# ACHIEVE CORRECT HONED EDGE ANGLE GEOMETRY - DAILY

2-1/2" to 6" knife blade lengths: Maintaining even, correct hollow ground knife blade symmetry within thickness, depth & height, will allow the 15th's thick x 30th's deep, evenly-formed, honed edge angle to have the consistent base thickness & symmetry needed to form proper honed edge angles along the entire knife blade length & shape.

When a knife blade is properly honed, the top area of each honed edge angle, along the whole blade's length & shape, should always be kept even with the top surface area of the gauge. Also, both sides of the blade's honed edge angle must reach the proper slot depth for each stage of the knife blade's life cycle.

Implementing correct hollow grinding procedure will greatly extend the life of the knife, the durability of the edge on line & will cut the number of sharpening strokes on the honing machine to 2 - 3 light strokes.



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# Wolff # 971000 Knife Gauge - Stainless Steel

POULTRY KNIFE BLADE THICKNESS, DEPTH & HEIGHT GAUGE



## MIDDLE SLOT:

.023" x 1/8" to 3/16" to 1/4" depth & height on the gauge (HOLLOW GROUND BASE ANGLE)

*CHECK* for even, hollow ground thickness, depth & height on each side of the blade, along whole length & shape of the knife blade.

When a knife blade is newer or just out of the box, the hollow ground thickness, depth & height should easily fit down into the .023" thick x 1/8" to 3/16" depth slot on your knife gauge, throughout the whole length & shape of the knife blade. After a while, it will need to be hollow ground!

**PROBLEM:** When knife blade is too thin the hollow grind will be too high and will move sloppily in the gauge slot. This indicates over hollow grinding and/or wheels that are too far apart or not properly positioned at a paper's width apart.

If the knife blade is too thick, it will ride high & not fit properly into the depth of the gauge slot, indicating a lack of hollow grinding. A thick, hollow ground base angle results in a wide, honed edge angle. Consequently, a wide honed edge angle will have more metal surface area removed during the re-honing process & will take several more sharpening strokes to create an edge, which ends up being weaker & greatly lessens the life of the knife & the effectiveness & durability of on line blade edges. Uneven hollow ground angles can indicate poor sharpening techniques, uneven wheel size and/or uneven wheel speed. Any of the above conditions can cause more rapid blade wear, dull knives, uneven blade geometry, edge rollover; and, if hollow ground angles are too thin, breakage will occur.

### ACHIEVE CORRECT HOLLOW GROUND BASE ANGLE GEOMETRY-DAILY

Maintain even, correct hollow ground thickness, depth & height for 2-1/2" to 6" knife blade lengths, throughout each stage of a knife blade's life cycle.

Knives 5" & shorter: The hollow grind should be no higher than 1/8" when a knife blade is newer, to a 3/16" height in the mid part of its life; then, at the end of its life cycle, go no higher than a 1/4" height, while always maintaining even symmetry & thickness on both sides of the blade, along the whole length & shape of the knife blade. (Preferably, 2-1/2" to 3-3/4" blades' hollow ground angles should not exceed a 3/16" height within the gauge's slot.) When a knife blade is properly hollow ground, the top area of each hollow ground angle, along the whole blade's length, should always be kept even with the top surface area of the gauge. Also, both sides of the blade's honed edge angle must reach the proper slot depth for each stage of the knife blade's life cycle.



Knives 6" & longer: The hollow grind should start off at a 1/8" height & work its way up to 1/4" in the mid part of its life; then, at the end of its life cycle, go no higher than a 3/8" height, always maintaining even symmetry on both sides of the blade, along the whole length & shape of the knife blade *(right hand SLOT)*.

When a knife blade is properly hollow ground, the top area of each hollow ground angle, along the whole blade's length, should always be kept even with the top surface area of the gauge. Also, both sides of the blade's honed edge angle must reach the proper slot depth for each stage of the knife blade's life cycle.

Implementing correct hollow grinding procedure will greatly extend the life of the knife, the durability of the edge on line & will cut the number of sharpening strokes on the honing machine to 2 - 3 light strokes.



### POULTRY KNIFE BLADE THICKNESS, DEPTH & HEIGHT GAUGE

*LEFT HAND SLOT:* .015" thickness x .030" depth & height on the gauge (HONED EDGE ANGLE)

*CHECK* for even, honed edge thickness, depth & height along whole length & shape of the knife blade.

When a knife blade is newer, or just out of the box, the honed edge thickness, depth & height should easily fit down into the .015" thick x .030" *(left hand SLOT)* deep slot on your knife gauge, along the whole length & shape of the knife blade. After a while, the blade will become too thick & will need to be re-hollow ground to allow the honed edge angle to fit properly back into left slot.

**PROBLEM:** The blade is too thick if honed edge angle height exceeds surface level of gauge slot. This indicates a lack of hollow grinding or honing wheels positioned at an improper cross over. Uneven honed edge angles can be observed visually & physically, within the slot, when comparing the symmetry of the angles on both sides of the blade, along the whole length of the knife blade. This indicates one or more of the following negative conditions: poor sharpening techniques, uneven wheel size, uneven wheel speed or improper honing wheel cross over. These conditions can cause more rapid blade wear, malformed edge angles, uneven blade geometry, edge rollover & weaker edged, duller knives.