

# CoroMill® Plura Gannet for HRSA

Optimized solid end mill for plunging in HRSA

## Optimized for HRSA plunging

Introducing CoroMill® Plura Gannet, a solid end mill especially developed for plunging in HRSA. Part of our Optimized offer, this end mill is ideal for roughing of HRSA aerospace blisk using plunge milling.

Equipped with the excellent wear-resistant 1610 grade, the end mill offers high process security with longer tool life.



## Designed for plunging

- Robust, patented geometry especially designed for plunging
- Equipped with 1610 grade that is optimized for plunging in HRSA
- Features coolant grooves on the shank for safe chip evacuation
- Offers excellent bending control
- Offers excellent productivity and tool life

## High productivity in tough materials

- Unique solution, optimal for high productivity in components with hidden slots, e.g. close blisk slots
- Extremely good productivity, as plunging allows for large cutting depth in limited time
- Optimized for self-stabilizing effect, as the forces are directed in the axial direction
- Balanced front geometry with  $a_e = 30\% \times D_c$
- Possible to machine with long overhangs

## Blisk Roughing with plunge milling

Plunge milling is one of the preferred method when machining deep cavities.

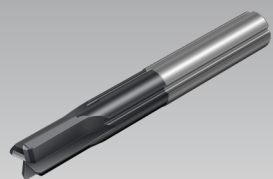
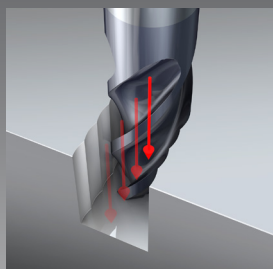
### Main Benefits:

- Axial feed movement directs cutting forces into the spindle to avoid vibrations, even when machining with long tools
- Extremely long overhangs, up to  $6 \times D$ , can be used
- Suitable for complex shapes and limited space between blades



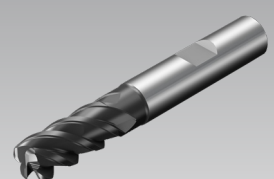
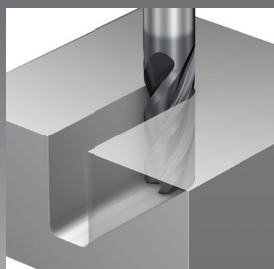
# Solid end mill offer for HRSA roughing

Plunge milling



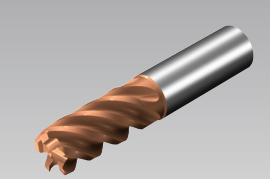
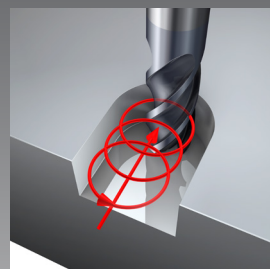
CoroMill® Plura  
Gannet 1610

Slot and shoulder milling



CoroMill® Plura  
VFD 1725

Trochoidal milling



CoroMill® Plura  
HFS 1710

High speed milling



CoroMill® 316  
Ceramic 6060



CoroMill® Plura  
Ceramic 6060

## The standard offer

Family	Dc range	Re/CHW	LU	Shank	No. of flutes	Coolant Grooves	Grade
2P070-PB	4–16 mm	CHW	4xDc	Weldon	4	Yes	1610
2P070-PB (inch)	0.188–0.625 inch	CHW	4xDc	Weldon	4	Yes	1610
2P090-PB	4–16 mm	CHW	6xDc	Weldon	4	Yes	1610

## Standard Assortment and Tailor Made are made the same

Thanks to Design Automation, using 3D model automatic generation, Standard and Tailor Made, are now following the same process for design and manufacturing.



### Tailor Made offer means:

- No engineering time
- Instantaneous turnaround of design and quotation
- Reconditioning quote included
- Same Sandvik Coromant quality
- Consistent and secure delivery established with the quotation

# Performance

**Component:** Blisk  
**Material:** Inconel 718  
**Operation:** Slots between blades  
**Machine:** STARRAG LX021

**60%**  
Cycle time  
reduction

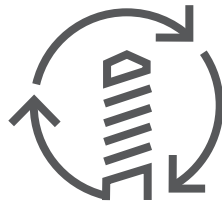
**+800%**  
Tool life

	Competitor	Sandvik Coromant
<b>Tool</b>	Tool with Dc= 3mm	2P070-0400-PB 1610
<b>Method</b>	Trochoidal	Plunging
$Z_n$	4	4
$n$ , rpm	2650	1990
$v_c$ , m/min	25	25
$v_f$ , mm/min	160	96
$f_z$ , mm/z	0.015	0.012
$a_p$ , mm	3	0.9
$a_e$ , mm	0.2	4
<b>Cycle time, min</b>	<b>90</b>	<b>36</b>
<b>Tool life, pcs</b>	<b>1/3 pcs – 5 blades , total 3 cutters</b>	<b>1 pcs – 15 blades, with 1 cutter</b>

For more information, contact your local Sandvik Coromant representative or visit [www.sandvik.coromant.com](http://www.sandvik.coromant.com)

## Valuable services

Reconditioning



Reconditioning service is available.

[www.abzarforooshan.com](http://www.abzarforooshan.com)

