



Walter Cut SX – Grooving

Edition 2020

\_WALTER CUT SX

# Work more flexibly – parting off and slitting



# Parting off and slitting with the new single-edged grooving system.

## THE SYSTEM

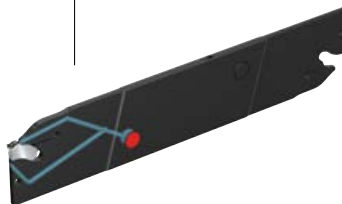
The Walter Cut range of grooving tools is being extended with the new SX grooving system. This enables the user to part off and groove, or slit and slot mill, using the same cutting insert.

## THE CUTTING MATERIAL GRADES

- Three **Tiger-tec® Silver** PVD grades: WSM23S, WSM33S and WSM43S for steel, stainless steels and materials that are difficult to machine
- One **Tiger-tec® Silver** CVD grade: WKP23S for steel and cast iron machining
- One uncoated grade: WK1 for machining NF metals



G2012 R/L tool holder with precision cooling for parting off up to a diameter of 90 mm



Strengthened and neutral G2042/G2042-P parting blades, with precision cooling option for parting off up to a diameter of 200 mm



G2632 grooving modules for parting off up to a diameter of 90 mm



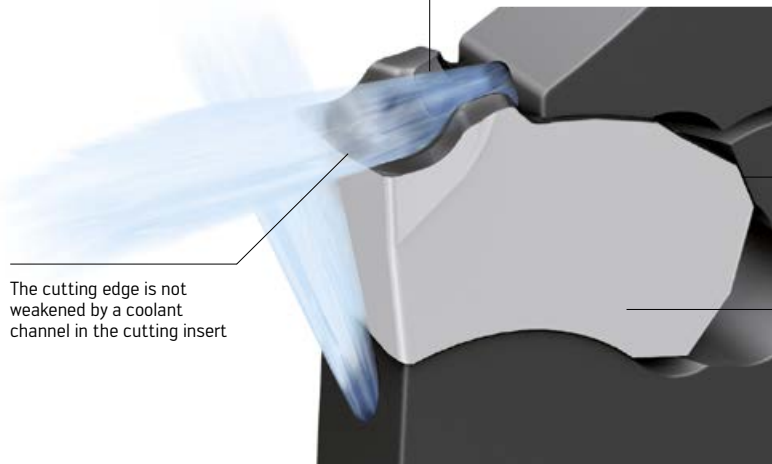
F5055 slotting cutter: Diameters from 63–250 mm

## BENEFITS FOR YOU

- Maximum tool life due to new self-clamping system with positive locking
- User-friendly clamping system for fast replacement of the cutting edge
- Lower inventory costs through the use of one type of cutting insert in multiple tool variants

## THE STABILITY

Chip breaker groove developed for precision cooling, shortest distance from the outlet through to the cutting edge



The cutting edge is not weakened by a coolant channel in the cutting insert

Contact surface for transferring the cutting forces into the rigid section of the tool

Maximum cost-efficiency in the machining of all material groups through the use of state-of-the-art cutting tool materials, geometries and precision cooling

## THE CUTTING EDGE WIDTHS

1.5/2.0/3.0/4.0/5.0/6.0/8.0/10.0 mm

## THE CHIP FORMATION TYPES



### CE4 – The universal one

- Stable cutting edge for maximum feeds
- Very good chip constriction
- 6° angled parting off inserts available in right- and left-hand version



### CF5 – The positive one

- Low burr and pip formation
- For long-chipping materials
- 15°/7°/6° angled parting off inserts for parting off with low burr and pip formation

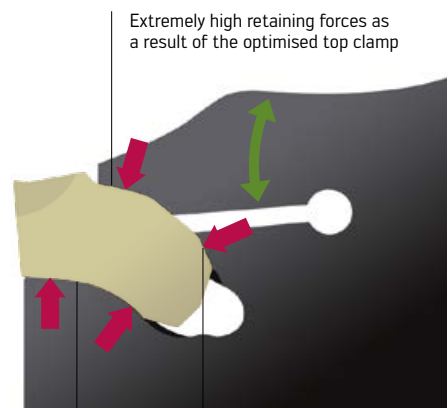


### CF6 – The sharp one

- Minimum burr and pip formation
- For small diameters and thin-walled tubes

## THE ACTION/

## POSITIVE-LOCKING CLAMPING



Extremely high retaining forces as a result of the optimised top clamp

Cutting forces are absorbed into the rigid section of the tool, rather than the flexible section

The cutting insert is positively locked in the insert seat, thus eliminating loss during withdrawal

