



PRODUCT PORTFOLIO 03/2025  
SYSTEM TRUMPF, THICK TURRET & SALVAGNINI

## PRODUCT PORTFOLIO

FOR MACHINE TYPES TRUMPF, THICK TURRET & SALVAGNINI

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## THANK YOU VERY MUCH,

for your interest in a tool produced by PASS Stanztechnik AG.

With this brochure we would like to introduce you to our product portfolio. Therefore, we have prepared this document for you including the most important tools from the TRUMPF, THICK TURRET and SALVAGNINI systems.

Please feel free to contact us in any case of questions.

Yours

PASS Stanztechnik AG

FOR MACHINE TYPES TRUMPF, THICK TURRET & SALVAGNINI

## ALL SYSTEMS

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## SYSTEM TRUMPF

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# COUNTERSINKS: ps:<sup>®</sup> countersink

FOR MACHINE TYPES TRUMPF, THICK TURRET & SALVAGNINI

TRUMPF

THICK TURRET

SALVAGNINI

- countersinks in steel, aluminum and stainless steel possible
- available in two versions: rigid and spring-loaded

## rigid version:

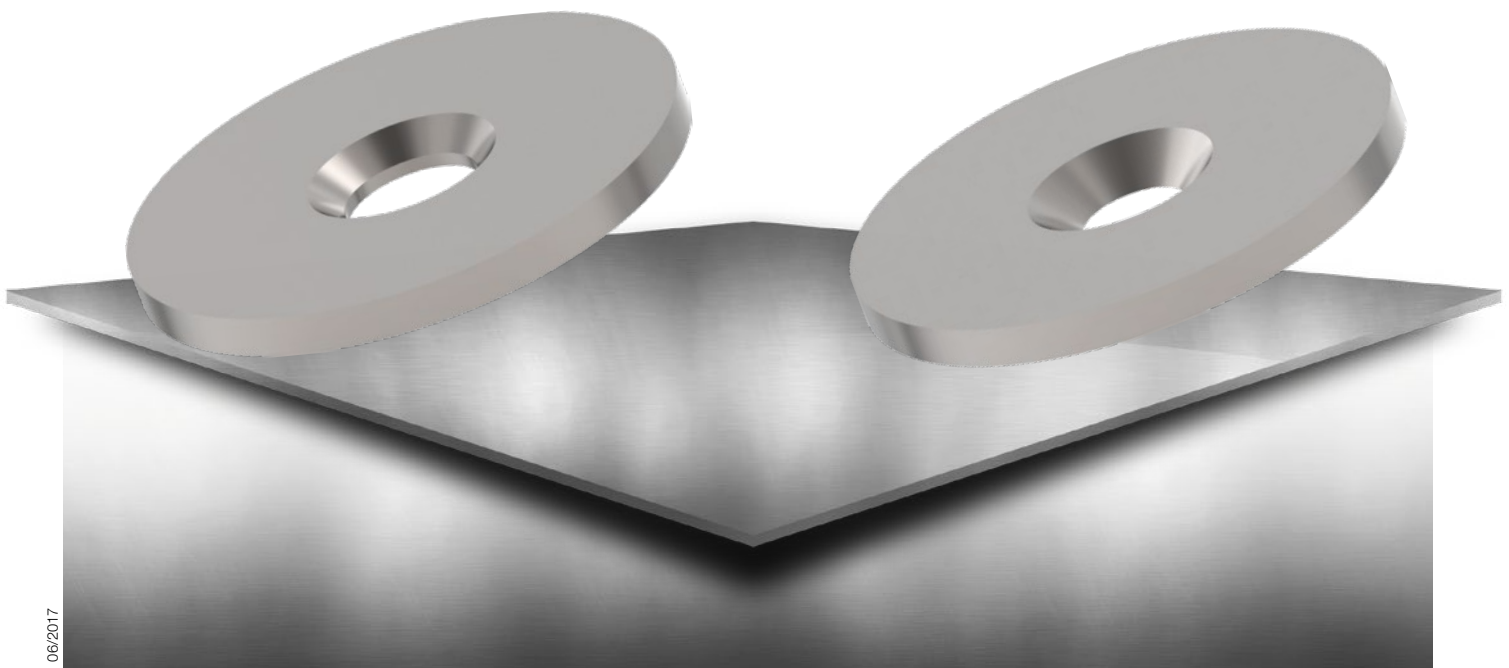
- countersink depth
  - aluminium:  
approx. 90 % of sheet thickness
  - steel:  
approx. 80 % of sheet thickness
  - stainless steel:  
approx. 66 % of sheet thickness

## spring-loaded version:

- countersink depth:  
almost 100% of the sheet thickness
- countersink die in reinforced version
- reinforced spring in the upper part  
to keep the sheet flat and improve  
the flow behavior

rigid version

spring-loaded version



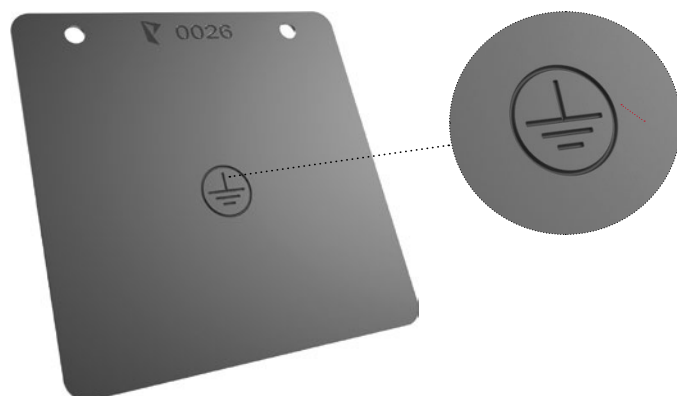
06/2017

# EMBOSSINGS AND MARKINGS

FOR MACHINE TYPES TRUMPF, THICK TURRET & SALVAGNINI

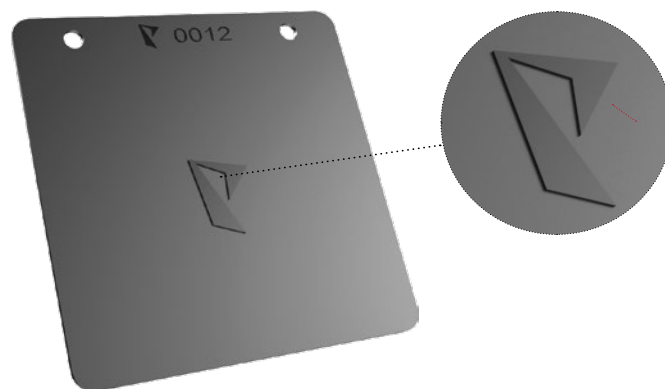
## Marking tool:

- markings possible from below and above with a depth of up to approx. 0,5 mm
- fine, recessed lines possible
- markings in one hit
- effective and fast production
- application area: attachment of logos to finished products, ground symbols, protective conductor signs



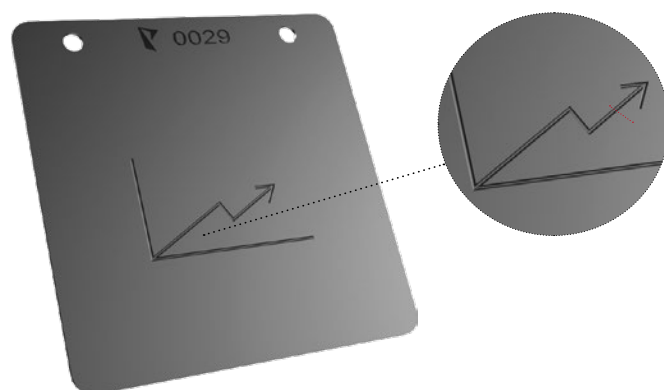
## Embossing tool:

- raised embossing in one hit
- optically high quality
- application area: optical and visible sheets with logos, symbols, shapes or characters



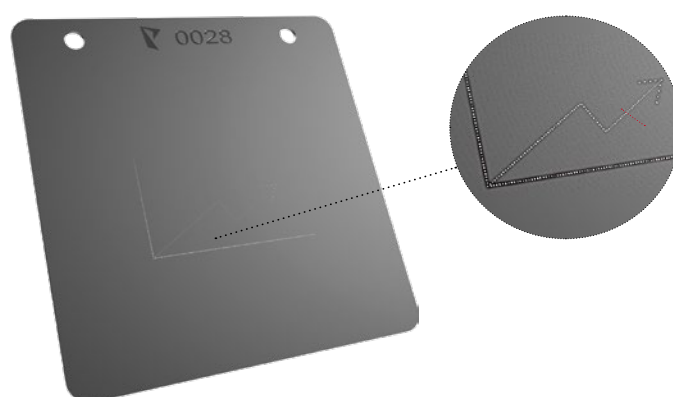
## Engraving tool:

- engravings with a depth of approx. 0,15 mm
- numbers, letters, special characters, free shapes
- flexible usable



## Signing tool:

- signing of parts from individual, composite grain points
- application area: numbers, letters, special characters, free shapes



# CONNECTIONS: ps:®macro-joint

FOR MACHINE TYPES TRUMPF, THICK TURRET & SALVAGNINI

TRUMPF

THICK TURRET

SALVAGNINI

- for effective production with manual part extraction
- **ps:®macro-joint** connects individual parts on a sheet plate
- connecting bridges remain on the rest fence when the parts are broken out thanks to 3-side connection
- no waste of the machine table caused by slugs
- bending of several small parts together possible
- timesaving
- optimizing the production process
- trouble-free production process

3-side-connection to the sheet plate

defined breaking edge

Technical information



# HINGES

FOR MACHINE TYPES TRUMPF, THICK TURRET & SALVAGNINI

- for producing hinges with 2 tools
- bending up takes place with at least 2 hits with a pre-forming tool
- finishing of the hinge is done by a rigid finish-forming tool
- different sizes, lengths and diameters possible
- depending on Ø to sheet thickness
- for sheet materials aluminium, steel, stainless steel

TRUMPF  
THICK TURRET  
SALVAGNINI



step 1



step 2



step 3



02/2014

# BALL DEBURRING: ps:®ball-deburr

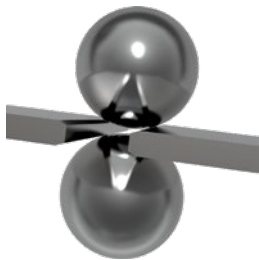
FOR MACHINE TYPES TRUMPF, THICK TURRET & SALVAGNINI

