

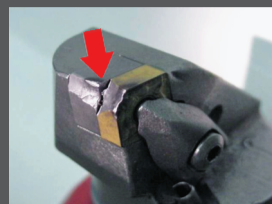
# Tool maintenance

PRIME TOOLING

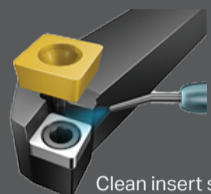
## Guidelines & Handling

### Inspection of tool

#### Visually inspect shims & shim seats



Damage



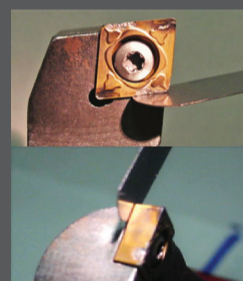
Clean insert seats

- Shim should not have corners chipped, in cutting area.
- Shim seats should have no edge build up (raised edge).
- Check shim damage.
- Clean insert seat and damaged location and support for cutting edge.
- If necessary index or replace shim.
- Ensure correct insert location against support points.
- Ensure that shim corners have not been knocked off during machining or handling.

#### Inspect pockets



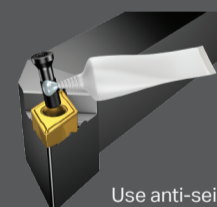
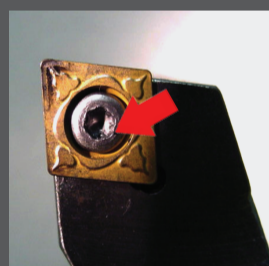
Damaged pocket



Use shim to check the gap

- Pockets damaged or plastic deformation.
- Oversized pockets due to wear. The insert does not sit properly in the pocket sides. Use a 0.02mm shim to check the gap.
- Small gaps in corners, between the shim and the bottom of the pocket.

### Insert screws / clamping screws

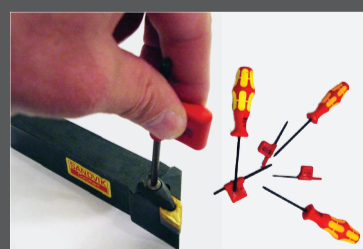


Use anti-seize

- Screw threads, heads and Torx sockets should be in good condition.
- Use correct keys.
- Ensure correct screw-tightening torque.
- Apply sufficient screw lubrication to prevent seizure. Lubricant should be applied to the screw thread and screw head face.
- Replace worn or exhausted screws.
- Use Anti-seize for screw heads and threads.

### Importance of using the correct wrench

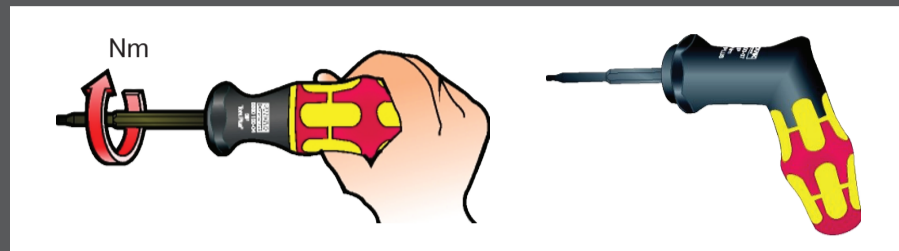
#### Why use the proper wrenches?



- Extends life of screw and wrench.
- Reduces risk of stripping screw.
- Always use correct torque. Values are marked on tool and shown in product catalogue.

### Torx Plus® wrenches

#### Torx Plus from Sandvik Coromant



- To get the best performance out of our tools, it is important to have the correct insert tightening torque.
- In the Sandvik Coromant assortment, there are torque wrenches available.

#### Torx Plus® vs Torx

##### Cross Section



Torx Plus®



Torx



Torx Plus®

Torx Plus® is a registered trademark of Camcar-Textron (USA).



Standard Torx screw

### Consequences of poor tool maintenance

Damaged inserts  
Damaged shims  
Damaged tool holders  
Damaged components  
Damaged machine

Reduced production  
Higher production cost

### Summary of maintenance points

- Check tool wear and shims for damage.
- Make sure insert seat is clean.
- Make sure of correct insert location.
- Make sure correct keys and drivers are used.
- Insert screws should be correctly tightened.
- Lubricate screws before tool assembly.
- Make sure contact faces are clean and undamaged on tools, holding tools and machine spindles.
- Make sure boring bars are clamped well and that holder is undamaged at end.
- A well organized, maintained and documented tool inventory is a production cost saver.
- Stability is always a critical factor in any metal cutting operation.

For technical support, please contact Sandvik Coromant's Authorized Technical Distributor - Prime Tooling.

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