# Tiger-tec® Silver

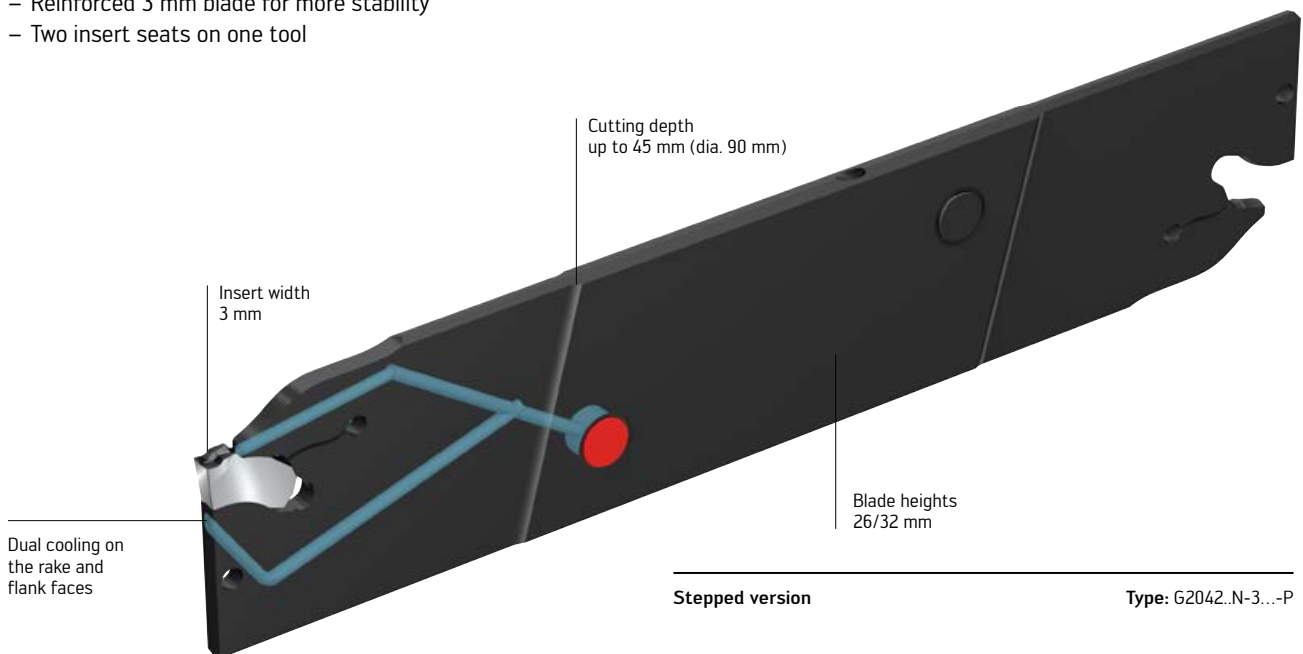
# Work more flexibly: Deep parting blades with precision cooling.

## THE TOOLS

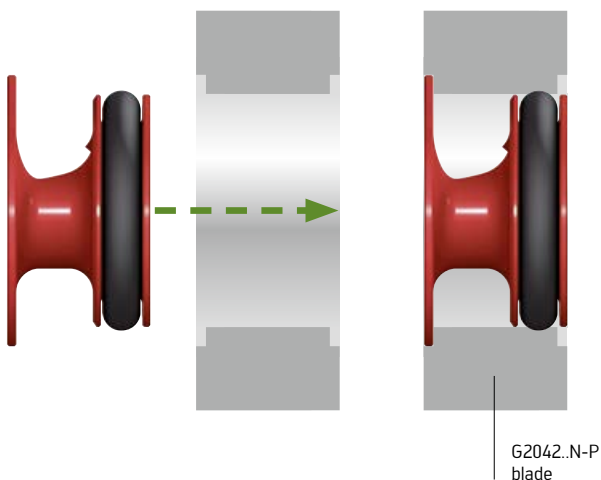
- G2042..N-P parting blades with precision cooling
- Blade heights of 26, 32 and 52 mm
- Insert widths from 3–10 mm
- Grooving to a cutting depth of 100 mm and parting off up to a diameter of 200 mm
- Reinforced 3 mm blade for more stability
- Two insert seats on one tool

## THE APPLICATION

- Grooving and parting off on all types of lathes
- Can be used universally due to its neutral design
- Grooving and parting off along the primary or counter-spindle without interference contour
- Can be used starting from 10 bar up to a maximum coolant pressure of 80 bar



