

## Top hammer drill bits warranty

This warranty document is only for following categories of drill bits which are supplied by Sinodrills company:

- 1,tapered chisel bit;
- 2,tapered cross bit(or X bit);
- 3,tapered button bit;
- 4,threaded cross bit (or X bit);
- 5,threaded button bit;

Any drill bit performance and reliability not only depends on its design, raw materials and workmanship, but also depends on user's proper selection, rock formation, user's operation and all other related drilling equipments conditions. So the following basic rules are foremost and necessary to be followed.

### **Proper selection of drill bits is the key:**

Any drill bit can be only used for some specific conditions, so selecting correct design of drill bits according to different rock formations is very important. Especially for threaded button bits, correct face shape ( usually there are flat face, convex face or drop center) and correct buttons shape (usually there are spherical,parabolic or ballistic buttons) are essential. Additionally buttons configuration is also very important. Sometime drill bits flushing holes design and drill bits skirt design are also important points for drill bits performance. While all these points can be only confirmed by customers or users, so Sinodrills refuses all claims resulting from customers' incorrect choice or decisions.

### **Proper usage of drill bits is essential:**

Push pressure, torque pressure, flushing fluid pressure ,rotation speed, drilling speed and drilling fluid volume are the most important parameters during drilling, so monitor all these parameters while drilling and always make sure every parameter is correct and reasonable are essential. All these parameters must be adjusted time to time according to different rock formation. Properly maintain drill bits is another important procedure: any drill bit, whatever chisel bits, cross bits or button bits, need to be sharpened in due time. Only in this way, each drill bit can be utilized to its biggest value.

**Warning: Improper use or operation may result in serious damages of drill bits and other equipments, even serious injury or death.**

### **Warranty:**

Sinodrills warrants each new drill bit to be free from defects in materials and workmanship for 200 days from the date of shipping and agrees only to repairs, replace, or give credit, but at no time will any cash refund be remitted to resolve a warranty claim. Defects caused by improper use or application shall not be considered defects within the scope of the foregoing warranty. If improper use, or incorrect maintenance are made on or used with the drill bits, Sinodrills shall also be relieved of responsibilities for fulfillment of this warranty.

### **Maximum liability:**

The maximum liability of Sinodrills under the exclusive warranty set forth herein shall be the amount paid to

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Sinodrills by customers.

**Disclaimer:**

Under no circumstances shall Sinodrills be liable for any consequential or special damage which any person, company, or other entity may suffer or claim to suffer or incur or claim to incur as a result of any defect in the product or in any correction or alteration thereof made or furnished by Sinodrills. "Consequential" or "Special" damage as used herein includes but is not limited to costs of transportation, lost sales, lost profits, lost income.

**Limited warranty policy:****Tapered chisel bit, tapered cross bit (or X bit) and tapered button bit:**

1, If tapered degree is not standard, Sinodrills is responsible for replacement;

2, For any drill bit, before its 1/2 life time, if drill bit skirt breaks or crushes , Sinodrills is responsible for replacement;

3, For any tapered chisel bit, tapered cross bit or tapered X bit, before its 1/2 life time, if tungsten carbide breaks or crushes, Sinodrills is responsible for replacement.

4, for any tapered button bit, before its 1/2 life time, if buttons breaks, Sinodrills is responsible for replacement, but all parabolic or ballistic (semi-ballistic) buttons are exclusive.

5, for all over sized tapered bit, including tapered chisel bit, tapered cross bit , tapered X bit or tapered button bit, Sinodrills refuses all warranty claim.The definition of over size diameter is as below: When any tapered chisel bit, tapered cross bit, tapered X bit or tapered button bit diameter is more than 42mm.

6, When any 3 or more than 3 threaded bits show quality problems in any single order or shipment, stop using and contact Sinodrills, Sinodrills will consider to replace all bits or discuss with users to resolve the problems.

**Threaded cross bit (or X bit), threaded button bit:**

1, For any threaded cross bit or X bit, before its 2/3 life time, if drill bit skirt breaks or crushes, Sinodrills is responsible for replacement;

2, For any threaded cross bit or X bit, before its 1/2 life time, if tungsten carbide breaks or crushes, Sinodrills is responsible for replacement;

3, For all oversized threaded bits, whatever threaded cross bit or threaded button bit, Snodrills refuses any warranty claim, the definition of oversized threaded bit is as below:

For R25 thread, all bits diameter more than 45mm are oversized;

For R28 thread, all bits diameter more than 48mm are oversized;

For R32 thread, all bits diameter more than 76mm are oversized;

For R38 thread, all bits diameter more than 89mm are oversized;

For T38 thread, all bits diameter more than 102mm are oversized;

For T45 thread, all bits diameter more than 127mm are oversized;

For T51 thread, all bits diameter more than 140mm are oversized;

For GT60, ST58 and ST68 thread, all bits diameter more than 152mm are oversized;

For SR32 and SR35 thread, all bits diameter more than 64mm are oversize;

4, For any threaded bit, if drill bit skirt breaks or crushes, Sinodrills is responsible for replacement;

5, For any threaded cross bit or X bit, before its 1/2 life time, if tungsten carbide breaks or crushes, Sinodrills is responsible for replacement;

6, For any threaded button bit, before 1/2 life time, if half or more than half of total buttons quantity break or drop off from the bit, Sinodrills is responsible for replacement;

7, Sinodrills refuse all warranty claims resulting from drilling in fractured rocks or drilling in concrete.

8, When any 3 or more than 3 threaded bits show quality problems in any single order or shipment, stop using and contact Sinodrills, Sinodrills will consider to replace all bits or discuss with users to resolve the problems.

9, Sinodrills does not warranty carbide breakage of "Ballistic" (or similar ballistic shape, like "Parabolic", "Spike" or "Conical") style buttons. Additionally, Sinodrills will not warrant any damage caused by this breakage. Because "Ballistic" (or similar ballistic shape, like "Parabolic", "Spike" or "Conical") style button bits have an aggressive drilling nature, but not suited for all drilling conditions.

#### **Warranty procedure:**

1, Any warranty claim must be submitted in writing to Sinodrills within 200 days from shipping date;

2, Any warranty claim will be resolved when:

1) Detailed photos or videos are sent to Sinodrills with date purchased and the information required under item 2) as below. All products where a warranty claim is pending are required to be kept by claimers until Sinodrills makes a full disposition of the claim. Sinodrills reserves the option to have the products returned in the event the photos are inconclusive in resolving the claim.

2) The claimer is to advise Sinodrills of the problem with the products including the footage the product drilled, air pressure, rock formation and drilling location. On bits the diameter over the gauge row must be given along with the width across the flats on gauge row buttons. In addition the claimer is requested to offer other pertinent information useful in analyzing the claim.

3) Once the claim is approved by Sinodrills, Sinodrills will offer new products, specific spare parts or issue a credit of up to a maximum of the amount paid to Sonidrls by claimer. Sinodrills reserves the right of final determination of any credit to be issued.

**Any issues not mentioned in this warranty shall be settled through negotiation between Sinodrills and users.**