NTK's Recommendation for Swiss Tooling

Specific Application

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General Tooling for Popular Materials

- Titanium
- 304SS
- Ti-6Al-4V
- 316SS
- Carbon steels
- Alloy steels
- Cobalt Chrome
- HRSA materials

Front Turning

**General Purpose**

- DM4-YL
- DM4-AMX

**Up to .020 DOC**

- Splash Series
- Y-axis with Coolant Through

Cut-Off

**Up to .472”**

- DM4-CTP-CX

**Up to .630”**

- DM4-CTPA-CX

**Up to 1.00”**

- CUT DUO

- Splash series

- NTK recently added another coolant through cut-off toolholder for larger diameter materials.
- CTDP-OH toolholder can cut up to 1” materials and can control chips very well.

- DM4 has excellent heat resistance. It is the best grade to machine for Titanium Alloys, Cobalt Chrome, and HRSA materials.
- YL chipbreaker is designed for both sharpness and chip control. It can hold dimensions very well and evacuate chips smooth.
- AMX chipbreaker is optimized for very small DOC operations. It can perform very well in thin chip control situations.
- Use with coolant through tool holder to help with chip evacuation. Y-axis coolant through toolholder is the best solution for chip control problems.

- CTP/CTPA style cut-off tool is a best-seller in the Swiss market. They have excellent rigidity and sharpness. Now NTK added the CX chipbreaker to them. 3D shaped CX chipbreaker can control chips extremely well.
- Use with coolant through toolholder for better chip evacuation.
- CTP style is designed for up to .472” material and CTPA is for up to .630”.

- DM4-AMX chipbreaker is optimized for very small DOC operations. It can perform very well in thin chip control situations.
- Use with coolant through tool holder to help with chip evacuation. Y-axis coolant through toolholder is the best solution for chip control problems.
**Back Turning**

- **General Purpose**
  - **DM4-TBP / TBPA-BM**
  - **Splash Series**
  - **Y-axis with Coolant through**

- NTK’s TBP/TBPA back turning tools are solid and can provide stable machining even with heavy DOC operations.
- Now, NTK added a 3D chipbreaker named BM to this series. BM chipbreaker can manage chip direction. Just one pass is needed to get excellent face/ID finish.
- Use with coolant through tool holder to help with chip evacuation and the Y-axis coolant through toolholder is the best solution for chip problems.

**Grooving**

- **General Purpose**
  - **DM4-GX**
  - **Splash Series**
  - **Y-axis with Coolant through**

- NTK is expanding its triangle style grooving tools. Now NTK accommodates wide grooving widths from .012” to .125”.
- GX chipbreaker can control chips very well, not only for grooving but also side-turning operations.
- Use with coolant through tool holder to help with chip evacuation and the Y-axis coolant through toolholder is the best solution for chip problems.

**Threading**

- **General Purpose**
  - **QM3-TTP**
  - **TTP**

- NTK’s side-clamping TTP inserts are rigid and produces high quality good threads. Various lineups are available for each specific threading operations.
- QM3 has good wear resistance and toughness and can cut most materials.

**ID Boring**

- **General Purpose**
  - **STICK DUO Hyper**
  - **STICK DUO SPLASH**
  - **Mogul Bar**

- Stick Duo Splash are coolant through sleeves for ID operations. NTK has a variety of ID tooling inserts, bars for ID boring, ID back turning, ID grooving and ID threading to use with Stick Duo Splash.
- The sleeves are equipped with an adjustable overhang mechanism that allow you to index bars easily without length adjustment.
- Mogul Bar is a series name for boring tools with indexable inserts. The series starts from .197” minimum bore diameter and ID and use with F-style chipbreaker which makes chip evacuate backward.
- They include a coolant through system that ensures better chip evacuation.

**Endmill**

- **General Purpose**
  - **DM4-BL**
  - **Indexable Endmill**

- NTK has a variety of indexable type endmill tools for Swiss machines. The big head endmills can cut in close proximity to the Guide-bushing and provide excellent rigidity. Due to the big diameter, you can also run faster than small diameter endmills.