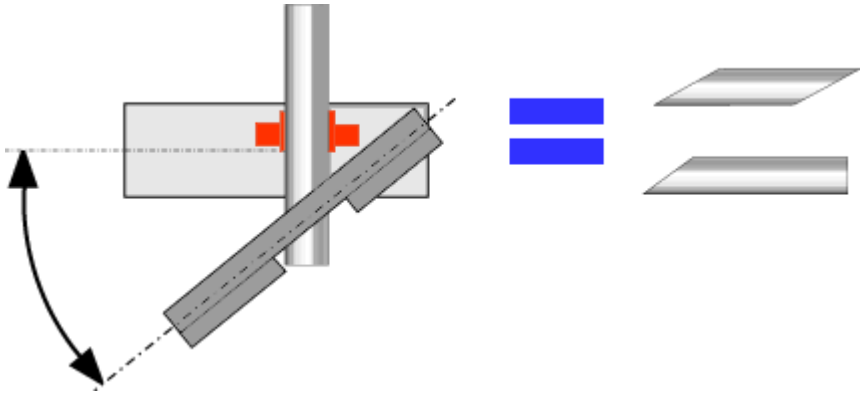

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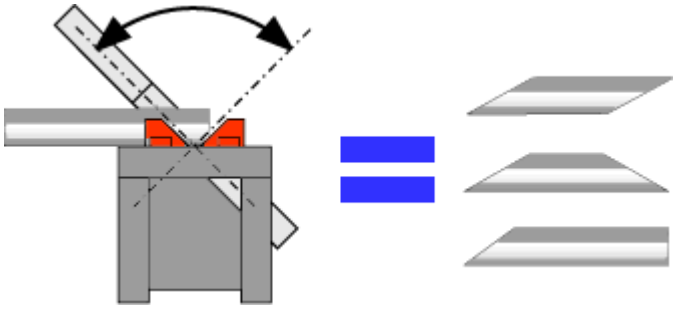

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