## FITTING

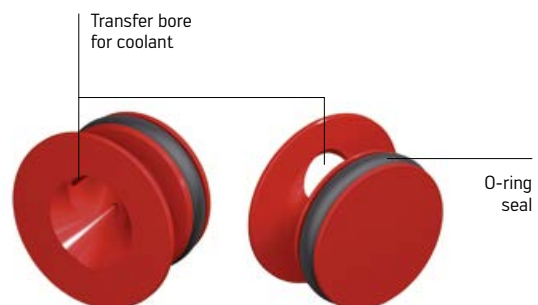


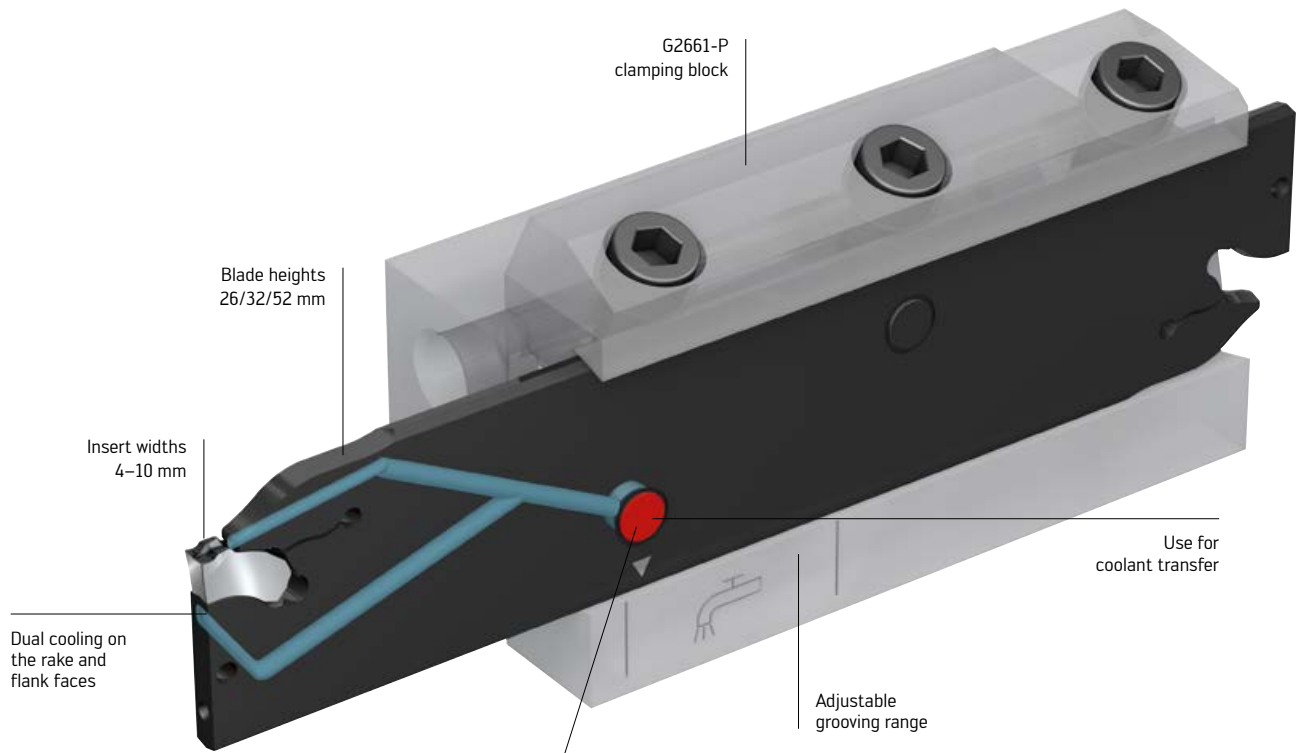
## THE TRICK

Use for coolant transfer\*:

- Can be fitted from either side without mounting aids
- No external projection
- Guides the coolant reliably into the blade

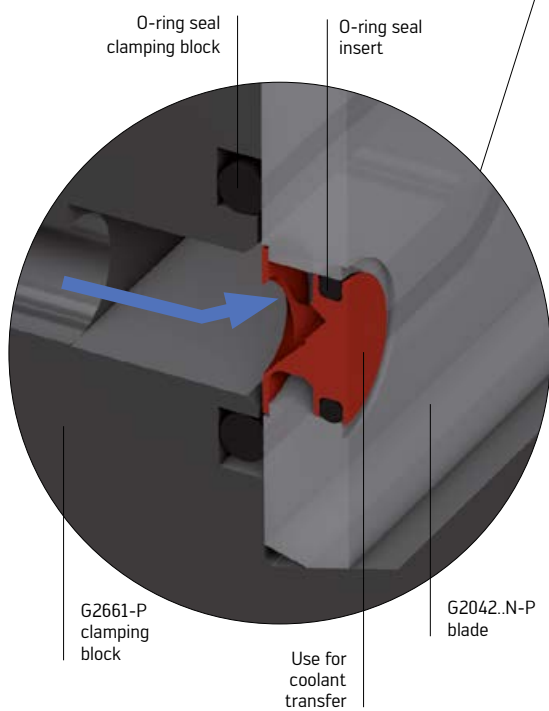
\* patent pending





Neutral/universal version

Type: G2042..N4-10...-P



#### BENEFITS FOR YOU

- Increase in tool life up to 200% on stainless materials, high-temperature alloys and steel
- Plug-and-play: Use on existing machines, as the cooling system can be employed starting from a pressure of 10 bar and without interference contour on the tool
- Increase in cutting speed by up to 50%, while maintaining same tool life quantity

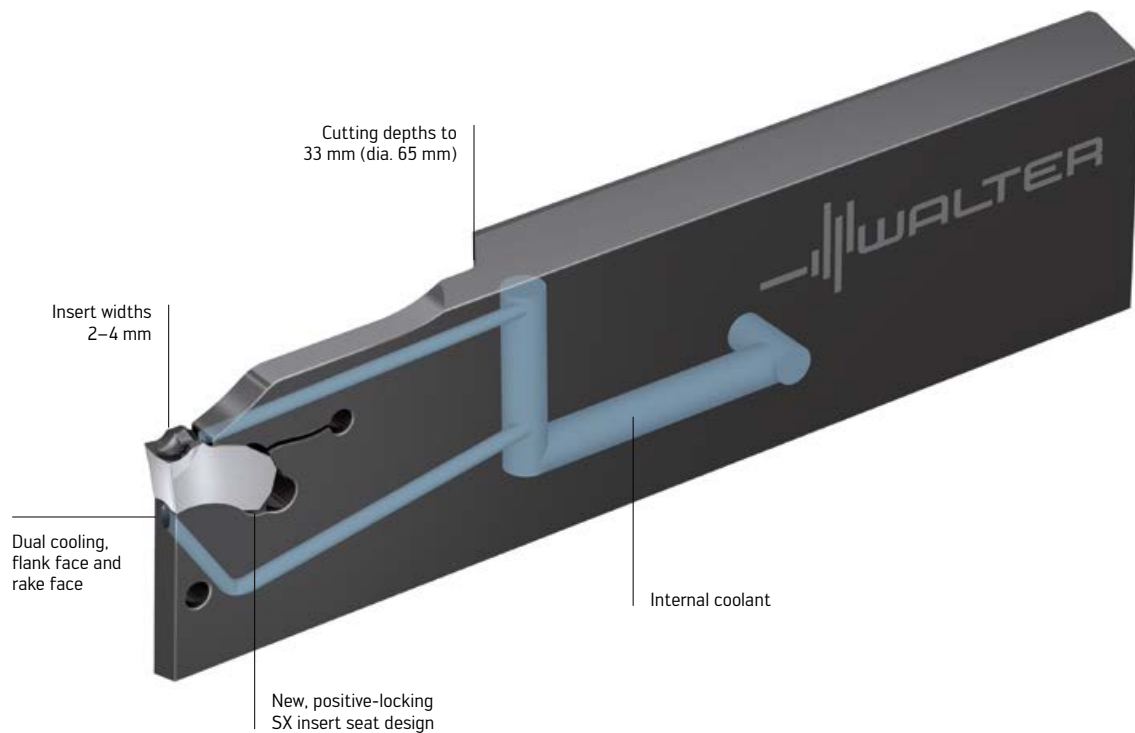
# More productive due to reinforced contra parting blades with precision cooling.