TRUMPF

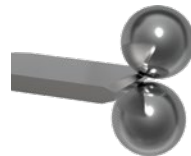
THICK TURRET

SALVAGNINI

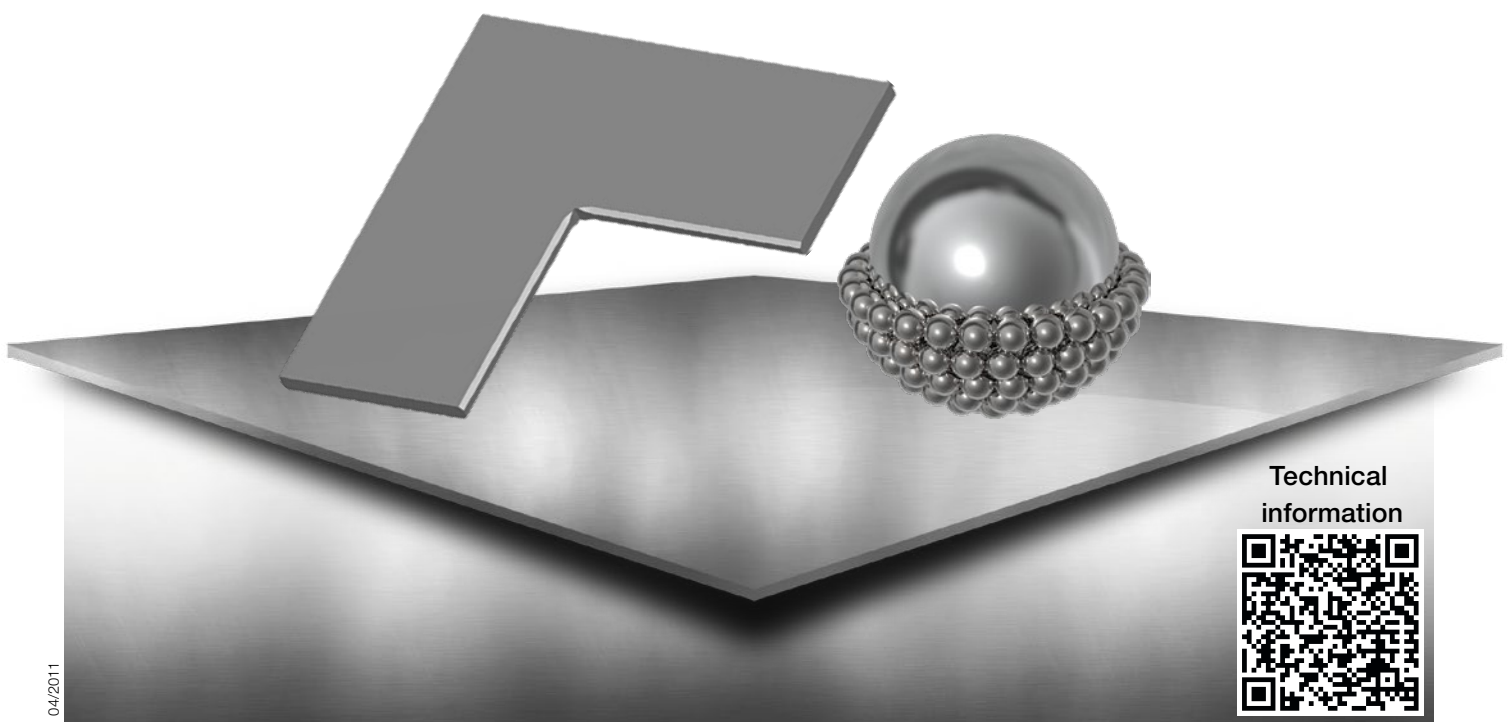
- for automated deburring of sheets
- for sheet materials  
aluminium, steel, stainless steel
- high operating safety by spring-loaded ball inserts (safety mechanism)
- low maintenance – long tool life
- for usage on sheet edge or 5,0 mm slitting cut
- 2 versions available:  
V3 (ball Ø 15)  
optimised deburring of combined slitting cuts  
V4 (ball Ø 8)  
deburring close to edges possible
- for sheet thickness up to s = 6,0 mm (depending on the tooling system)
- ball integrated in a solid and hardened rack
- ball works free of clearance under pressure during process
- polished ball rack providing a trouble free procedure



Version V3 Ø 15 mm



Version V4 Ø 8 mm



Technical  
information





# KNOCK-OUTS: ps:®knock-out

FOR MACHINE TYPES TRUMPF, THICK TURRET & SALVAGNINI

## normal knock-outs:

- production of knock-outs with one diameter in one hit
- suitable for all standard sheet thicknesses and sheet materials as well as surface coatings (powder, zinc, etc.)

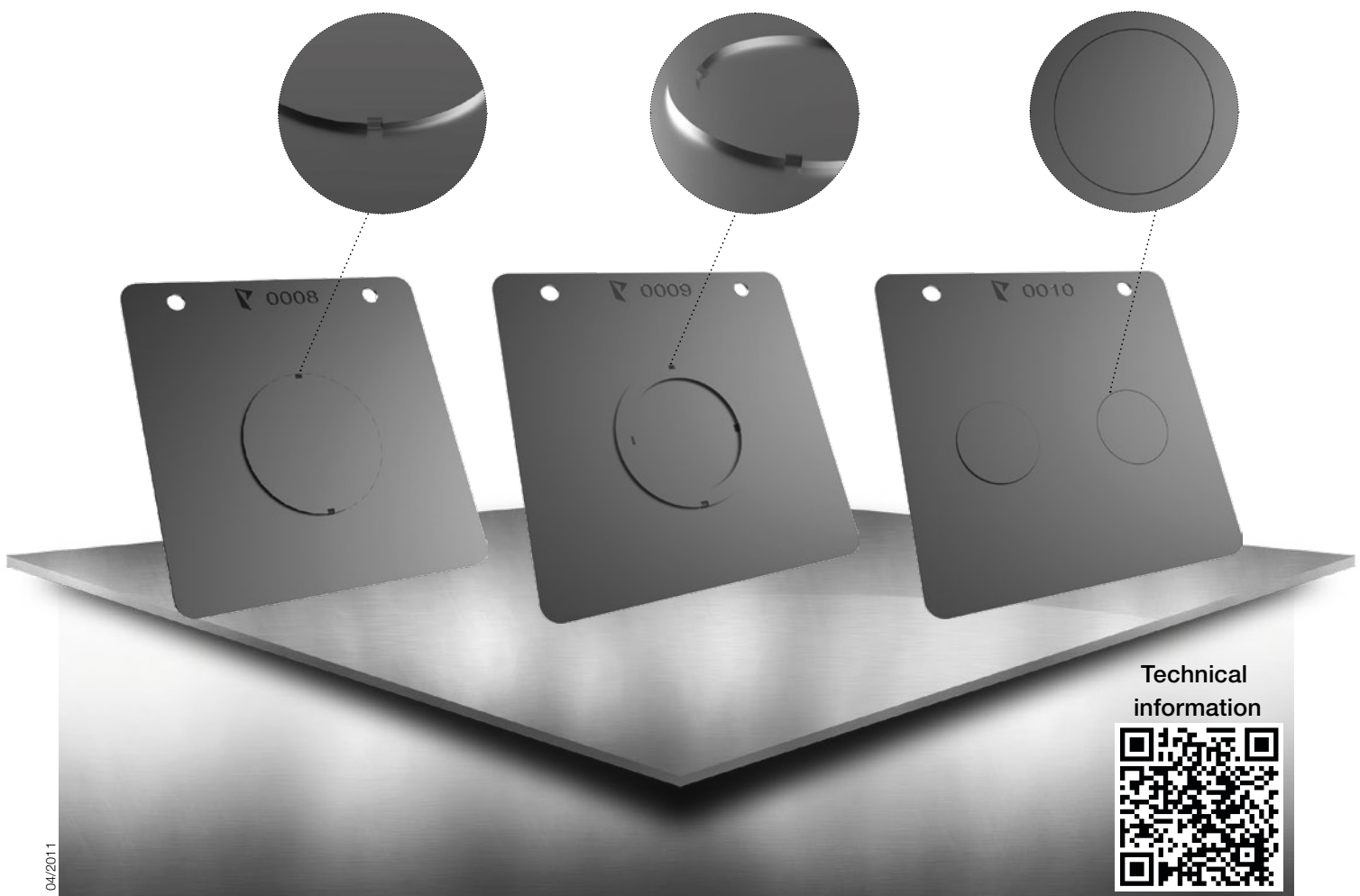
## ring knock-outs:

- production of ring knock-outs with two diameters in one hit
- suitable for all standard sheet thicknesses and sheet materials as well as surface coatings (powder, zinc, etc.)

## ps:®knock-out

- production of the knock-outs in two steps:  
step 1: production of the knock-out  
step 2: flattening
- non-sharp-edged connections (risk for damaging the cable is decreased)
- slug can be removed on both sides
- suitable for all standard sheet thicknesses and sheet materials as well as surface coatings (powder, zinc, etc.)

TRUMPF  
THICK TURRET  
SALVAGNINI



Technical  
information



# DESIGN: ps:®texture

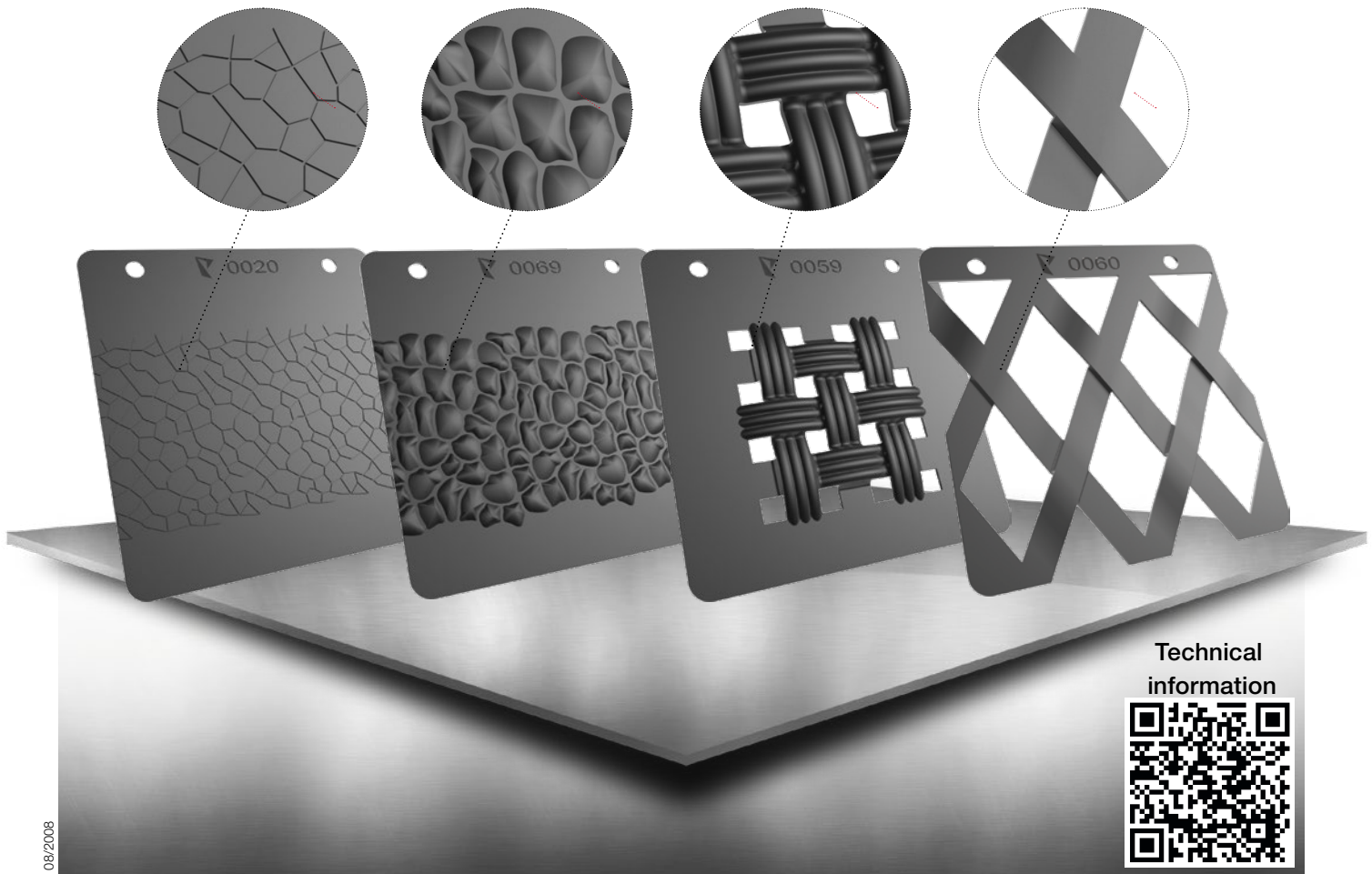
FOR MACHINE TYPES TRUMPF, THICK TURRET & SALVAGNINI

TRUMPF

THICK TURRET

SALVAGNINI

- application of visible sheets in architecture: interior and exterior of private and public buildings
- specific design of sheets for car tuning area
- expanded metal, textured sheets and other optical sheets are used in many design products, garden chairs, tables and storage systems
- advantage of PASS tools: applicable in small areas of a sheet plate
- different types of pre-punching with one tool achieves unique appearances
- for sheet materials aluminium, steel
- continuous punching tool
- engineered parameters reduce warpage
- programming as embossing tool required
- for sheet thickness  $s = 0,3$  up to approx. 2,0 mm

