

# Troubleshooting

## (Side lock holder)

	Contents of the trouble	Causes	Pulled out of holder. Unable to attach fast to spindle or holder in case of MT shank.
1	Tool is pulled out or down.	① Tool end face does not touch stopper bolt or holder ID bottom face. ② No notch part in tool ③ Loosened lock screw due to machining vibration	① Use of tool with its end face attached to bottom face ② Use of tool with notch part ③ Revision of cutting conditions (Decrease cutting resistance.) a : Higher rotation speed or lower feed rate (Approx. 20%) b : Lower cutting depth
2	Tool will not fit.	① Chip and dust biting and adhesion in holder ID part ② Scratch and dent in holder ID and tool OD ③ As for SLB side lock holder, wrong height and width of adapter and tool key	① Cleaning of holder ID and tool shank ② •Replacement of holder or tool •Touching up of area in question (rubbing off with sand paper #1000 and above) Correction (grinding) by NT TOOL is not possible. ③ Check key height and width.
3	Tool will slip.	① Tool notch part is not in alignment with lock screw location. ② As for SLB side lock holder, tool with key is not used.	① Bring tool notch part in alignment with lock screw location. ② Use of tool with key
4	Seized lock screw	① Chip and dust biting and adhesion in screw part	① •Cleaning of screw part •Replacement of lock screw
5	Chattering	① Loosened lock screw •One-side hitting of lock screw  •Looseness due to machining vibration  ② Cutting resistance is too small in comparison with holder's rigidity.  ③ Cutting resistance is too high in comparison with holder's rigidity.  ④ Bending moment is too large.  ⑤ Mischoice of retention stud  ⑥ Expansion of BT shank because of over-tightening retention stud.  ⑦ Low taper contact of interface • Poor taper contact from expanded spindle nose	① •Check if tool has angled notch part for preventing it from being pulled out. If angled tool is used, use tool without any angle. (What about NT standard products such as DC and adjustable?)  •Revision of cutting conditions (Decrease cutting resistance.) a : Higher rotation speed or lower feed rate (Approx. 20%) b : Lower cutting depth  ② Revision of cutting conditions (Increase cutting resistance.) a : Higher feed rate or lower rotation (Approx. 20%) b : Higher cutting depth  ③ Revision of cutting conditions (Decrease cutting resistance.) a : Higher rotation speed or lower feed rate (Approx. 20%) b : Lower cutting depth  ④ •Shorter tool projection length •Shorter holder length  ⑤ Use designated retention stud for the machine  ⑥ Keep recommended torque value for tightening retention stud.  ⑦ •Regrinding and correction of machine spindle

		<ul style="list-style-type: none"> <li>• Dust, scratch or dent in the taper part or end face (in the case of two-face contact)</li> </ul> <p>⑧ Chattering from holder's resonance</p>	<ul style="list-style-type: none"> <li>• Cleaning of taper and end face (in the case of two-face contact), touching up of scratch or dent.</li> </ul> <p>⑧ Shift rotation speed (more than 10%)</p>
6	Poor holding accuracy	<p>① Chip and dust biting and adhesion in holder ID part</p> <p>② Scratch in cutting tool shank or holder ID</p> <p>③ Poor accuracy of cutting tool.</p>	<p>① Cleaning of holder ID and tool shank</p> <p>② • Replacement of holder or tool • Touching up of area in question (rubbing off with sand paper #1000 and above) Correction (grinding) by NT TOOL is not possible.</p> <p>③ Tool replacemen</p>