## THE TOOLS

- G2042..R/L-C-P parting blades with reinforced shank and precision cooling
- Blade heights of 26 and 32 mm
- Insert widths 2–4 mm
- Available in right- and left-hand contra version
- Grooving to a cutting depth of 33 mm and parting off up to a diameter of 65 mm

## THE APPLICATIONS

- Grooving and parting off on all types of lathes
- Parting off operations with counter spindle where space is limited
- Parting off when using long tool projections with low loss of stability
- First choice when using parting blades
- Can be used starting from 10 bar up to a maximum coolant pressure of 80 bar



Reinforced blade with precision cooling

Type: G2042..R/L-C-P

Left-hand tool



Contra

Right-hand tool



Contra

## BENEFITS FOR YOU

- No loss of the cutting edge during machining due to the optimised, positive-locking design of the insert seat
- Longer tool life and higher productivity thanks to optimum cooling directly in the cutting zone starting from a coolant pressure as low as 10 bar
- Optimum chip control through precision cooling
- Can be used on all conventional clamping blocks
- Low vibration tendency thanks to reinforced shank

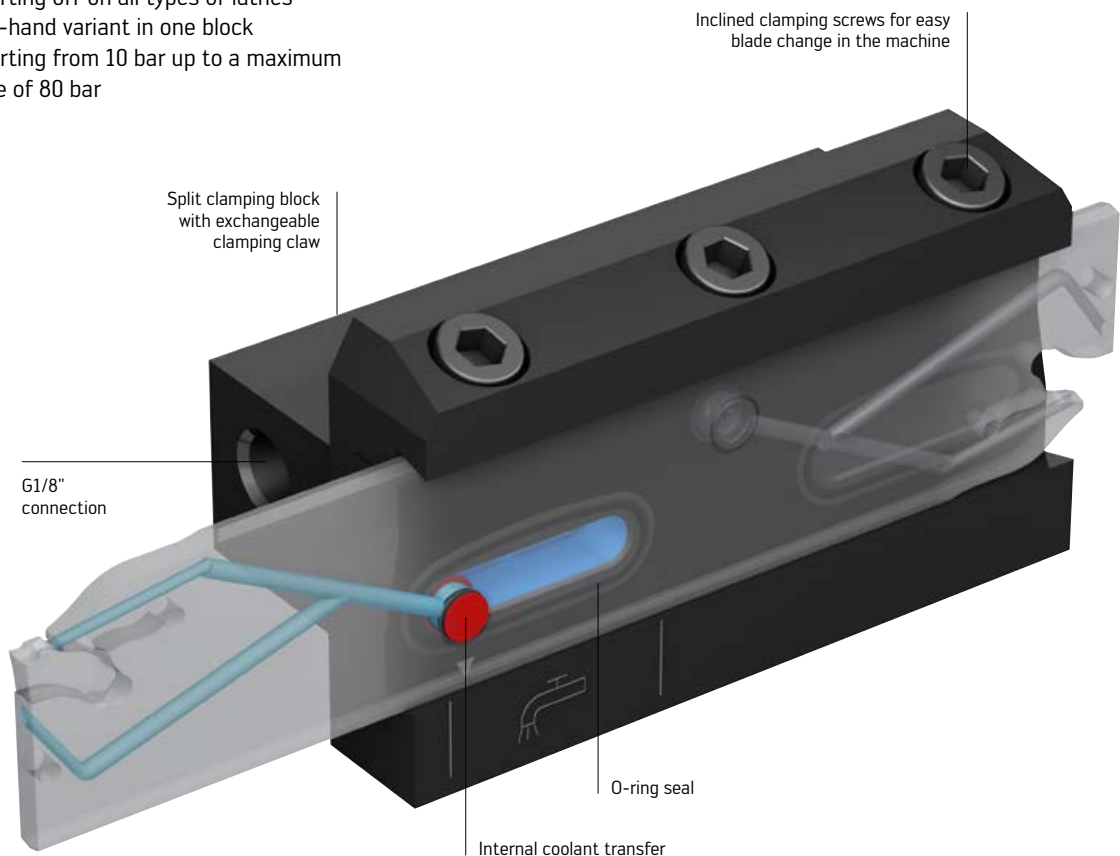
# Clamping blocks with direct coolant transfer for precision-cooled parting blades.