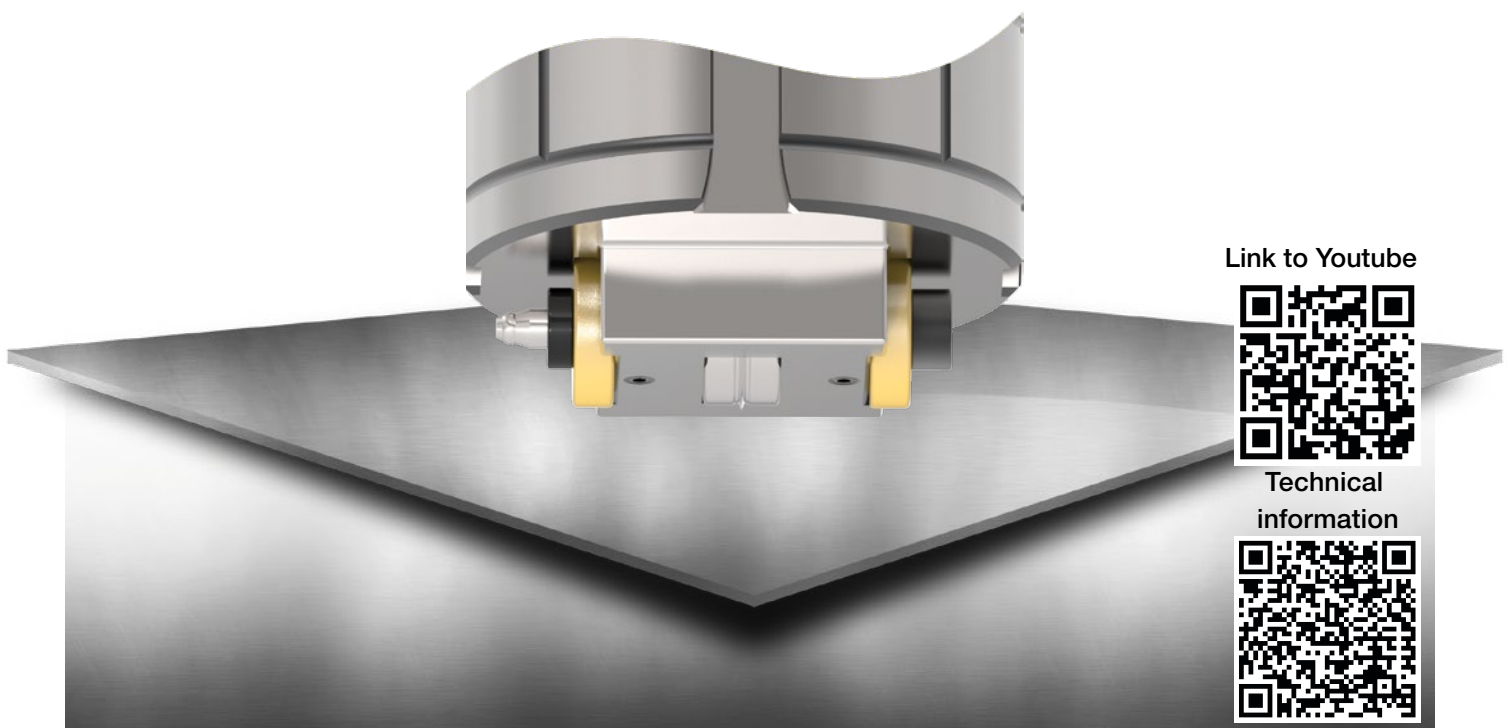
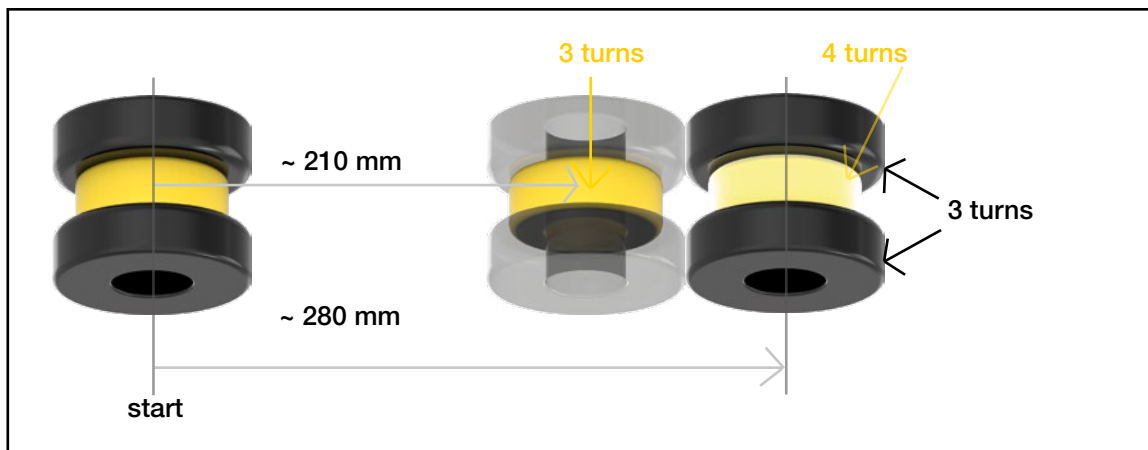


08/2008

# WHEEL TOOLS: ps:® wheel

FOR MACHINE TYPES TRUMPF, THICK TURRET & SALVAGNINI

- for different range of applications (e.g. beading-, flange- or offset-tool)
- reduced warpage because of differential effect (segmented wheels)
- no chatter marks
- integrated lubrication
- working with close radius possible
- perfect operating characteristics due to the shafts coated with a special lubrication
- dimensions according to customer requirements
- for different sheet materials and thicknesses



Link to Youtube



Technical information



TRUMPF  
THICK TURRET  
SALVAGNINI

# ps:<sup>®</sup>MT5 FOR PUNCHING

FOR MACHINE TYPE TRUMPF - MACHINE GROUP I

TRUMPF

- for sheet materials  
aluminium, steel, stainless steel
- for sheet thickness s = up to  
4,5 mm (stainless steel s = up to  
3,0 mm)
- max. diameter 16,0 mm
- max. punching force 57 kN
- working with 5 different punching  
shapes in ONE tool
- special shapes, numbers or letters  
possible
- time savings in setup and tool  
change times



Technical  
information



# ps:®easy-type

FOR MACHINE TYPE TRUMPF - MACHINE GROUP I

- for sheet materials  
aluminium, steel, stainless steel
- for sheet thickness  $s = 0,5 \text{ mm}$  up to  $8,0 \text{ mm}$
- working with 5 different inserts for embossing in ONE tool
- for embossing numbers, letters and characters by lining up embossing segments
- font sizes 4, 5, 6, 8 or 10 mm possible
- max. embossing depth  $0,5 \text{ mm}$
- time savings in setup and tool change times



Technical  
information



# ps:<sup>®</sup>MT10 FOR PUNCHING

FOR MACHINE TYPE TRUMPF - MACHINE GROUP I

TRUMPF

- for sheet materials  
aluminium, steel, stainless steel
- for sheet thickness s = up to  
4,5 mm (stainless steel s = up to  
3,0 mm)
- max. diameter 10,5 mm
- max. punching force 57 KN
- working with 10 different punching  
shapes in ONE tool
- special shapes, numbers or letters  
possible
- time savings in setup and tool  
change times



Technical  
information





# ps:®MT10 FOR EMBOSSING

FOR MACHINE TYPE TRUMPF - MACHINE GROUP I

TRUMPF

- for sheet materials  
aluminium, steel, stainless steel
- for sheet thickness  $s = 0,5 \text{ mm}$  up to  $8,0 \text{ mm}$
- working with 10 different inserts for embossing in ONE tool
- for embossing e.g. numbers and protective conductor symbols
- max. embossing depth  $0,5 \text{ mm}$
- time savings in setup and tool change times



Technical  
information



06/2020

## ps:<sup>®</sup>flange90° + ps:<sup>®</sup>flange180°

FOR MACHINE TYPES TRUMPF & THICK TURRET

TRUMPF

- bend, e.g. with dimension 30 x 70 mm
- for all sheet materials
- flanging possible in two degrees:
  - 1. 90° flanging with **ps:<sup>®</sup>flange90°**
  - 2. 180° flanging with **ps:<sup>®</sup>flange90° + ps:<sup>®</sup>flange180°**
- application area:  
recessed grips of boxes or bushings



10/2019

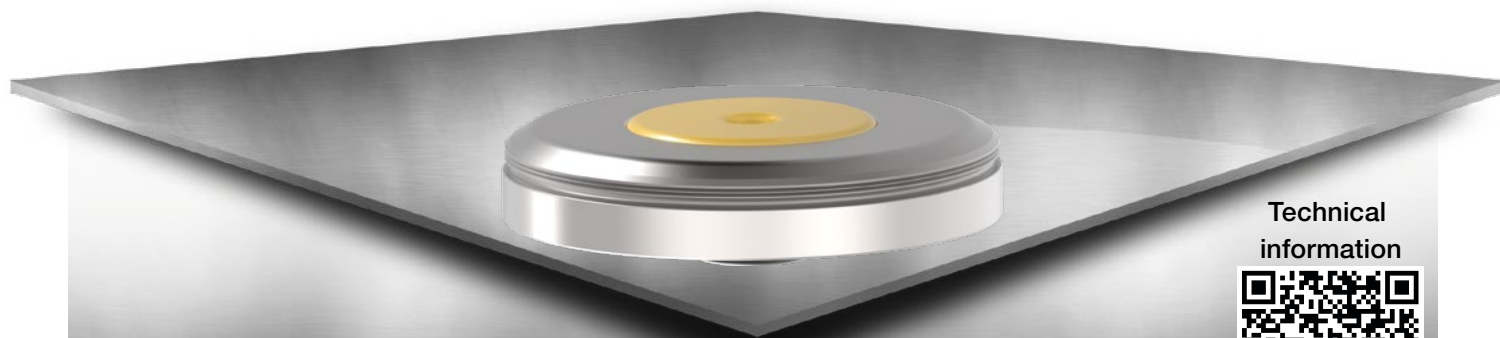


# ps:<sup>®</sup>single-thread

FOR MACHINE TYPE TRUMPF - MACHINE GROUP I

TRUMPF

- for all sheet materials  
aluminium, steel, stainless steel
- for sheet thickness  $s = 1,0$  up to  $8,0$  mm
- thread M2,5 up to M10
- thread forming in flat sheets and in extrusions
- easy and tool-free changing of the thread modules by slide-part system
- easy change of tap inserts by means of magnetic holder



