

# DRILL BIT WARRANTY CLAIMS *Definitions & Procedures*

**FAILURES:**

Warranty claims will occur on less than 1/2 of 1% of the Simpson Strong-Tie Anchor Systems® carbide-tipped bits used. This estimate is based on experience with many millions of bits in various tools and materials.

The following information has been produced to enable you to improve your ability to fairly determine defects. **BITS ARE WARRANTED FOR REPLACEMENT ONLY AND IN NO CIRCUMSTANCES WILL SIMPSON BE LIABLE FOR MERCHANTABILITY OR LOSS OF SERVICE.**

If the defect is not obvious, please return the bit to our home office in Pleasanton, CA. Warranty decisions will be made within 48 hours after receiving the returned item(s).

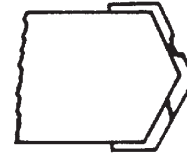
**FOR BEST BIT WEAR LIFE / PRODUCTION OUTPUT USE THE FOLLOWING GUIDELINES:**

- Ensure that the tool holders are in good shape. Deformation of the slots or contours of the bit shanks are a positive indication of tool holder wear. Worn tool holders reduce rotational and energy transfer efficiencies. Repair or replacement is required for efficient hole production.
- The lines of force should be kept as close as possible to 90° to the axis. The tool and bit should be kept directly in line with the hole.
- The bit should not be used as a hammer support when working in walls. Such use reduces energy transfer, slows rotation, accelerates flute wear, and is indicative of poor workmanship. The hammer should be supported at all times when working in walls.
- Only a slight "guiding pressure" is required to assist hammers when working on a horizontal surface. The weight of the hammer itself is almost sufficient for optimum production. Some guiding pressure absorbs recoil and assists in hole production. Obviously, compensation for the pressure which the weight of the hammer produces, must be made when working in ceilings and walls. Caution must be taken not to apply too much pressure as this retards hole production.
- Generally speaking, when a bit becomes very dull, it should be retired; it has done its job. Note: resharpening of drill bits voids the warranty.
- Bit life is generally measured by flute wear. We measure the diameter of the flutes directly behind the tip (area of most wear) and compare that reading to the diameter at the top of the bit (area of least wear). The resultant difference indicates wear life. If a measurement is greater than the standard shown in the chart, the bit is considered to be out of warranty.

**BIT FAILURES CAN OCCUR IN THE FOLLOWING WAYS:**

**Carbide tip fractures:**

Carbide fracture can be caused by two primary reasons: hitting an extremely hard foreign object in the concrete or hitting and staying on reinforcing steel. Steel strikes are readily identifiable. The bit steel will be damaged as well as the tip itself. The operator should cease hole production when the bit stops turning and start a new hole. Bits damaged due to steel strikes are not warranted.



**Shaft Breakage behind the head:**

If the break area shows jagged steel and no notch, the bit has been over-torqued by jamming in the hole. The bit is not covered by warranty.



**Shank transition area on upper shaft is polished:**

This is a positive indication that the bit has been used to produce deeper holes than it should. This means that debris has not been able to clear the hole readily, producing excessive heat buildup, which destroyed the bit-no warranty replacement. (User should purchase longer bits or use a lighter-duty hammer with small diameter bits).



**Tool holder slots, dimples, or recesses show wear:**

This indicates the hammer tool holder should be repaired or replaced-no warranty replacement.



Bit Dia. (in.)	Wear Diff. (in.)	Bit Dia. (in.)	Wear Diff. (in.)	Bit Dia. (in.)	Wear Diff. (in.)	Bit Dia. (in.)	Wear Diff. (in.)
3/16	.008	1/2	.020	7/8	.028	1 3/8	.043
1/4	.008	9/16	.024	1	.032	1 1/2	.048
5/16	.012	5/8	.024	1 1/8	.036	1 3/4	.048
3/8	.016	11/16	.024	1 1/4	.039	2	.048
7/16	.020	3/4	.024	-	-	-	-