## THE TOOLS

- Clamping blocks with direct coolant transfer
- Blade heights of 26, 32 and 52 mm
- Shank dimensions of 20 × 20 mm, 25 × 25 mm, 32 × 25 mm, 32 × 32 mm and 40 × 32 mm

## THE APPLICATION

- Grooving and parting off on all types of lathes
- Left-hand/right-hand variant in one block
- Can be used starting from 10 bar up to a maximum coolant pressure of 80 bar



Clamping block for precision cooling

Type: G2661-P

## BENEFITS FOR YOU

- No loss of pressure through the O-ring seal for reliable transfer of the coolant
- No vibration thanks to sturdy toolholder design with rigid clamping
- Easy handling of the blade without removing the clamping block thanks to the inclined clamping screws

# VDI parting blade adaptors with direct coolant transfer for star turrets.

## THE TOOLS: A2110-V..-P

- VDI 25/30/40 adaptors for star turrets
- Transfer of the coolant directly through the VDI interface

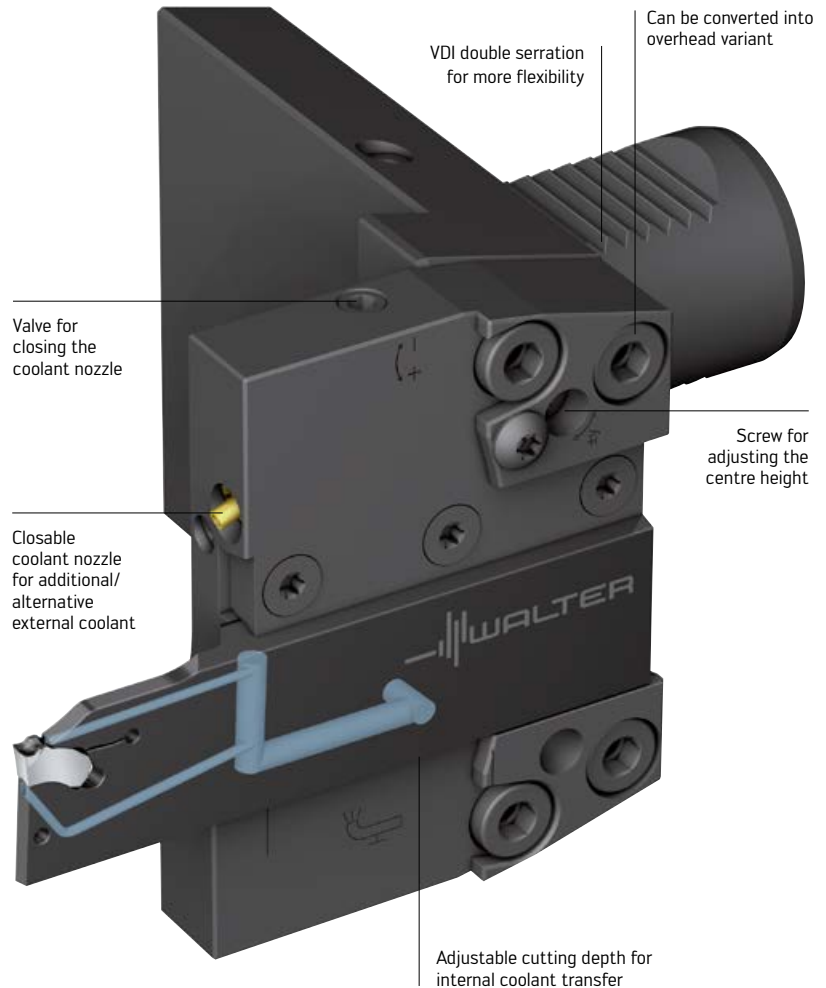
## THE APPLICATIONS

- For use on all VDI star turret machines
- Grooving and parting off with precision cooling
- Can be used starting from 10 bar up to a maximum coolant pressure of 80 bar



VDI 25/30 adaptors for star turret

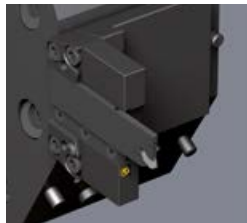
Type: A2110  
V30-32R-087-P



## THE APPLICATION OPTIONS



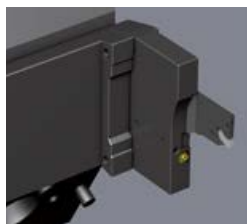
A2110-V40-32R-080-P



A2110-V40-32R-080-P  
Overhead installation position



A2110-V40-32L-080-P



A2110-V40-32L-080-P  
Overhead installation position

VDI adaptor for star turrets

Type: A2110-P

## BENEFITS FOR YOU

- Flexibility: One toolholder for standard and overhead installation positions
- Longer tool life and productivity thanks to optimum cooling directly in the cutting zone starting from a coolant pressure as low as 10 bar
- Short chips, therefore no downtimes for removing accumulated swarf