Technical  
information



patented  
EP 3,417,970  
US 10,940,543

02/2019

# ps:<sup>®</sup>emboss5

FOR MACHINE TYPE TRUMPF

TRUMPF

- special tools with max. size as spring-loaded lower part (Ø 98,5 mm)
- extended upper part with enlarged surface
- active die necessary
- special assembly for reducing sheet warpage for large embossings



10/2018

# ps:<sup>®</sup>slitting5

FOR MACHINE TYPE TRUMPF

- for normal slitting cuts and process-reliable discharge of small parts
- reduced processing times
- active or lowerable die necessary
- for sheet thickness  $s = 0,5$  up to  $3,0$  mm
- maximum process reliability due to monitored ejection process

TRUMPF



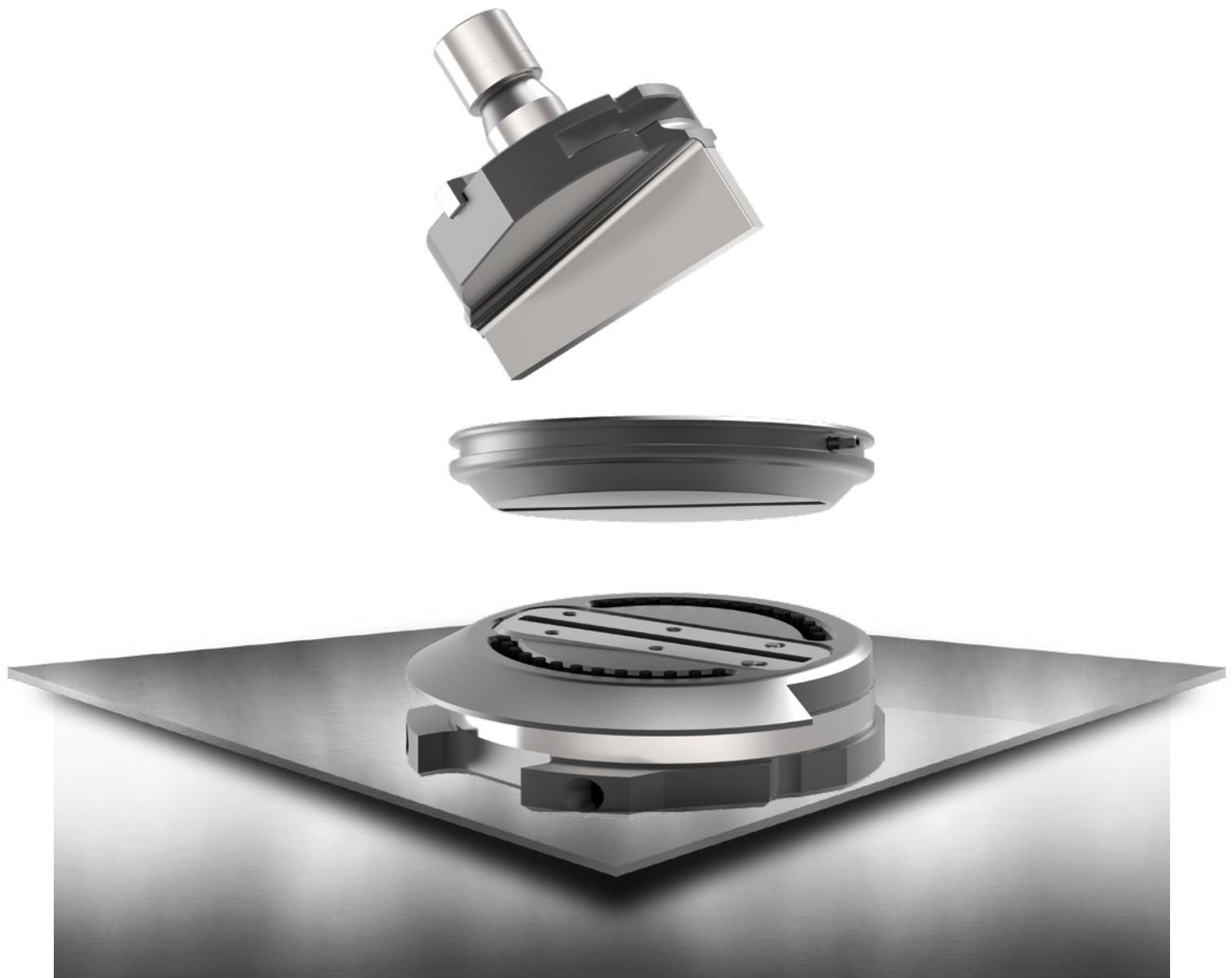
09/2018

## ps:<sup>®</sup>T8-shear

FOR MACHINE TYPE TRUMPF - MACHINE GROUP I

TRUMPF

- for slitting sheets with smooth sheet edge
- for all sheet materials  
aluminium, steel, stainless steel
- for sheet thickness  $s = 0,5$  up to  $3,0$  mm
- no nibbling marks
- die plate is available in two versions:  
single die plate for  $s = 0,5$  up to  $1,5$  mm  
pair of die plates for  $s = 2,0$  up to  $3,0$  mm



# ps:<sup>®</sup>T8-trim

FOR MACHINE TYPE TRUMPF - MACHINE GROUP I

- for trimming sheets
- for all sheet materials  
aluminium, steel, stainless steel
- for sheet thickness  $s = 0,5$  up to  
3,0 mm
- no nibbling marks
- die plate is available in two versions:  
single die plate for  $s = 0,5$  up to  
1,5 mm  
pair of die plates for  $s = 2,0$  up to  
3,0 mm

TRUMPF

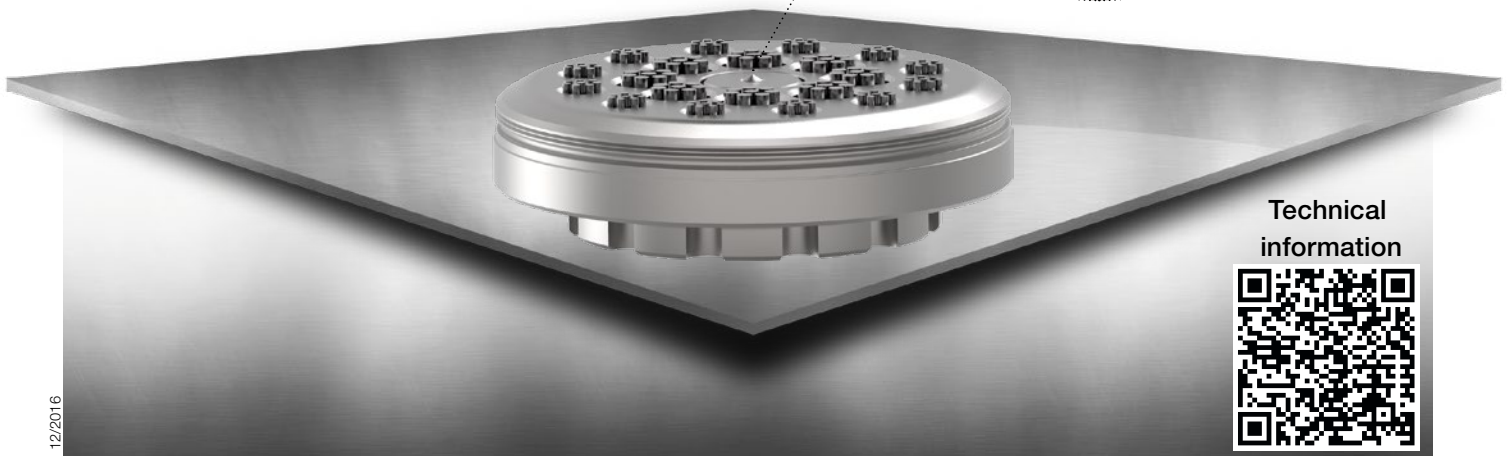
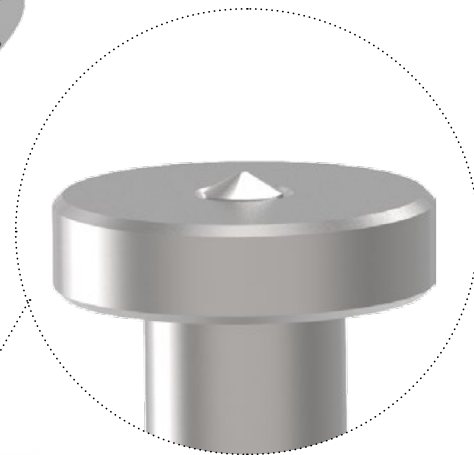


# ps:® engraving-up

FOR MACHINE TYPES TRUMPF & THICK TURRET

TRUMPF

- for all sheet materials and sheet thicknesses
- fully adjustable pre-loaded spring in the upper part for fine adjustment
- interchangeable spring in the upper part for rough adjustment of the spring force
- ball integrated in a solid and hardened rack
- ball works free of clearance under pressure during process
- polished ball rack providing a trouble free procedure
- low maintenance – long tool life
- diamond needle insert for supreme tool life



