Users Guide

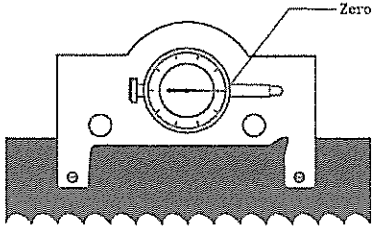
Application

M.K. Morse tension gage is for use in band saws and hack saws to measure the tension of band saw blades and hack saw blades easily and accurately.

By using M.K.Morse tension gage, users can ensure the blade is tensioned to be within the range of ideal tension, which is essential to maximize blade life and produce the most accurate cuts.

How to use

When mounting the tension gage to the blade, first tighten the screw on the stationary leg of the gage, then carefully adjust the moveable leg so that the gage dial pointer rotates approximately one full turn. While holding this position, tighten the screw on the moveable leg. This action "preloads" the dial indicator so that its pointer can move in either direction. Once the gage has been preloaded and tightened onto the blade, move the rotating bezel so the gage indicates "zero" (see picture 1).



Picture 1

The tension gage can be used to measure tension either when installing a new blade (applying tension) or when removing a blade already installed on a machine (releasing tension). In the preloaded condition, the gage needle will move clockwise from zero when tensioning a new blade and counterclockwise when releasing tension from a blade already mounted and tensioned on a machine.

Tension the blade to the proper tension range to maximize the blade life in an effective way.

Ideal tension range:

Bi-metal blade	2100-2450kgs./cm^2 30,000-35,000lbs./in^2
Carbon blade (hard back)	1400-1750kgs./ cm^2 21,000-25,000lbs./in^2
Carbon blade (flex back)	1050-1400kgs./ cm^2 15,000-20,000lbs./in^2

Tips

1st Low-tension will shorten the fatigue life of the blade and cause crooked cuts.
Over-tension will lead to the breakage of the blade and increase in the wear and tear.

2nd For new blade, after the first few cuts, because of the imperceptible change in blade length caused by the cuts, the blade should be tensioned again to ensure they are tensioned within the proper tension range.