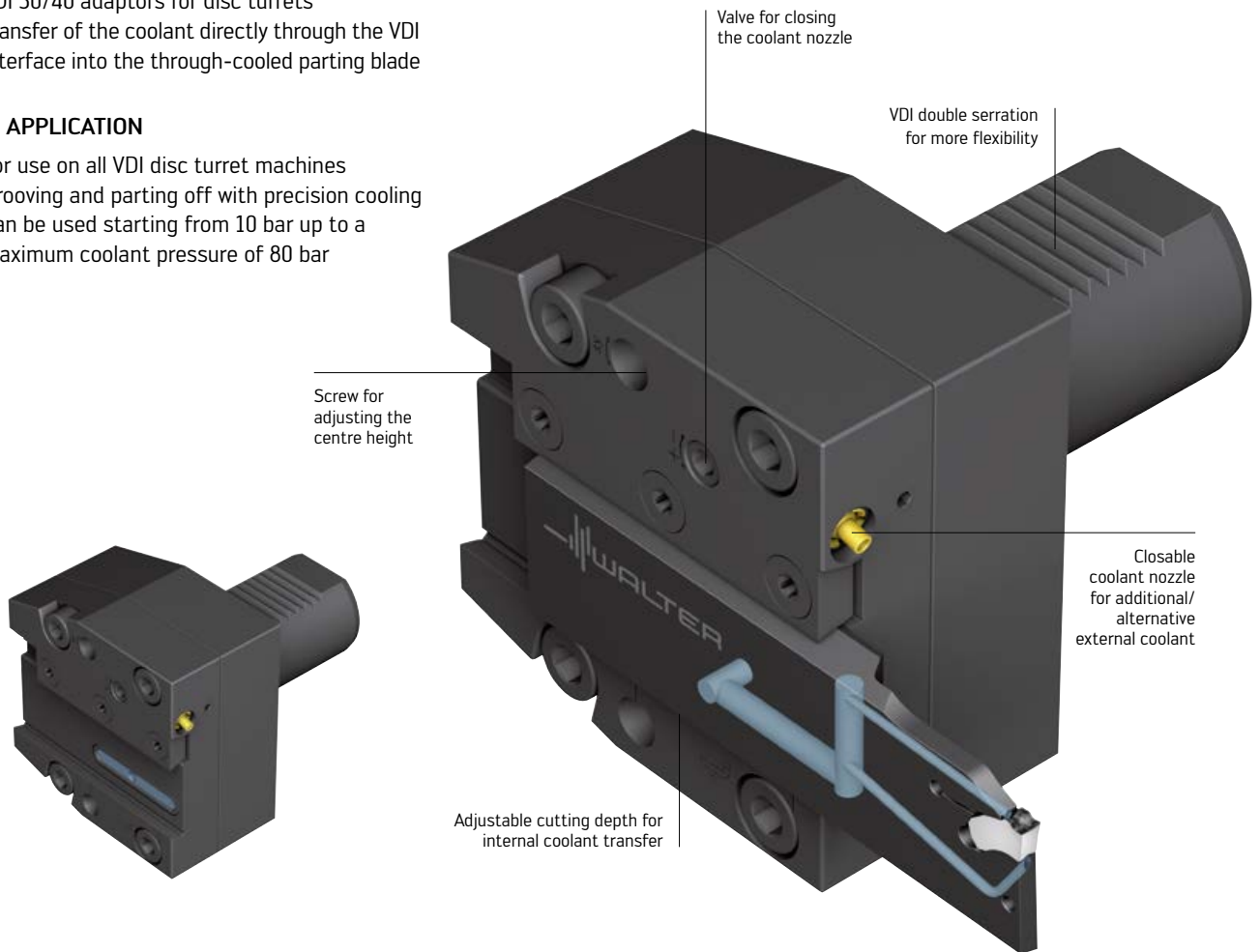
# VDI parting blade adaptors with direct coolant transfer for disc turrets.

## THE TOOLS

- VDI 30/40 adaptors for disc turrets
- Transfer of the coolant directly through the VDI interface into the through-cooled parting blade

## THE APPLICATION

- For use on all VDI disc turret machines
- Grooving and parting off with precision cooling
- Can be used starting from 10 bar up to a maximum coolant pressure of 80 bar



VDI adaptor for disc turrets

Type: A2111-P

## THE APPLICATION OPTIONS

- No loss of pressure due to the O-ring seal for reliable transfer of the coolant
- No vibration thanks to sturdy toolholder design, adjustable to every machining position
- Precise centre position thanks to easily adjustable centre height in a range of  $\pm 0.5$  mm



A2111-V30-32R-045-P



A2111-V30-32L-045-P  
Overhead installation position

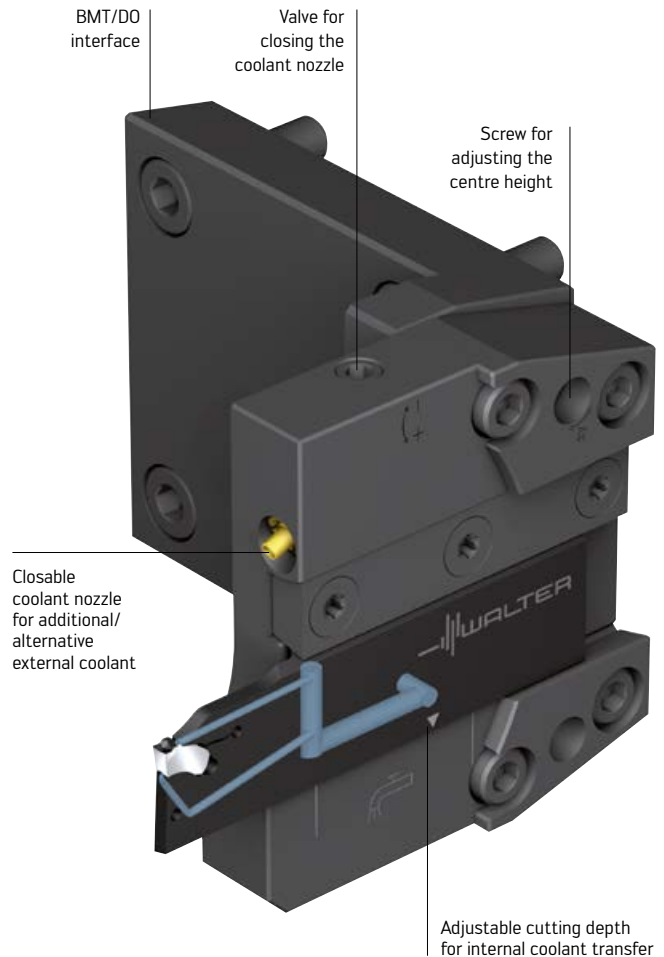
# BMT/DO parting blade adaptors with direct coolant transfer for precision cooling.