Technical  
information



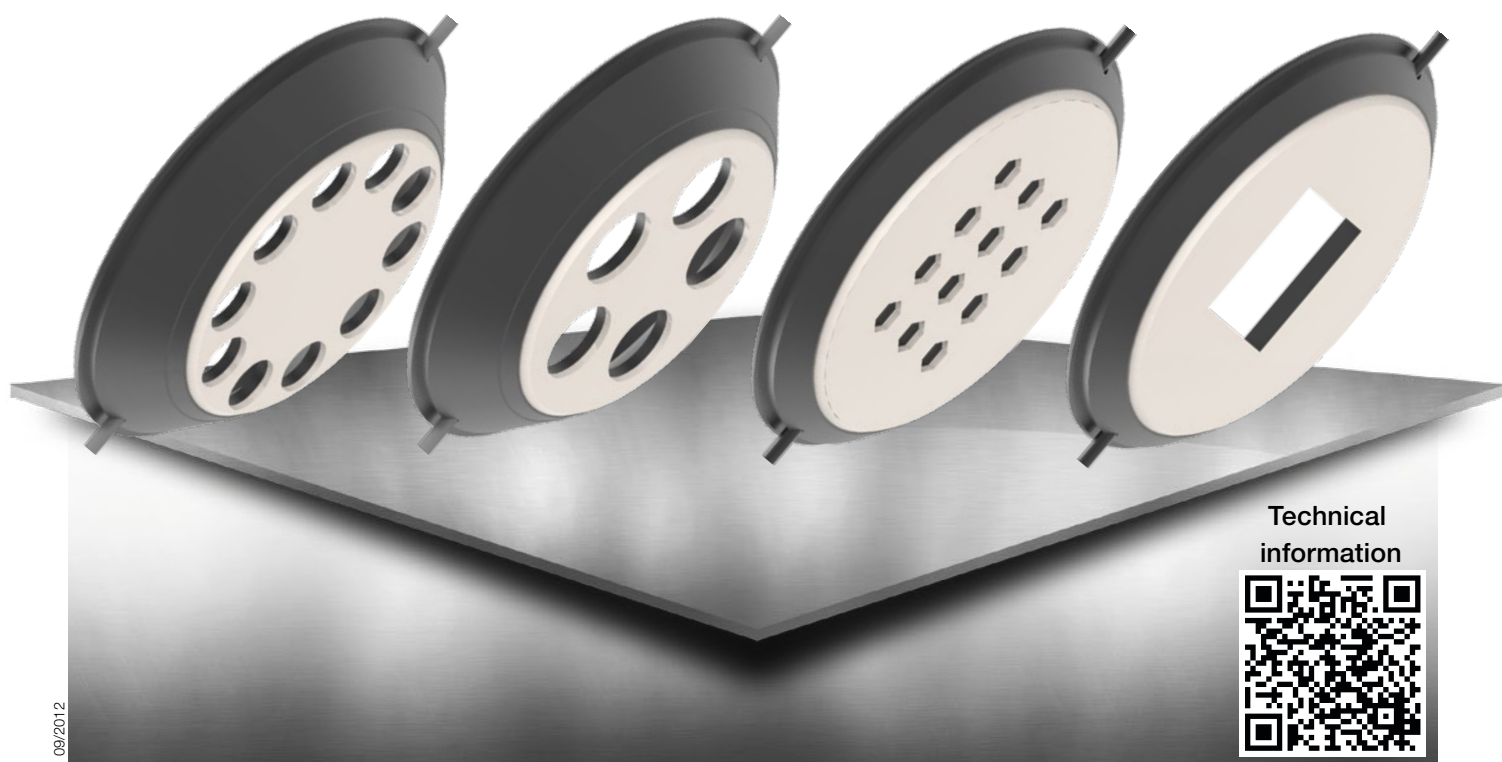


# ps:® low-scratch-stripper

FOR MACHINE TYPE TRUMPF

- scratches on the upper side of the sheet are minimised
- reinforced base body to secure stability
- extreme high abrasive life of the PU-coating
- available for multitools ps:®MT5 and ps:®MT10 as well as normal punching tools and multitools

TRUMPF



Technical  
information



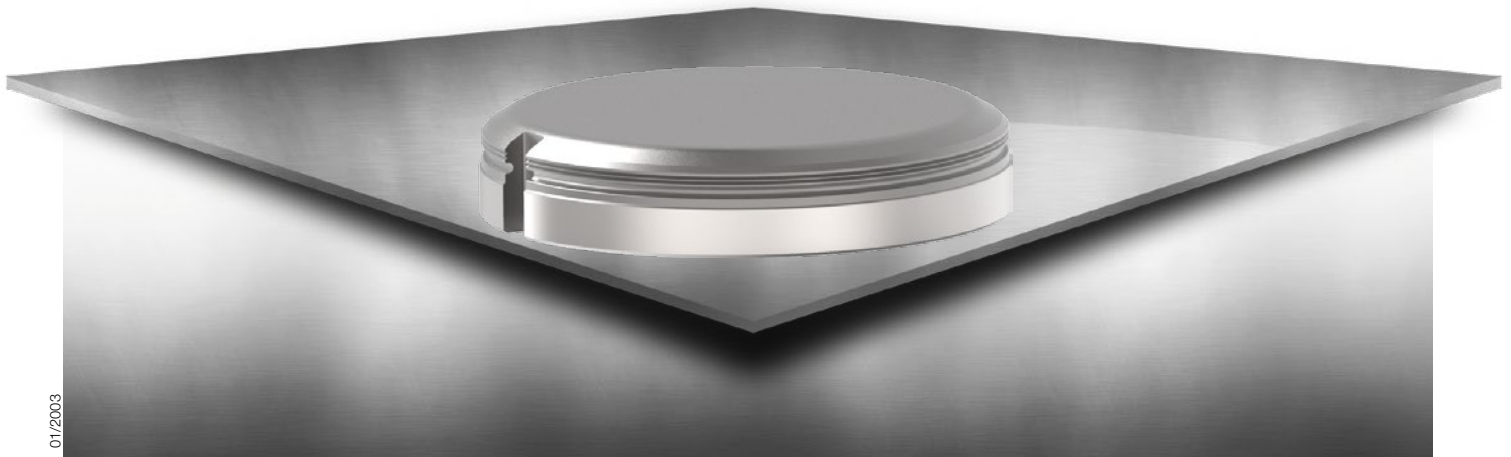
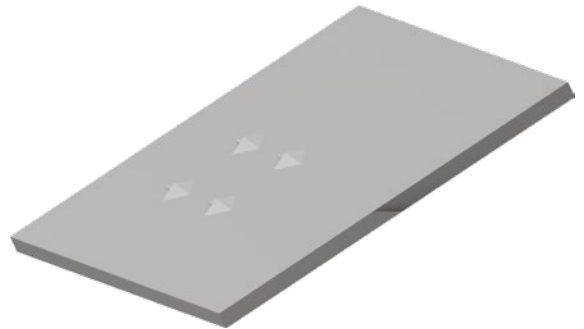
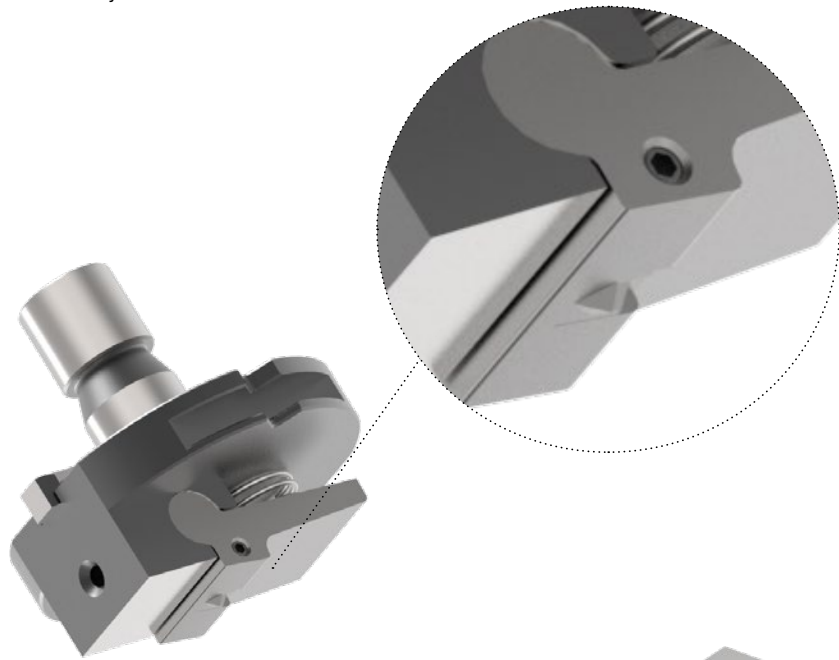


# ps:<sup>®</sup>position

FOR MACHINE TYPE TRUMPF

TRUMPF

- for creating auxiliary stops for the accurate alignment of two sheets
- for sheet thickness  $s = 0,8$  up to  $6,0$  mm
- no deformations on the bottom side of the sheet
- form height and size on the upper side of the sheet are flexibly adjustable
- programming as embossing tool required
- for sheet materials aluminium, steel

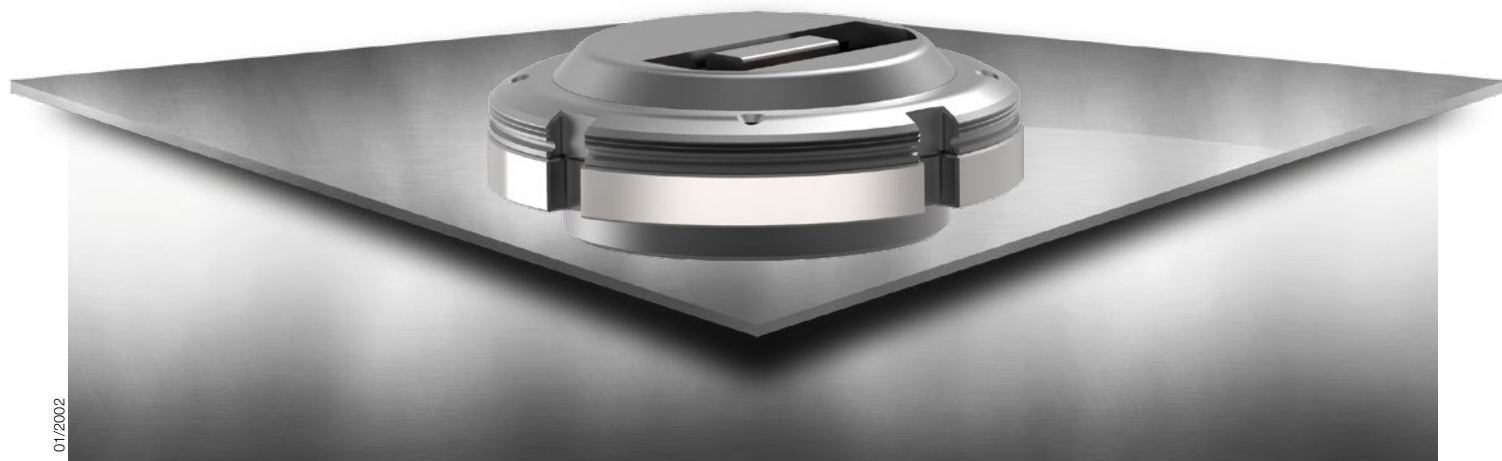
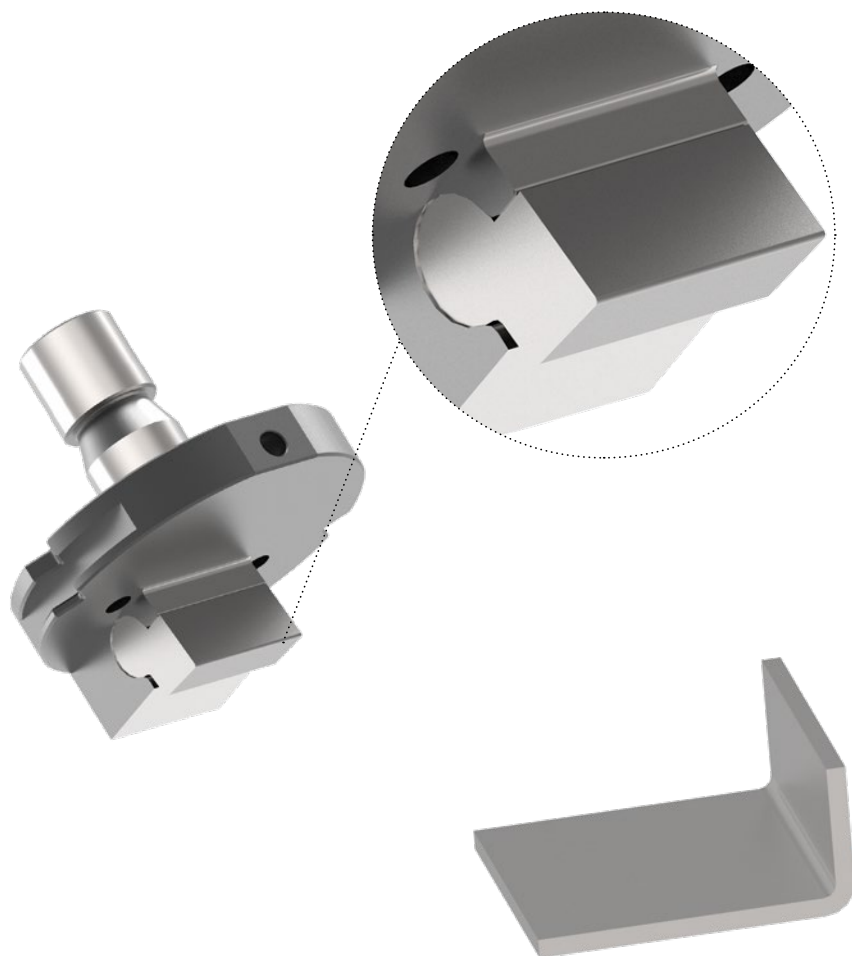


