

CoroMill® Plura and shrink fit adaptor with iLock™

Risk-free titanium milling

Tough cuts without risk of pull-out

iLock™
rigorous locking interface



Highly productive titanium milling is an extreme application where the high axial forces can literally pull the end mill out its holder.

The new iLock fixturing system secures the end mill from pull-out without interfering with runout precision. High quality surfaces can be manufactured at metal removal rates that are otherwise not possible.

Benefits

- Security and precision with pull-out protection
- Up to three times larger depth of cut – reduces production time
- Longer tool life thanks to close tolerances
- Shrink fit ensures correct clamping, every time



Application

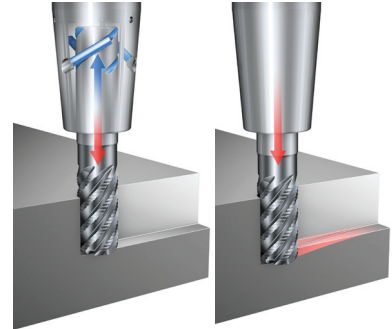
- Titanium milling with high demands on security, productivity and runout precision
- Complementary applications can be found in steel, stainless steel
- Full slot roughing to finish milling
- 2D-milling with high axial engagement



ISO application area

Technical features

- iLock spiral groove on CoroMill Plura end mill shank is directed to pull the tool into the chuck for absolutely secure fixturing
- Drive keys inside shrink fit adaptor chuck to guide and lock end mill in position
- High precision shrink fit clamping with tool runout $\leq 5 \mu\text{m}$ (200 μin) at $3 \times D$
- High performance grades GC1620, GC1640 maintain cutting edge sharpness for long times in cut in titanium
- Optimized geometries for titanium machining
- Radii options for typical fillet radii in Aerospace frame components



Recommendations

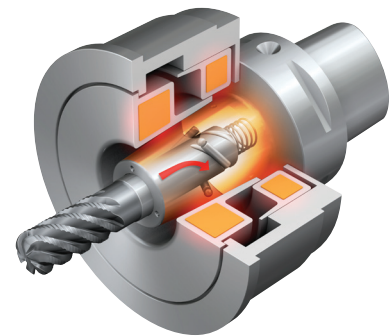
Always apply CoroMill Plura with iLock in combination with shrink fit adaptor with iLock for pull-out protection.

Cutting data recommendations for CoroMill Plura are available in Supplement 12.1 page D23. iLock makes it possible to apply the higher cutting data range also for tougher cuts.

Handling

Mounting of CoroMill Plura with iLock in shrink fit adaptor with iLock:

1. Heat shrink fit adaptor in heating equipment, minimum 10 kW
2. Insert CoroMill Plura with iLock into shrink fit adaptor with a rotating motion
3. Ensure that end mill is inserted completely
4. Cool shrink fit adaptor completely before use



Assortment

New tools and holders	D_e mm (inch) d_m mm (inch)	Radii mm (inch)	Machine interface	Supplement 12.1, page
CoroMill Plura with iLock	12–25 (0.472–0.984)	0.5–6.3 (0.020–0.248)	–	D17–D19
Shrink fit adaptor with iLock	12–25 (0.472–0.984)	–	Coromant Capto®, HSK A/C, ISO 7388.1, MAS-BT 403, CAT-V	D20–D21

For additional information see Rotating tools and Turning tools catalogues or www.sandvik.coromant.com

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