## THE TOOLS

- A2110-BT..-P BMT 45/55/60 adaptors for star turrets
- A2110-DO..-P DO adaptors for star turrets
- Transfer of the coolant directly through the particular interface

## THE APPLICATIONS

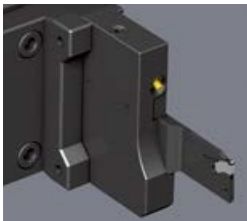
- For use on machines with BMT interface such as on Doosan Puma TT/TL/MX/Lynx Puma 2100, 2600 & 3100, Hyundai Wia, Hwacheon Cutex, etc.
- Grooving and parting off with precision cooling
- Can be used starting from 10 bar up to a maximum coolant pressure of 80 bar



BT adaptor for star turrets

Type: A2110-BT45-26R-080-P

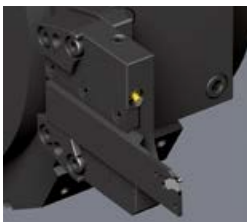
## THE APPLICATION OPTIONS



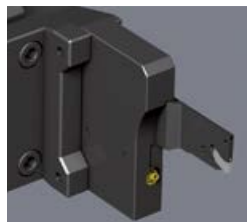
A2110-BT55-32R-080-P



A2110-BT55-32R-080-P  
Overhead installation position



A2110-BT55-32L-080-P



A2110-BT55-32L-080-P  
Overhead installation position

## BENEFITS FOR YOU

- Flexibility: One toolholder for standard and overhead installation positions
- Longer tool life and higher productivity thanks to optimum cooling directly in the cutting zone starting from a coolant pressure as low as 10 bar
- Short chips, therefore no downtimes for removing accumulated swarf
- No loss of pressure due to the O-ring seal for reliable transfer of the coolant
- No vibration thanks to sturdy toolholder design, adjustable to every machining position
- Precise centre position thanks to easily adjustable centre height in a range of  $\pm 0.5$  mm

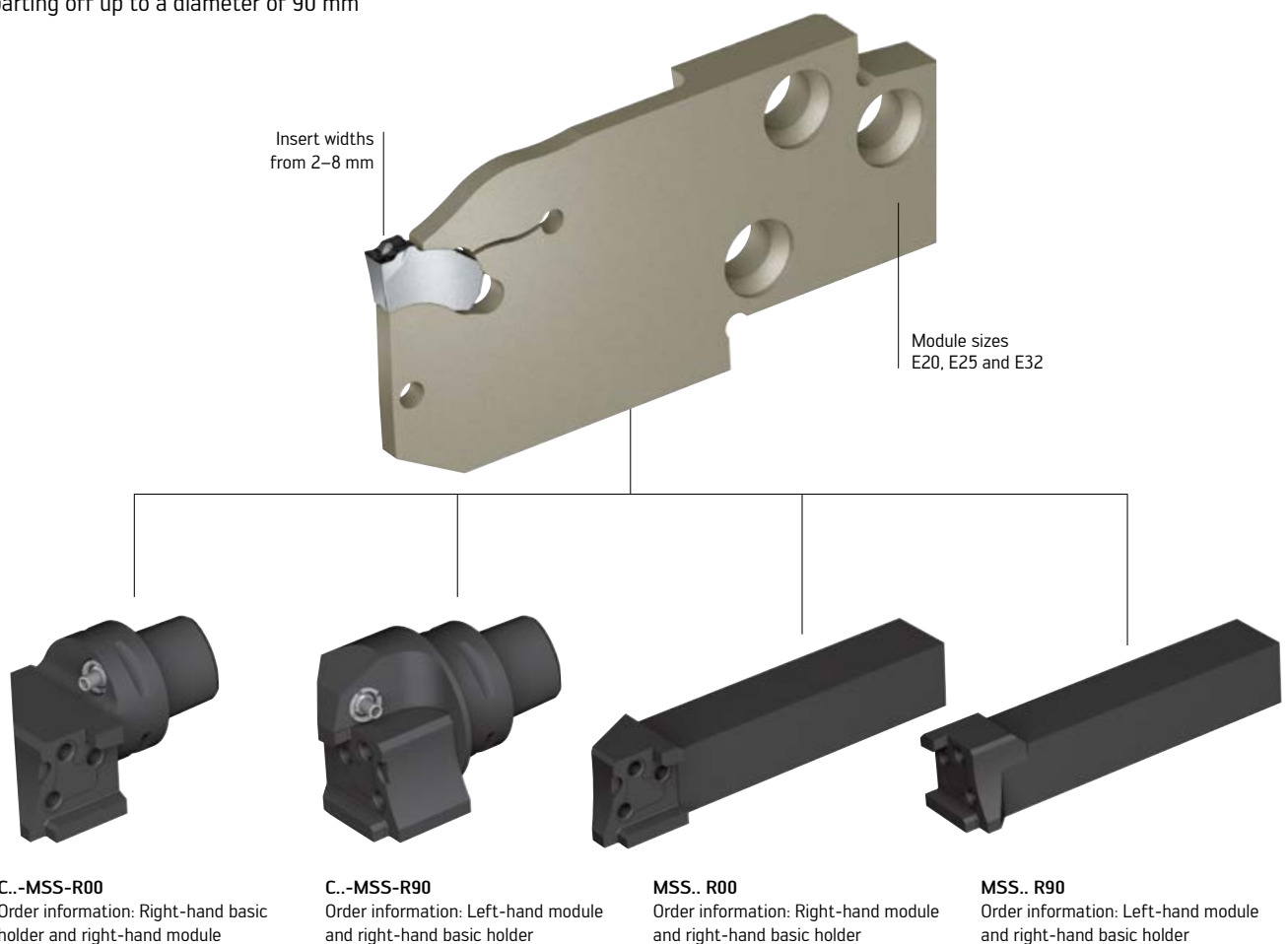
# Grooving modules for modular tool holders.