01/2003

# ps:<sup>®</sup>pivot FOR TRUE 90° BENDS

- for sheet materials  
aluminium, steel, stainless steel
- height of tab is limited by machine  
type (e.g. TRUMPF machines up to  
22,0 mm tab height)
- tab widths up to 55,0 mm
- even slight overbending (approx.  
91-93°) is possible
- programming as embossing tool or  
with "Multibend" function required
- for sheet thickness  $s = 0,8$  up to  
1,5 mm (aluminium and steel up to  
2,0 mm)

TRUMPF



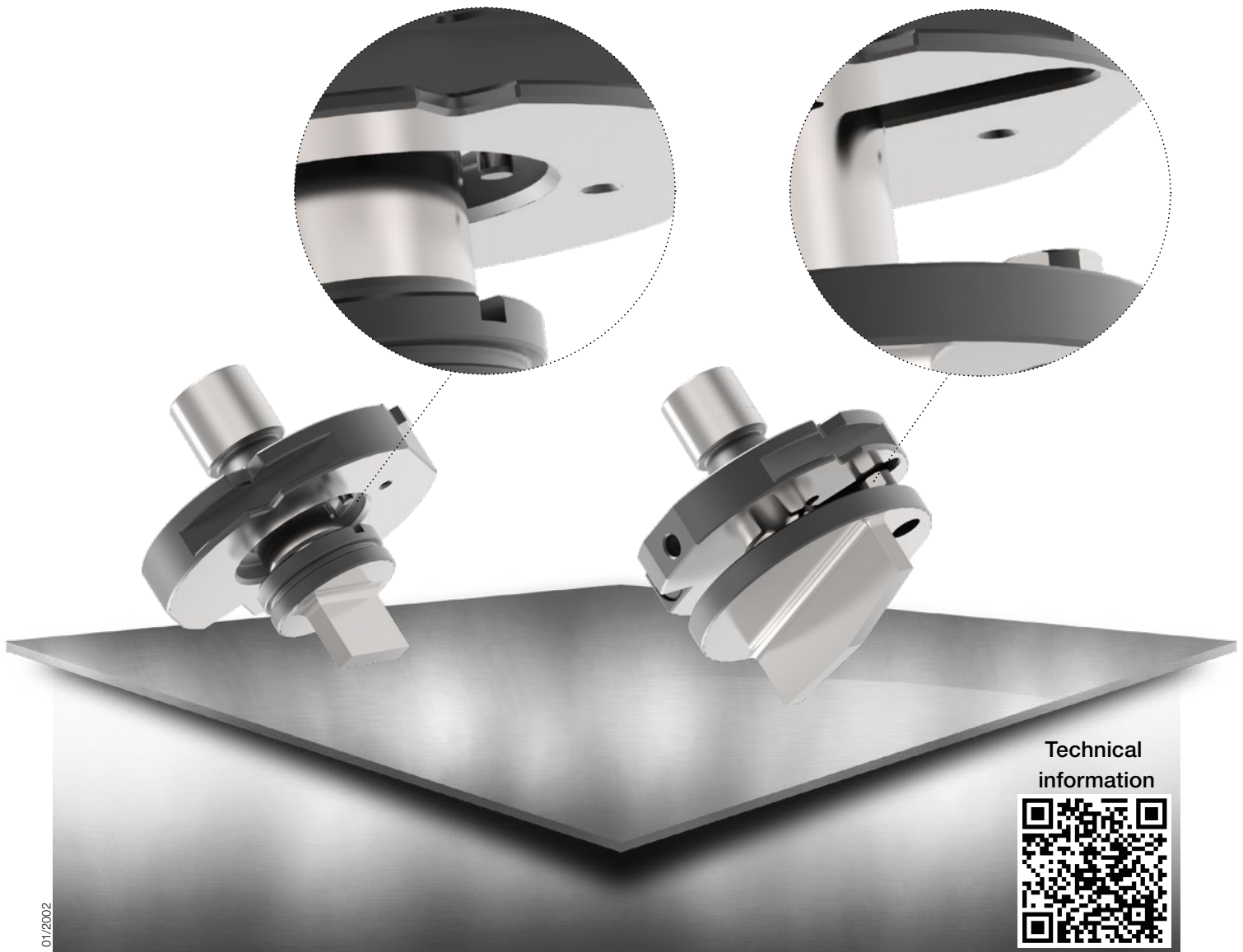
01/2002

ps:®passfit

FOR MACHINE TYPE TRUMPF

TRUMPF

- extremely fast and easy adjustment of the tools without additional tool
- extremely high tool stability (sheets up to 12,0 mm – also stainless steel – can be punched)
- all PASS special tools, e.g. embossing tools (louver, beads, bridges, lances, etc.) are manufactured and delivered with **ps:®passfit**
- high operational security of the machine preventing expensive tool misalignments
- no expensive base bodies are necessary



Technical  
information

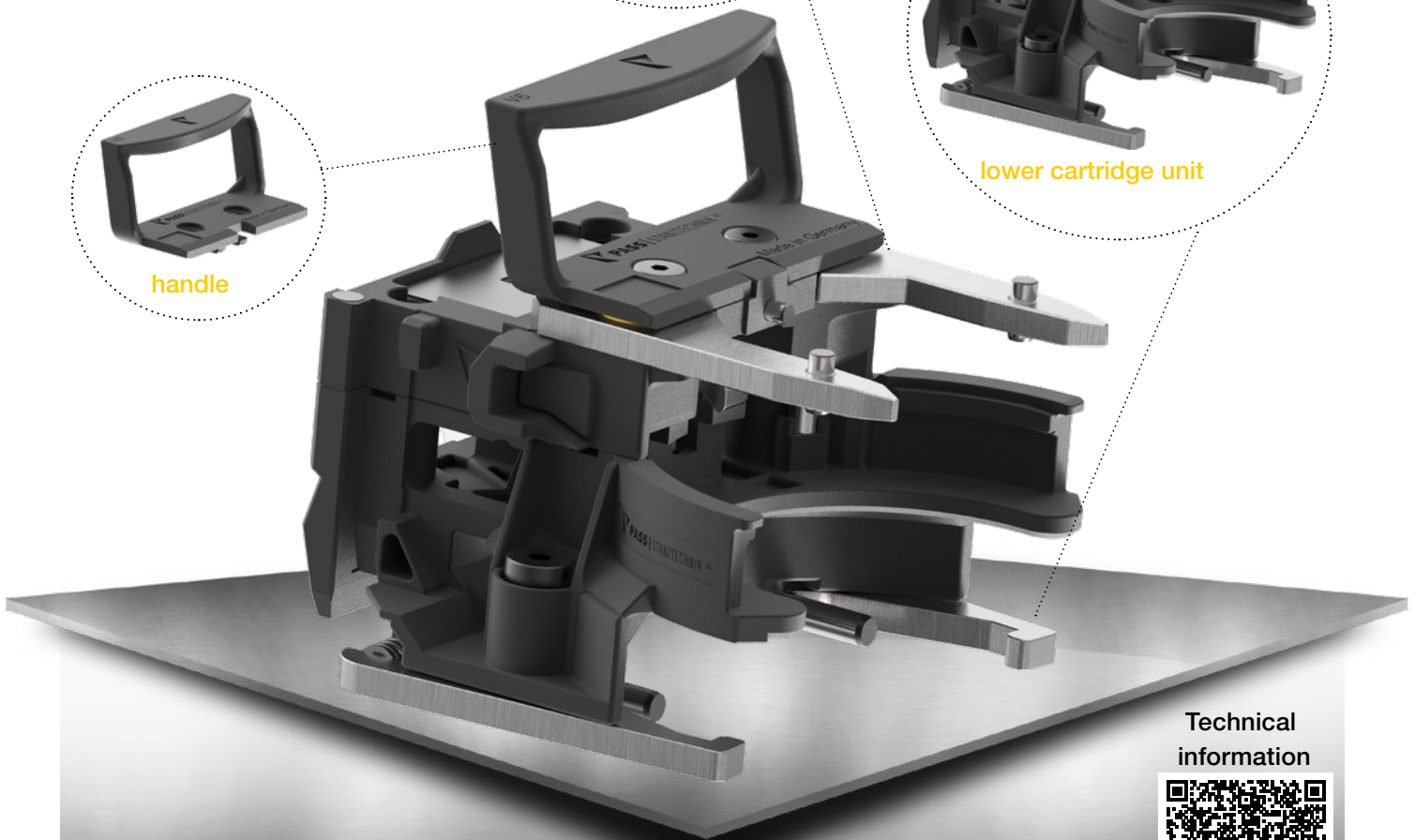
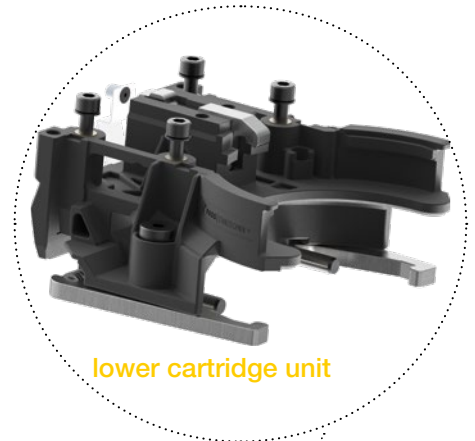
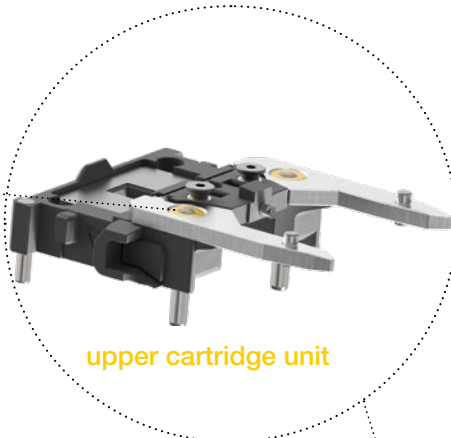
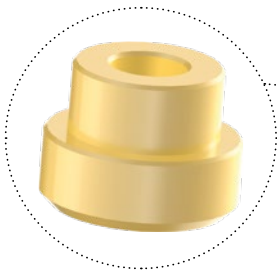


