

# MTS

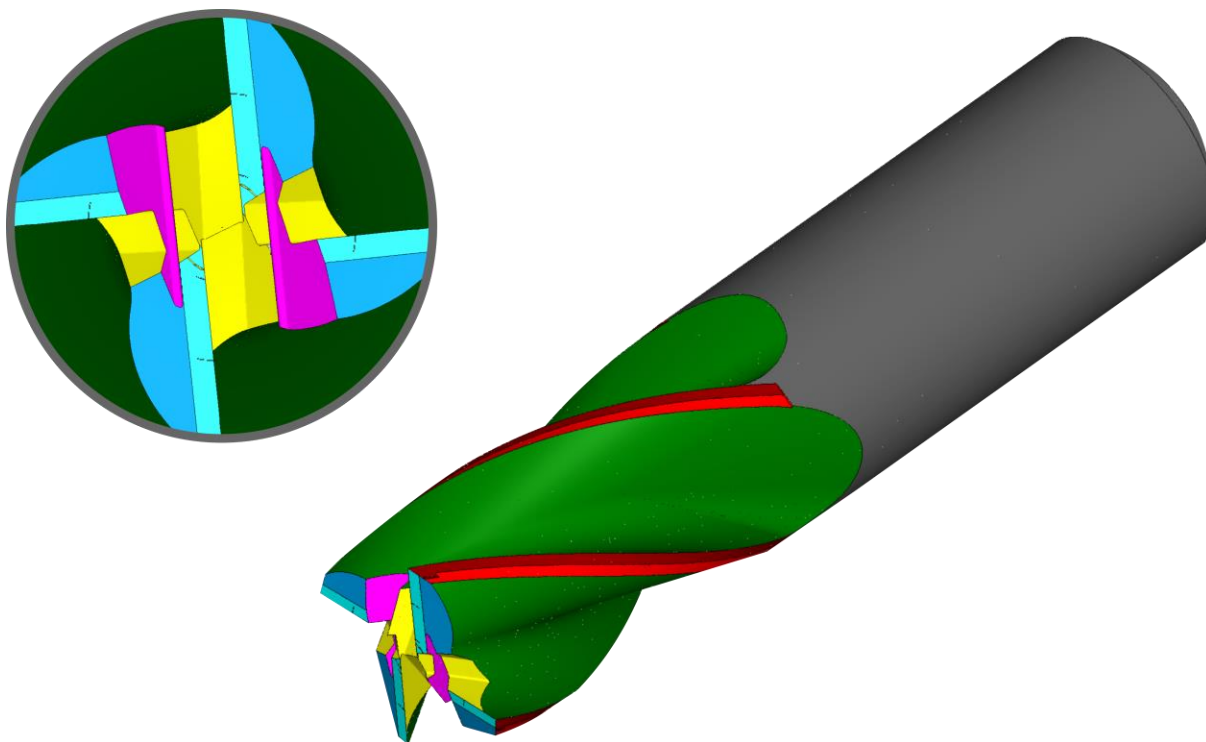
Product of the VOLLMER Group

*tool-kit* PROFESSIONAL by MTS – Product of the VOLLMER Group

# Software-Modul

## Spezifikation „Endmills/FMENU“

Stand: 15.01.25



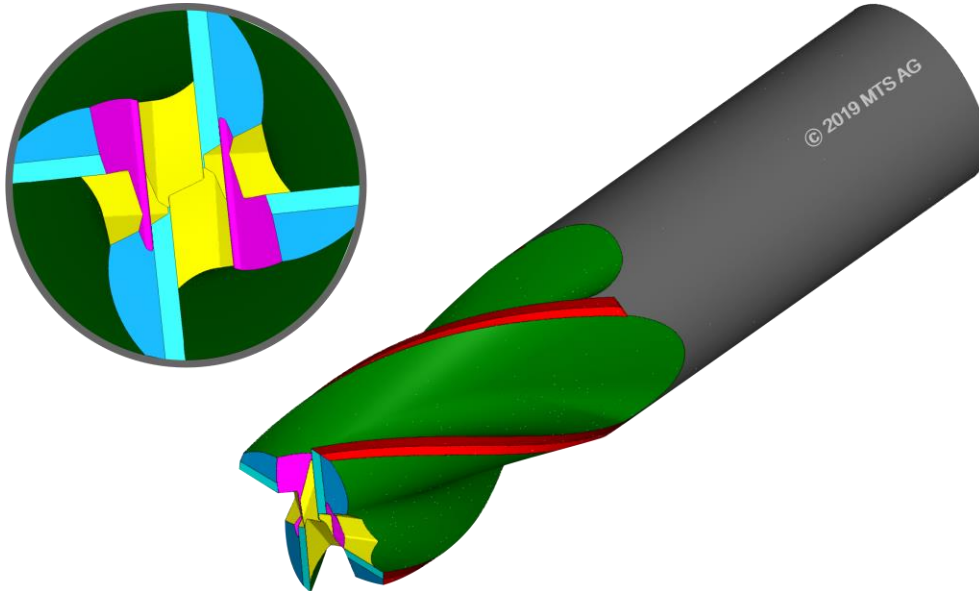
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# MTS

