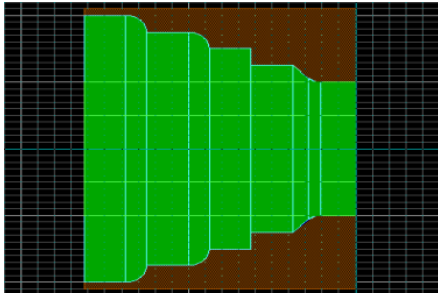


8.1 Basic program „Increasing / Downgrade Profile“

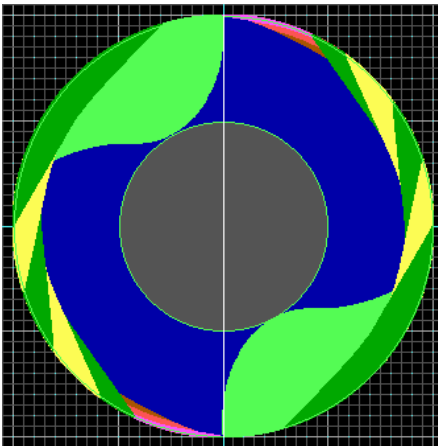
Profile End Mills / Spade End Mills

Profile Drills / Spade Drills

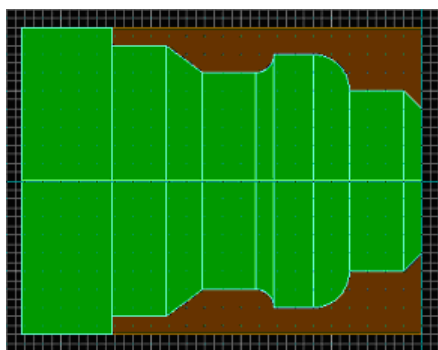
right helix / right cutting
left helix / left cutting



Side view



Front view



side view

Workpiece:

- Tools with increasing and **falling** profile

Point:

- A) Milling End Face like 1.1
- B) Drills Point like 6.1

Geometry:

- A) Milling End Face like 1.1
- B) Drills Point like 6.1

Cutting Edge Combination:

- right helix/right cut
- left helix/left cut

Production / Regrinding:

- Production by different infeed (several steps)
- Regrinding with calculation of removal length, periphery and rake.
- Regrinding, finishing with different wheels

Profile:

- CAD-system for profile construction

Profile Element:

- Straight line
- Edge
- Convex / concave radius
- Chamfer
- Increasing / downgrade profile
- Free selectable sequence of the profile elements

Preparation:

- Separation (cut off)
- Profile roughing
- Profile finishing
- Straight polishing
- Corresponding to a defined blank profile

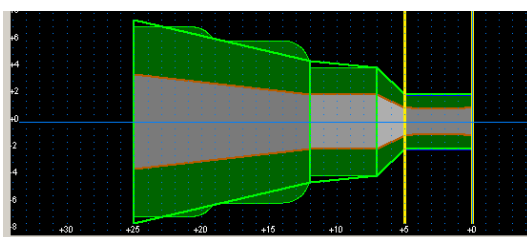
Main Fluting:

- Straight fluting
- Tapered fluting
- Spade drill fluting

Periphery:

- Linear relief: 1st/ 2nd /3rd relief angle
- Radial relief: 1st relief angle
- Cylindrical relief
- Raised land fluting
- Multi facet raised land fluting

8.2 Extension: Multi Fluting Geometry



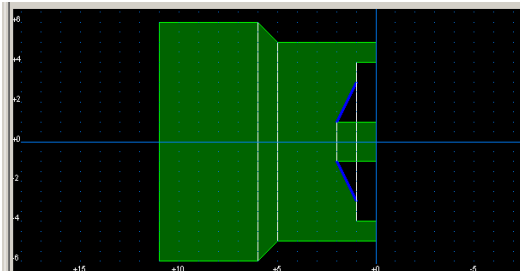
Workpiece with 4 flutings

Extension of basic program:

„Multi Fluting Geometry“

- Up to 5 flutings with separate definition but common cutting edge

8.3 Extension: Receding Profile



Workpiece with „Receding Profile“

Extension of basic program:

„Receding Profile“:

- Extension of profile including receding sections

8.4 Extension: Radial Periphery



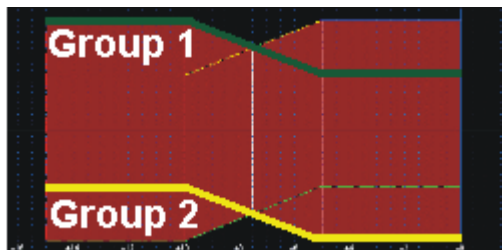
Grinding with radius wheel

Extension of basic program:

„Radial Periphery“:

- Radial periphery along discretionary sections
- Special grinding procedure by radius wheel

8.5 Extension: Multi Cutting Geometry

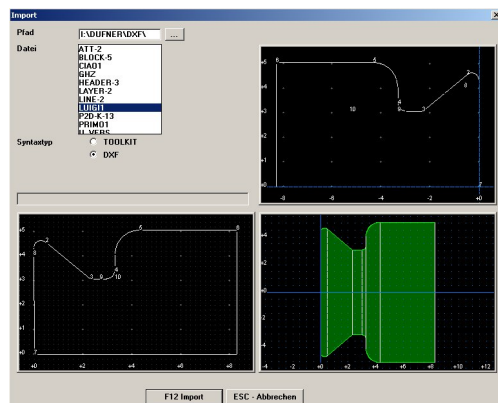


Extension of basic program:

„Multi Cutting Geometry“:

- Multi cutting tools with 2 Groups
- In pairs different cut geometry

8.6 Extension: Reading DXF-Format



Extension of basic program:

- Reading an external created **DXF-file**
- Konverting into MTS-file-format
- autom. sorted elements
- autom. corrected sequence
- autom. corrected orientation
- Selecting the particular layer
- DXF-Standard:
 - AutoCAD Version 12
 - DXF-identification-code „AC1008“