# ps:<sup>®</sup>3D-RTC

TOOL CARTRIDGE FOR TRUMPF PUNCHING MACHINES H & I

TRUMPF

- consisting of three segment assemblies
- individual segments easily interchangeable
- repairs possible due to good accessibility of individual parts
- lightweight therefore increased machine performance due to higher axis acceleration
- robust design
- metal plain bearing bushes: high load carrying capacity and low wear
- portable cartridge with practical handle
- cost and resource saving



Technical  
information



09/2023

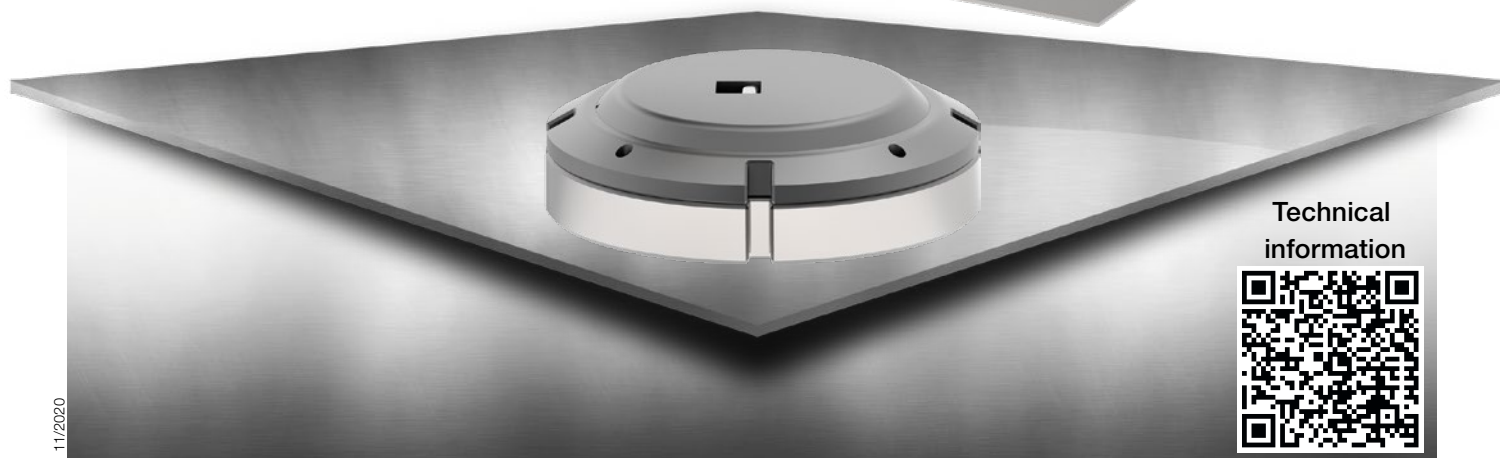
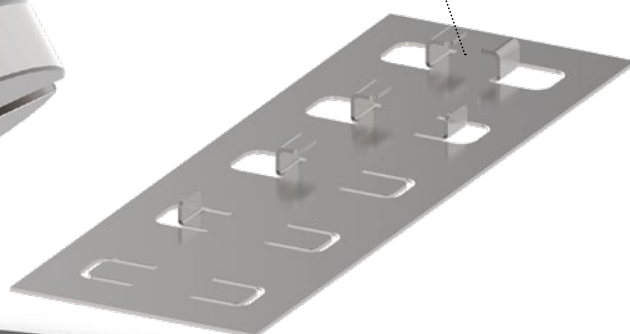
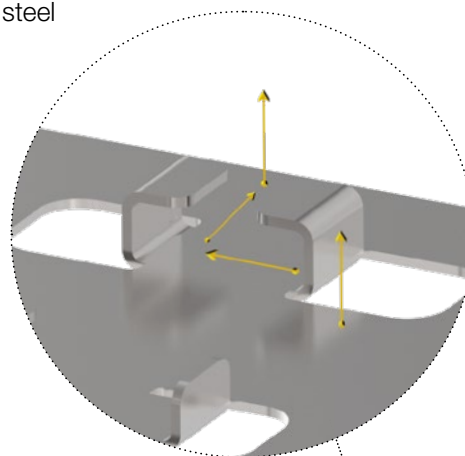
patent pending

## ps:<sup>®</sup>hook

FOR MACHINE TYPES TRUMPF & THICK TURRET

THICK TURRET

- production of double bends in the smallest space
- forming station necessary
- embossing height up to 14 mm
- many different application areas e.g. case construction, steel furniture, drawers, transport boxes, etc.
- for all sheet materials aluminium, steel, stainless steel



Technical  
information





# ps:®marking-all-in-one

FOR MACHINE TYPE THICK TURRET

- multifunctional tool for **engraving, signing, marking** and **foil cutting**
- 1 tool – 4 functions
- minimum conversion times for quick change to a new function due to head screw with bayonet lock
- incl. two dies: flat die (signing), ball roller die (engraving, marking and foil cutting)
- incl. special marking pen with Dry Safe Ink
- for all sheet materials and a sheet thickness from  $s = 0,8 \text{ mm}$

THICK TURRET



Technical  
information



## ps:®basic

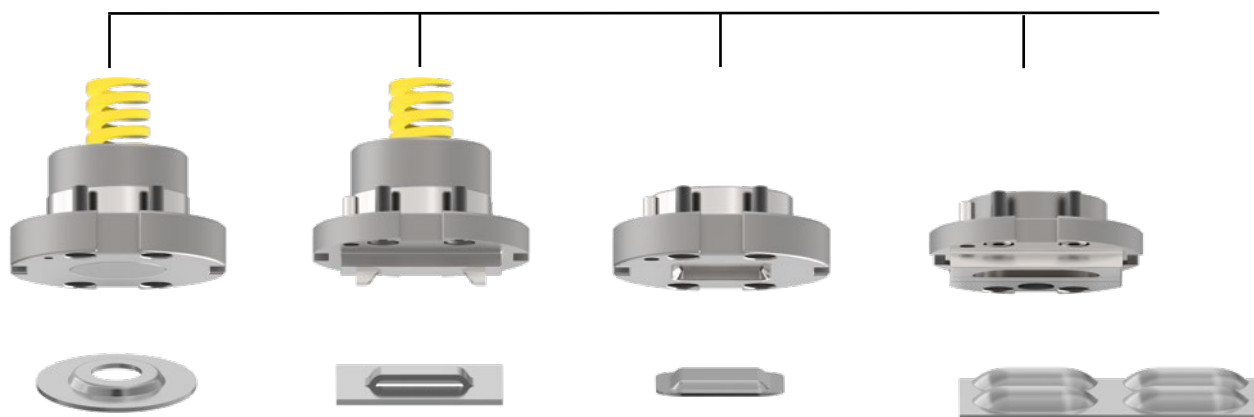
FOR MACHINE TYPE THICK TURRET

THICK TURRET

- cost savings due to standardised guide assembly for embossings upwards
- fast and easy changing of the embossing die



Inserts



Technical  
information





# ps:® assembly-element

FOR MACHINE TYPE THICK TURRET

- as plug system
- no need to clamp in vice
- for a gentle disassembly and assembly of the tools

■ Station A



■ Station B



■ Station C



■ Station D



■ Station E



■ P110  
(PRIMA POWER)



■ Pi135  
(PRIMA POWER)



EQUIPPED BASE PLATE



Technical  
information



# ps:<sup>®</sup>multi-thread<sup>®</sup>

FOR MACHINE TYPE THICK TURRET – STATION Di

THICK TURRET

- fast and easy changing of tap inserts
- metric and inch system tap inserts can be used in one tool
- also usable for extrusions up- and downwards
- different sizes from M2/UNC #2-56 to M10/UNC 3/8"-16 possible
- automatic selection of the single tap inserts
- with tool and sheet lubrication
- usable for all sheets up to s = 8,0 mm
- fast thread forming (within approx. 2 sec./thread)



12/2011

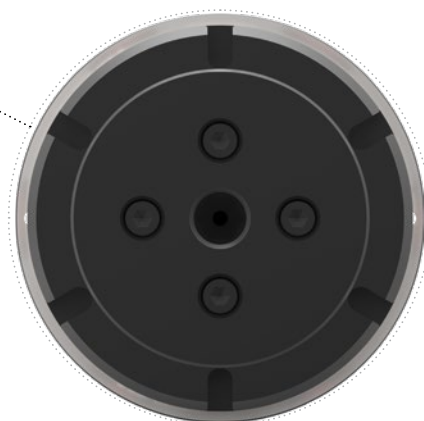
patented  
EP 3,180,139  
US 10,421,137

# ps:®MTP3RiB(PIN)-31,75

FOR MACHINE TYPE THICK TURRET – STATION Di

- simple and quick change of punches with maximum process stability
- minimum tool and guide wear due to maximum guide length
- internal and external lubrication channels
- special spring to control grind life after sharpening punches
- no “witness-marks” on the sheet, due to single active punch – all unused punches stay up
- individual adjustment of stripping force
- maximum performance range due to robust design of all components for sheet thicknesses up to  $s = 6,0 \text{ mm}$  (all materials)
- possibility to use standard tools from product line **ps:®beta-V2®**

THICK TURRET



patented  
EP 2,596,878  
US 9,266,248

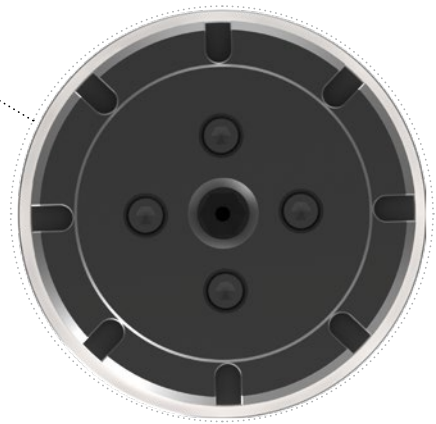
11/2011

# ps:®MTP8RiA(PIN)-12,7

FOR MACHINE TYPE THICK TURRET – STATION Di

THICK TURRET

- simple and quick change of punches with maximum process stability
- special spring to control grind life after sharpening punches
- maximum performance range due to robust design of all components for sheet thicknesses up to  $s = 6,0$  mm (all materials)
- minimum tool and guide wear due to maximum guide length
- no “witness-marks” on the sheet, due to single active punch – all unused punches stay up
- possibility to use standard tools from product line **ps:®beta-V2®**
- internal and external lubrication channels
- individual adjustment of stripping force



patented  
EP 2,596,878  
US 9,266,248

11/2011

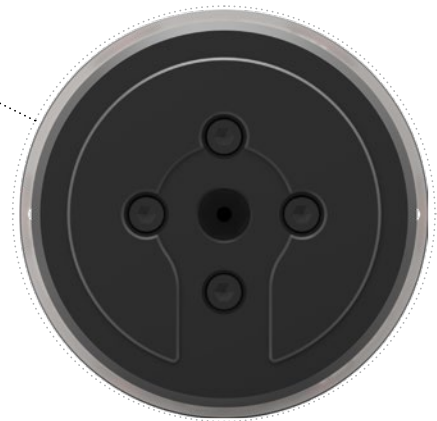


# ps:®MTP3RiB(I-RAM)-31,75

FOR MACHINE TYPE THICK TURRET – STATION Di

- effective reduction of production time due to combination of I-RAM and index station
- simple and quick change of punches with maximum process stability
- minimum tool and guide wear due to maximum guide length
- internal and external lubrication channels
- special spring to control grind life after sharpening punches
- no “witness-marks” on the sheet, due to single active punch – all unused punches stay up
- individual adjustment of stripping force
- maximum performance range due to robust design of all components for sheet thicknesses up to  $s = 6 \text{ mm}$  (all materials)
- possibility to use standard tools from product line **ps:®beta-V2**

