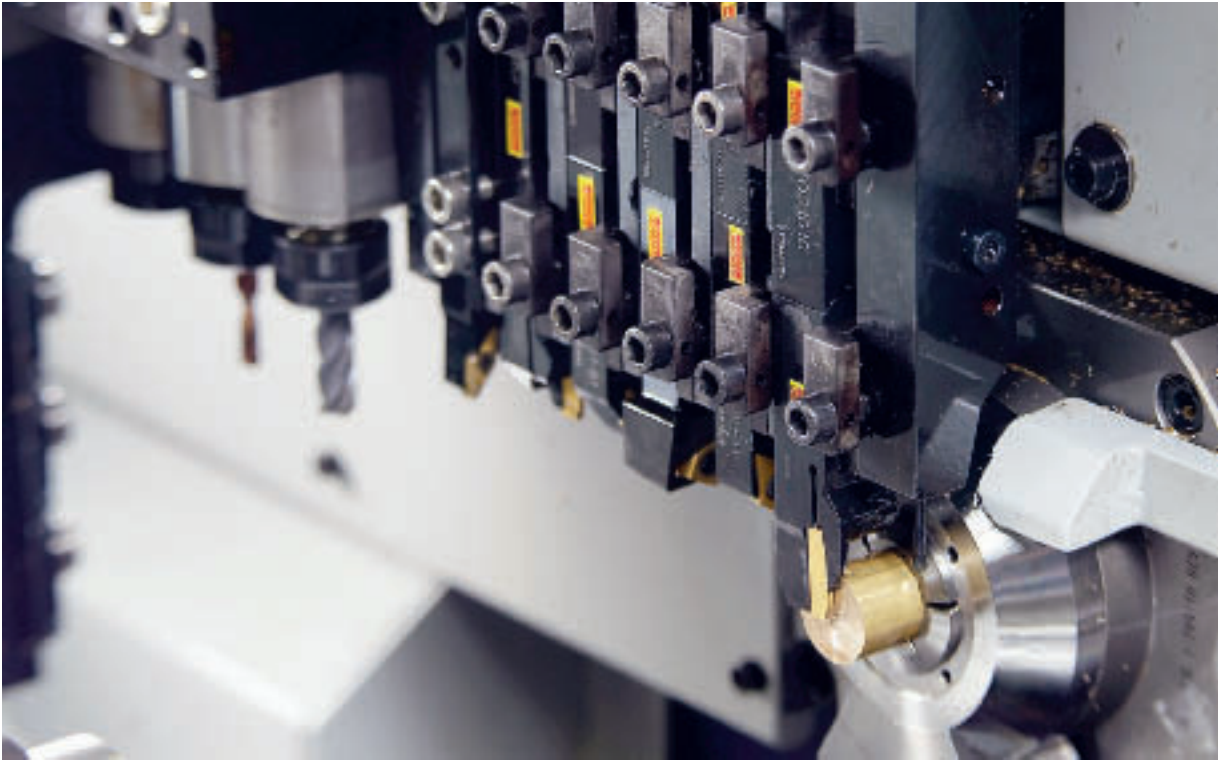


Small part machining

Fine mechanical engineering in automatic sliding head machines

Tools for small part machining are designed for high precision machining in automatic sliding head machines within the automotive, watch, connector and medical industry.



Precision inserts

CoroTurn® 107 and E-tolerance inserts are designed to give secure machining when there is a demand on precision, with small component tolerances. Ground VCEX inserts with E-tolerance enable excellent indexing, superb surface finish due to wiper effect and good chip control.

Maximise with Wiper technology inserts

The use of wiper inserts is an option to maximize productivity and increase machine utilization. Double the feed reduces machine time and improves chip control, same feed improves surface quality.

High precision holders

The holders – all laser marked – are designed with no offset to achieve a closer set-up to the collet. This minimizes vibration. Correct centre height is easily obtained when setting up the holder in the machine due to ground high precision shanks.