## THE TOOLS

- G2632 grooving modules for modular Walter Cut MSS...tool holders
- Module heights E20, E25 and E32 mm
- Insert widths from 2–8 mm
- Grooving to a cutting depth of 45 mm and parting off up to a diameter of 90 mm

## THE APPLICATIONS

- Grooving and parting off
- For use on modular tool holders with square shank or Walter Capto™ interface



**C..-MSS-R00**  
Order information: Right-hand basic holder and right-hand module

**C..-MSS-R90**  
Order information: Left-hand module and right-hand basic holder

**MSS.. R00**  
Order information: Right-hand module and right-hand basic holder

**MSS.. R90**  
Order information: Left-hand module and right-hand basic holder

All illustrations show right-hand version

## BENEFITS FOR YOU

- Flexible use of more than one insert width/grooving module on the same basic holder
- Low inventory levels
- Short set-up times

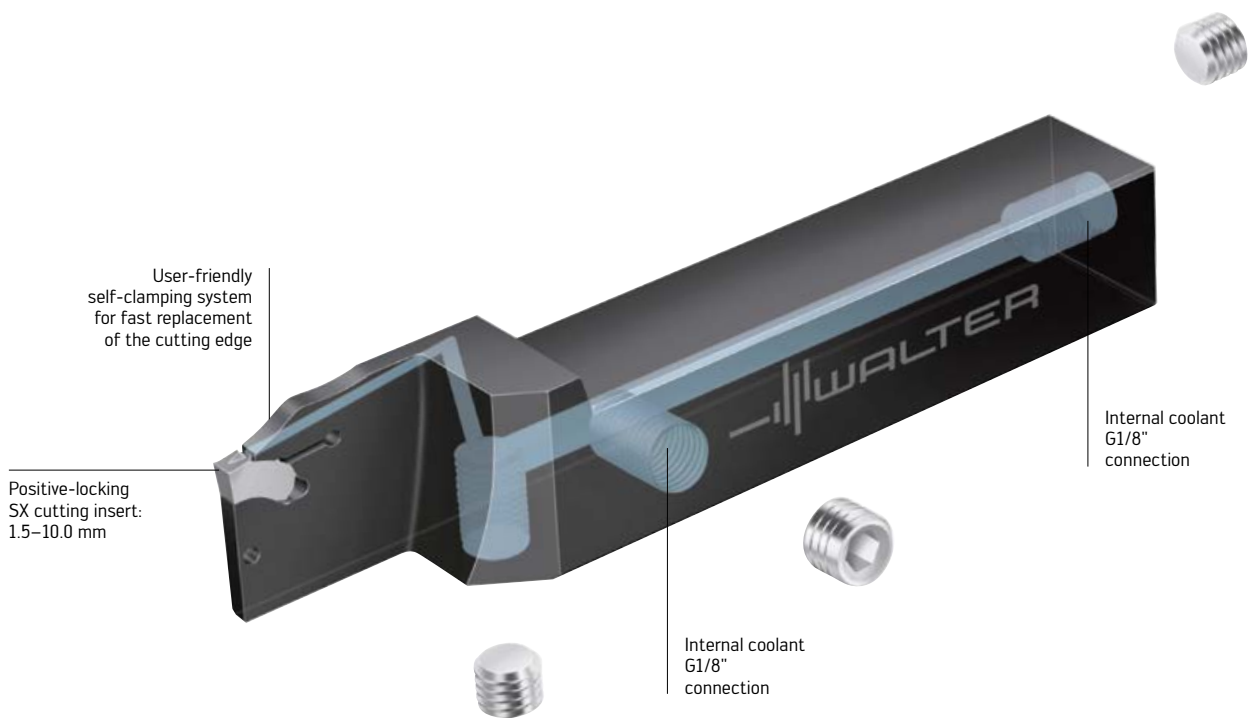
# Tool holder with precision cooling for single-sided SX cutting inserts.

## THE TOOLS

- G2012-P in sizes 12 × 12 mm, 16 × 16 mm, 20 × 20 mm, 25 × 25 mm and 32 × 25 mm with internal coolant supply
- Insert widths of 1.5/2.0/3.0/4.0/5.0/6.0/8.0/10.0 mm
- Grooving to a cutting depth of 45 mm and parting off to a bar diameter of 90 mm

## THE APPLICATION

- Can be used on all types of lathes
- Grooving and parting off with internal coolant
- Can be used from 10 bar up to a maximum coolant pressure of 150 bar



SX monoblock tools with precision cooling

Type: G2012-P

# Walter GPS



## The latest generation of tool navigation.

### **The right tool at the click of a mouse**

With just four clicks, Walter GPS takes you from the definition of your objective to the most cost-effective tool and machining solution. Walter GPS is surprisingly comprehensive. Be it holemaking, threading, turning or milling: Full information on all tools from Walter, Walter Titex and Walter Prototyp can be displayed in an instant. Access essential usage data, such as accurate cutting data or precise cost-efficiency calculations, on your screen.

Walter GPS is now also available for smartphones and tablet PCs. This means that you are able to access all the required tool information at any time, wherever you are, even without a PC: In the workshop, at the machine or on the move.

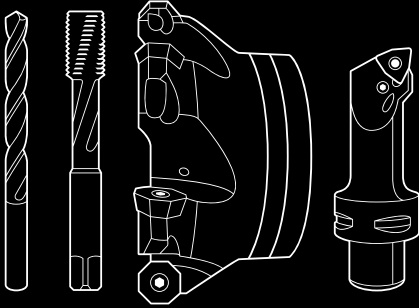
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