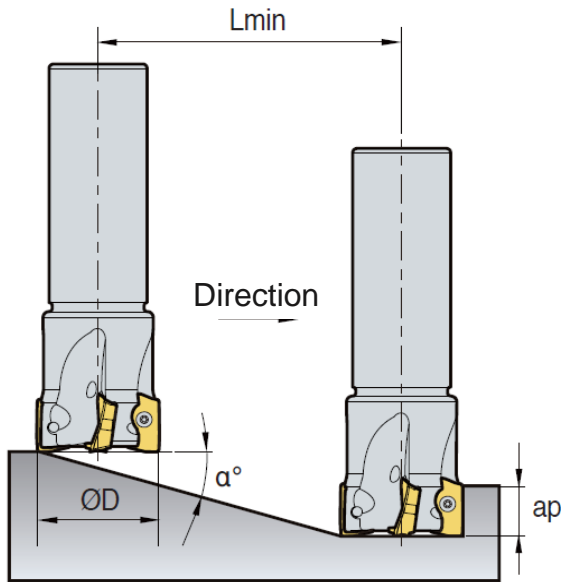


Technical Details

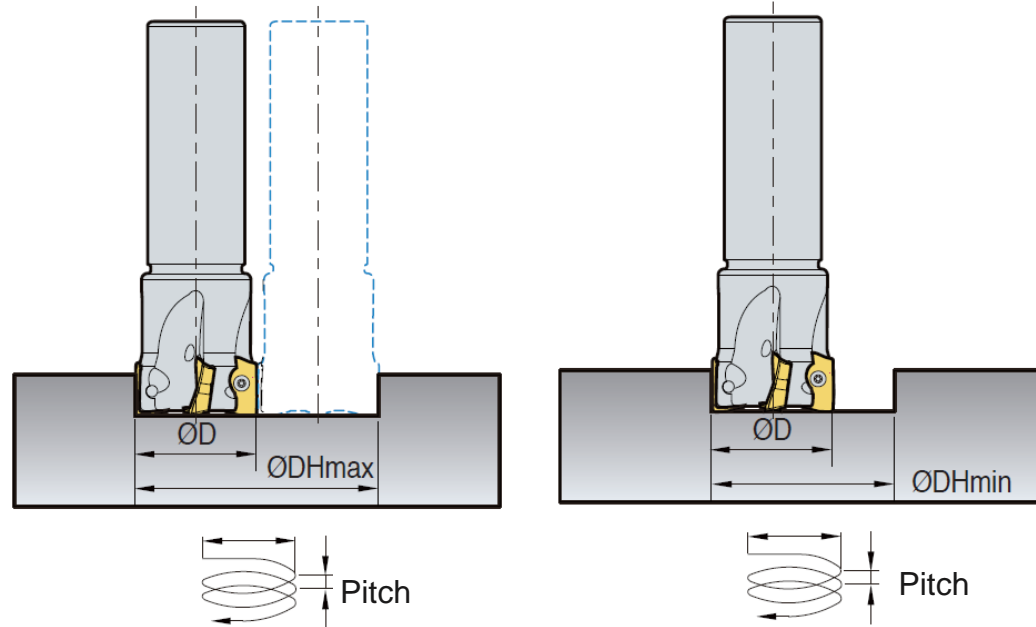


1. Ramping



* In ramping and helical machining, use coolant and air. $L_{min} = ap / \tan(\alpha^\circ)$

2. Helical Ramping



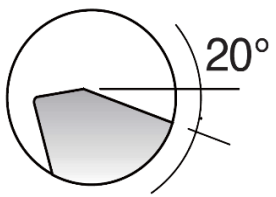
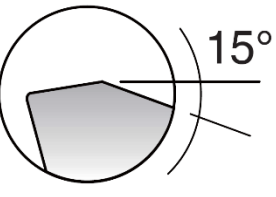
(mm)

| Tool Diameter ØD | ap | 1. Ramping | | 2. Helical Cutting | | | | | |
|---------------------|------|-----------------------------------|--------|----------------------------------|---------------|----------------------------------|---------------|---------------------------------|---------------|
| | | Max. Rake Angle α° | L min. | Blind Hole | | | | Through Hole | |
| | | | | Minimum Machining Dia. ØDHmin | Maximum Pitch | Maximum Machining Dia. ØDHmax | Maximum Pitch | Minimum Machining Dia. ØDmin | Maximum Pitch |
| 25 | 16.5 | 8.0 | 117.4 | 48.4 | 6.8 | 40.4 | 5.7 | 30.8 | 4.3 |
| 32 | | 3.7 | 225.2 | 62.4 | 4.0 | 54.4 | 3.5 | 44.8 | 2.9 |



Technical Details



| Chip Breaker | Cutting Edge Shape | Recommended chip breaker and grade by work piece material (✓ 1st recommendation) | | | | | | | |
|--------------|---|--|--------|----------------------------------|--------|-----------------|--------|-----------|---------|
| | | P | | | | M | | K | |
| | | Low carbon steel Mild steel | | High Carbon steel Alloy steel | | Stainless steel | | Cast iron | |
| | | C.B. | Grades | C.B. | Grades | C.B. | Grades | C.B. | Grades |
| HS |  | - | ✓ HP25 | - | ✓ HP25 | - | ✓ HU30 | - | - |
| | | - | HU30 | - | HU30 | ✓ | - | - | - |
| | | - | MKP30 | - | MKP30 | - | - | - | - |
| MHS |  | ✓ | ✓ HP25 | ✓ | ✓ HP25 | - | ✓ HU30 | ✓ | - |
| | | ✓ | HU30 | ✓ | HU30 | - | - | ✓ | ✓ MKP30 |
| | | ✓ | MKP30 | ✓ | MKP30 | - | - | ✓ | ✓ HKP40 |