Small part machining

To optimize the manufacturing process and increase the output, we suggest choosing cutting tools from the below recommendations for your sliding head machine.

Turning

CoroCut®

1-2 edge and CoroCut® 3 inserts for productive parting and grooving

T-Max U-Lock®

Productive threading programme

CoroTurn® 107

Precision inserts for turning and copying

CoroCut® XS

Precision turning, parting & grooving and threading of small components

Drilling



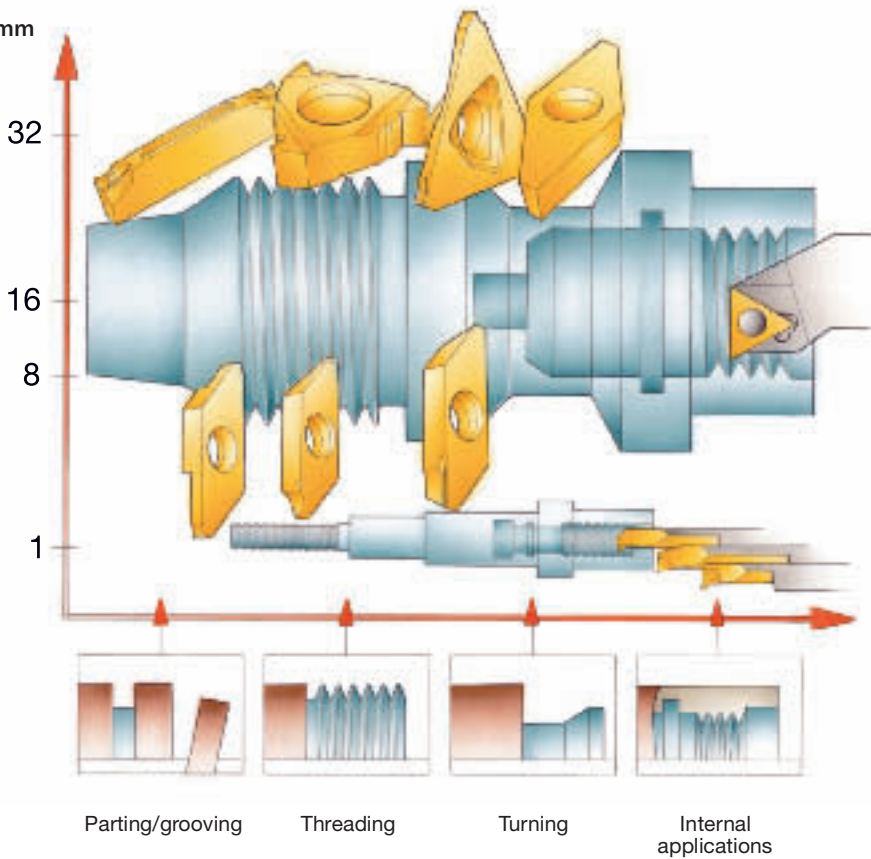
CoroDrill® Delta-C
Available in diameters from 0.3 mm

Milling



CoroMill® Plura
High precision solid carbide milling cutters in a variety of diameters and geometries. Available in diameters from 0.4 mm

Component diameter, mm



CoroCut® MB

Precision grooving from 10 mm diameter bore

CoroTurn® 107

For internal turning of small components from 8.5 mm diameter bore

CoroTurn® XS

For internal turning of small components from 0.3 mm diameter bore

Machining components from 6 up to 32 mm in diameter



CoroCut® - External
The productive and stable parting and grooving system. From 1.0 mm width and larger with a variety of geometries and grades. Corocut® 3 for parting up to 12 mm in diameter. See page B17.



T-Max U-Lock® - External
High productive threading with a large programme of thread profiles. Multi-point inserts for improved productivity. See page B41.