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## 1.1 End Mills

FMENU

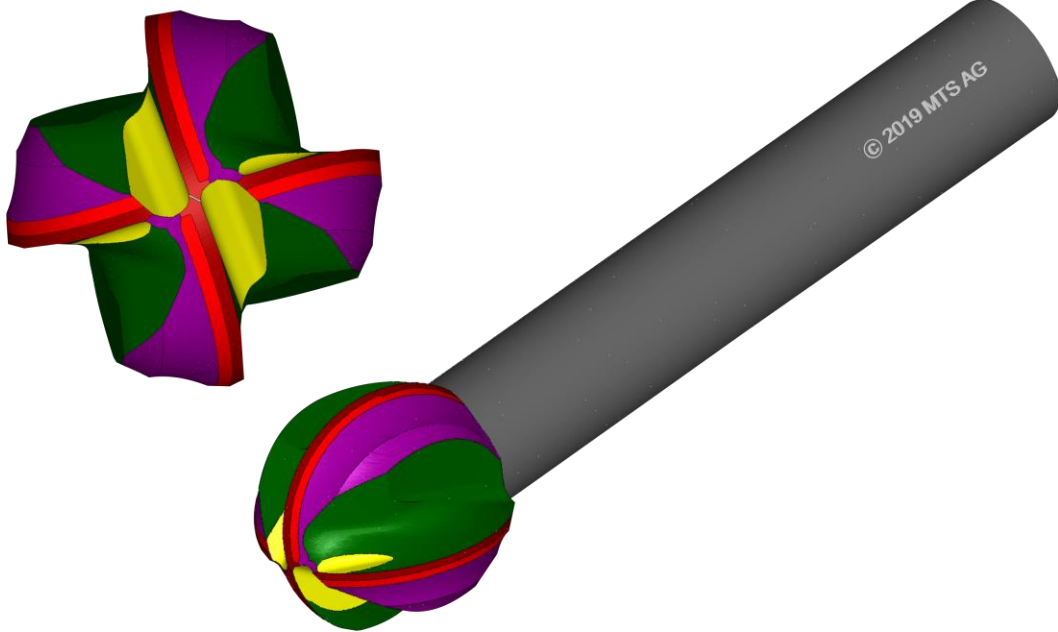


### 1.1 Basic Modul End Mills

- **Workpiece:**  
Cylinder  
Taper  
Angular Cutter
- **Point:**  
Plan Face  
Chamfer  
Corner Radius  
Ball Nose  
Circular Arc  
Double Radius
- **Geometry:**  
Regulare  
2 at Center  
1 above Center  
Centring Point  
3 at Center  
4 at Center
- **Cutting Edge Combination:**  
right helix/right cutting  
left helix/left cutting  
right helix/left cutting  
left helix/right cutting
- **Division:**  
Equal / unequal division of teeth
- **Periphery**  
Linear relief: 1st/ 2nd /3rd relief angle  
Radial relief: Cross-/ longitudinal  
Roughing  
Grind direction: Forward / backward  
Optional spark out grinding
- **Production / Regrinding:**  
Production by different infeed (several steps)  
Regrinding with calculation of removal length, periphery and rake.  
Regrinding, finishing with different wheels
- **Main Fluting**  
Meas. definition: Point-/ normal cut  
Grind direction: Forward / backward  
Optional spark out grinding
- **Taper:**  
Constant angle / constant helix  
Regrinding with undefined helix
- **Notching**  
Radius at entry and exit  
Variable entry- and aperture angle
- **Profile Simulation**  
Simulation of intersection at all operations  
Wheel/workpiece-simulation  
Machining simulation
- **Shank**  
Reducing the shank diameter  
Clamping area