CoroTurn® 107 - External
For external turning operations with dedicated geometries. Wiper inserts for improved productivity. The unique VCCEX-geometry for small to large components with sharp cutting edge and Wiper effect to improve productivity. See page B1.



CoroCut® MB - Internal
High precision grooving, turning and threading system using both steel and carbide boring bars. See page C8.



CoroTurn® 107 - Internal
Steel and carbide bars available, suitable for clamping with EasyFix sleeves, made for sliding head machines. See page C2.

Machining of components up to 8 mm in diameter



CoroCut® XS - External
A high precision system for parting and grooving, turning and threading applications. Grooving widths from 0.5 mm. Turning geometry for copying and backboring operations with sharp cutting edges dedicated for micro applications. See page B44.



CoroTurn® XS - Internal
Produce precision holes for turning grooving and threading applications. A unique clamping system makes it reliable and easy to use. See page C15.

CoroTurn QS™ holding system

QS™ holding system - external
The QS holding system is a quick change tool holder to maximise effective production time in Citizen sliding head machines. Conventional wedges can be replaced easily without making any modification to the machine and are available in CoroTurn 107, CoroCut XS, CoroCut 1-2, CoroCut 3 and T-Max U-Lock.



A

INTRODUCTION

External Machining - Overview

Introduction

How to choose the right tool

B

External machining

C

Internal machining

D

Milling

E

Drilling

F

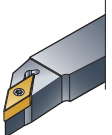
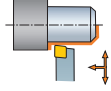
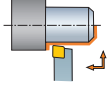
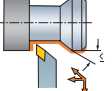
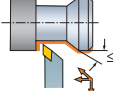
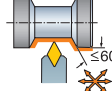
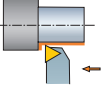






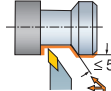
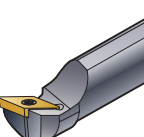
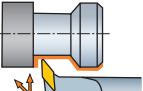
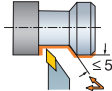
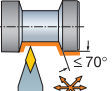

Cutting data

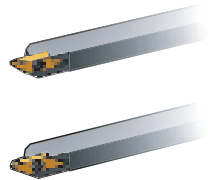
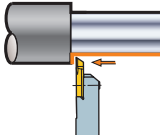
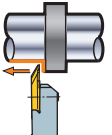
G

Grades

H

General Information

| | | | | | | | |
|--|--|---|---|---|--|---|---|
| CoroTurn® 107 screw clamp design  | Entering angle | | | | | | |
| |  K_r 95° |  K_r 90° |  K_r 93° |  K_r 90° |  K_r 62°30' |  K_r 93° | |
|  SCLCR/L |  SCACR/L |  SDJCR/L |  SDACR/L |  SDNCN |  STJCR/L | | |
| Insert size | 06-09 | 06-09 | 07-11 | 07-11 | 07-11 | 11 | |
| Shank size | 0808-1616 | 0808-1616 | 0808-1616 | 0808-1616 | 1010-1616 | 1010-1616 | |
| Page | B3 | B3 | B4 | B4 | B4 | B5 | |
| |  K_r 93° | | | Inch boring bars  | | | Entering angle  K_r 93° |
| |  K_r 90° | | |  K_r 72°30' | | |  SVUBL |
| Insert size | 11 | 11-16 | 11 | Insert size | 11 | | |
| Shank size | 0810-1616 | 0810-1616 | 0808-1616 | Bar diameter | 19.05-25.4 | | |
| Page | B6 | B6 | B6 | Page | B7 | | |

| | | | | |
|--|--|-----|--|---|
| CoroCut® XS For total assortment, parting, grooving, threading and turning inserts, see page B44 | Shank holder  SMALR/L | | Turning  MAFR/L | Back turning  MABR/L |
| | Insert size | | 3 | 3 |
| Shank size | 1010-1616 | | | |
| Page | B46 | B48 | B48 | |

A 6