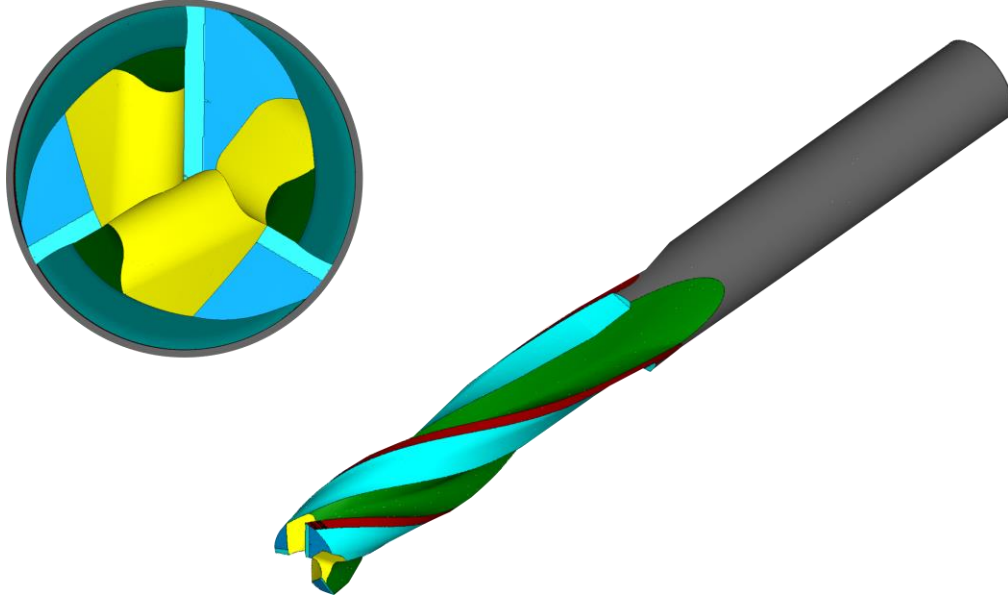
## 1.2 End Mill Ball

FMENU



1.2 Ball  
Extension to 1.1:

- Ball



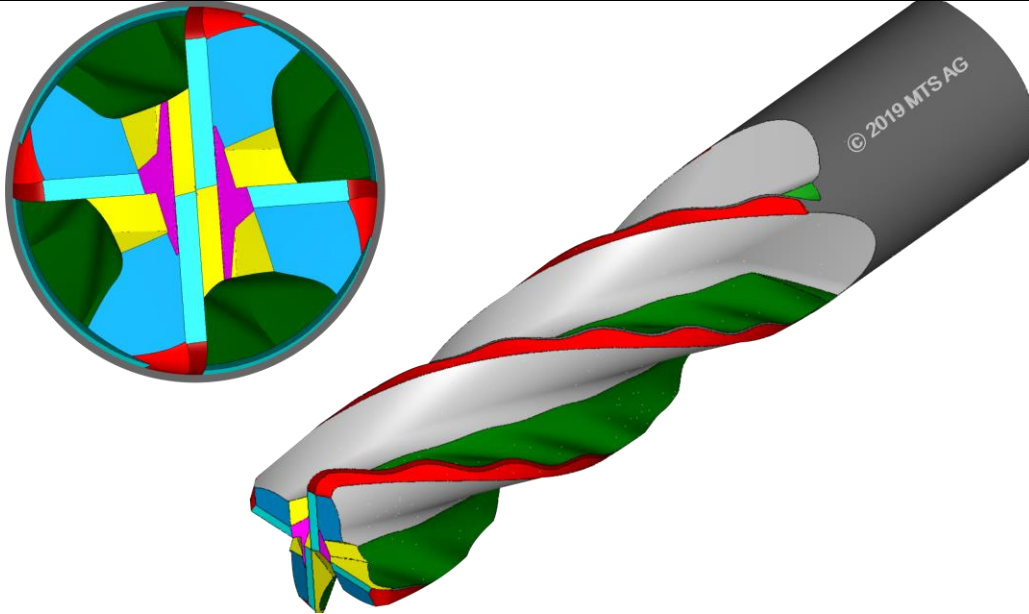
**1.3 Variably Helix**  
**Extension to 1.1:**

- **Variably Helix of Fluting:**
- Cylindrical and tapered tools

- Front and rear angle of helix
- 3 sections: Constant angle within 1. and 3. section; transition between front and rear helix-angle within 3. section
- Rising or falling helix

## 1.4 End Mill Wave Cut

4FMENU



### 1.4 Wave Cut(Crest-cut)

#### Extension to 1.1:

(Production only; regrinding on demand)

- **Cylindrical tools**  
Roughing cutting corresponding to a sinusoidal cutting edge along the helix  
Period and amplitude of wave according to sinus-function  
Starting point offset at every tooth  
Orientation of wave to the tool-center or to the cutting edge