THICK TURRET



patented  
EP 2,596,878  
US 9,266,248

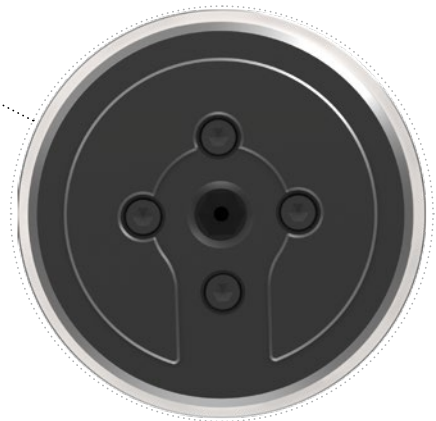
11/2011

# ps:®MTP8RiA(I-RAM)-12,7

FOR MACHINE TYPE THICK TURRET – STATION Di

THICK TURRET

- effective reduction of production time due to combination of I-RAM and index station
- simple and quick change of punches with maximum process stability
- minimum tool and guide wear due to maximum guide length
- internal and external lubrication channels
- special spring to control grind life after sharpening punches
- no “witness-marks” on the sheet, due to single active punch – all unused punches stay up
- individual adjustment of stripping force
- maximum performance range due to robust design of all components for sheet thicknesses up to  $s = 6 \text{ mm}$  (all materials)
- possibility to use standard tools from product line **ps:®beta-V2®**



patented  
EP 2,596,878  
US 9,266,248

11/2011



# ps:<sup>®</sup>beta-V2<sup>®</sup>

FOR MACHINE TYPE THICK TURRET

- assembled spring unit
- tool length can be adjusted by simple, quick and safe handling
- optional available as ABS-version (for machines with lubrication system)
- regrinding length up to 10 mm (s = 1,0 mm) without using shims
- replaceable stripper plates
- closed, solid head unit secures highest obtainable reliability of operation in case of spring breakage

THICK TURRET



Link to Youtube



# SHEAR BLADES

FOR MACHINE TYPE SALVAGNINI

- made of highest X3-PM quality  
which increases the lifetime

SALVAGNINI

■ 400 mm

■ 500 mm



08/2009

# TOOL CASSETTES TYPE STANDARD

FOR MACHINE TYPE SALVAGNINI S4

- cassette for 70 kN
- type standard
- max. diameter 33 mm



SALVAGNINI



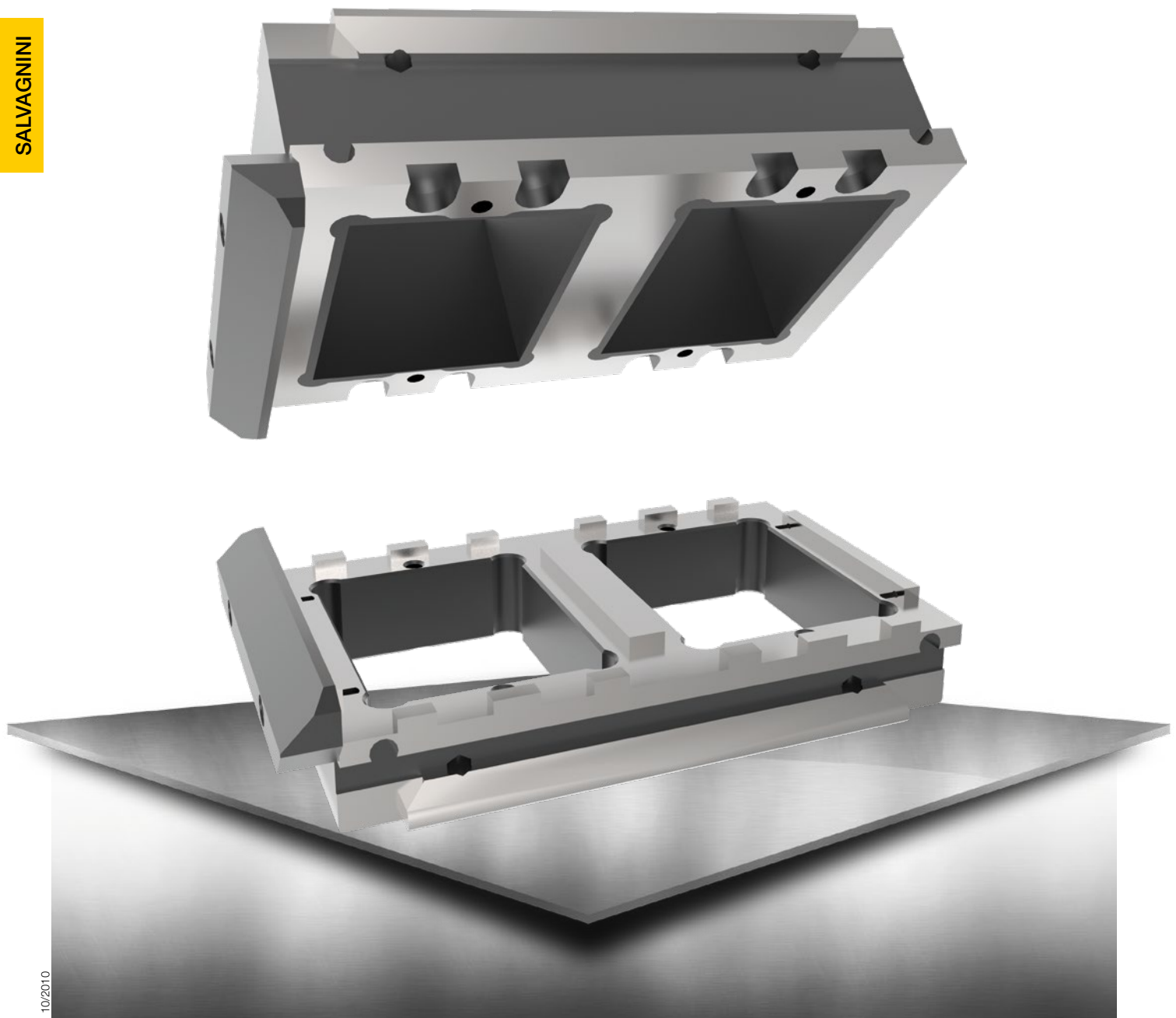
10/2010

# TOOL CASSETTES TYPE P21 UP TO P24

FOR MACHINE TYPE SALVAGNINI S4

- cassette for 260 kN
- P21 up to P24 / Front & Rear
- max. diameter 70 x 90 mm

SALVAGNINI

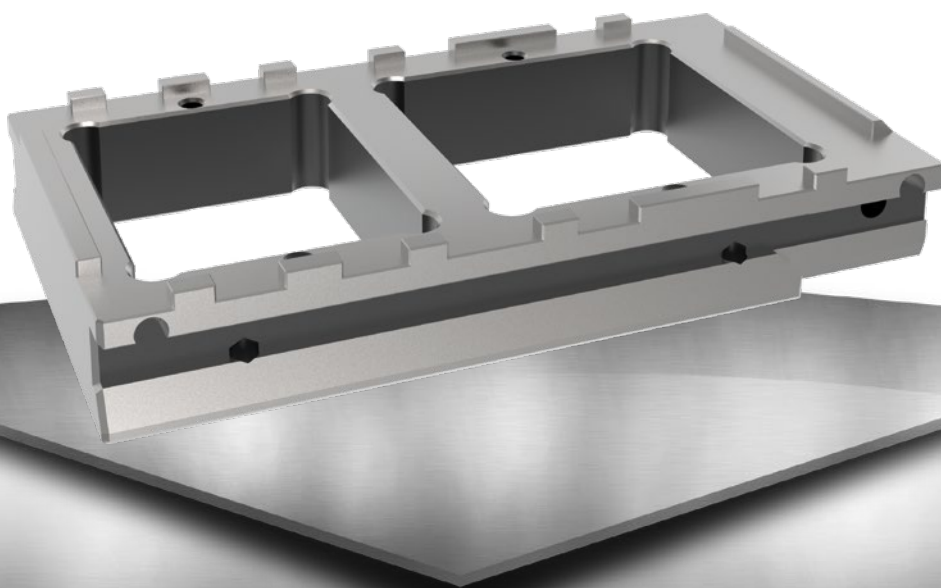
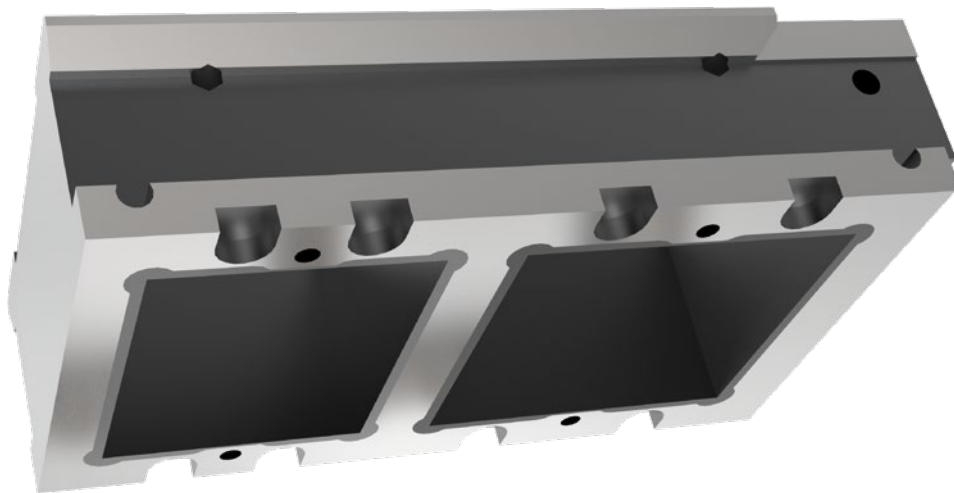


10/2010

# TOOL CASSETTES TYPE P23 AND P24

FOR MACHINE TYPE SALVAGNINI S4

- cassette for 260 kN
- P23 and P24 / Rear
- max. diameter  
70 x 90 mm / 90 x 90 mm



SALVAGNINI

# TOOL CASSETTES TYPE SINGLE P2R

FOR MACHINE TYPE SALVAGNINI S4 (P2R-ROTATION STATION)

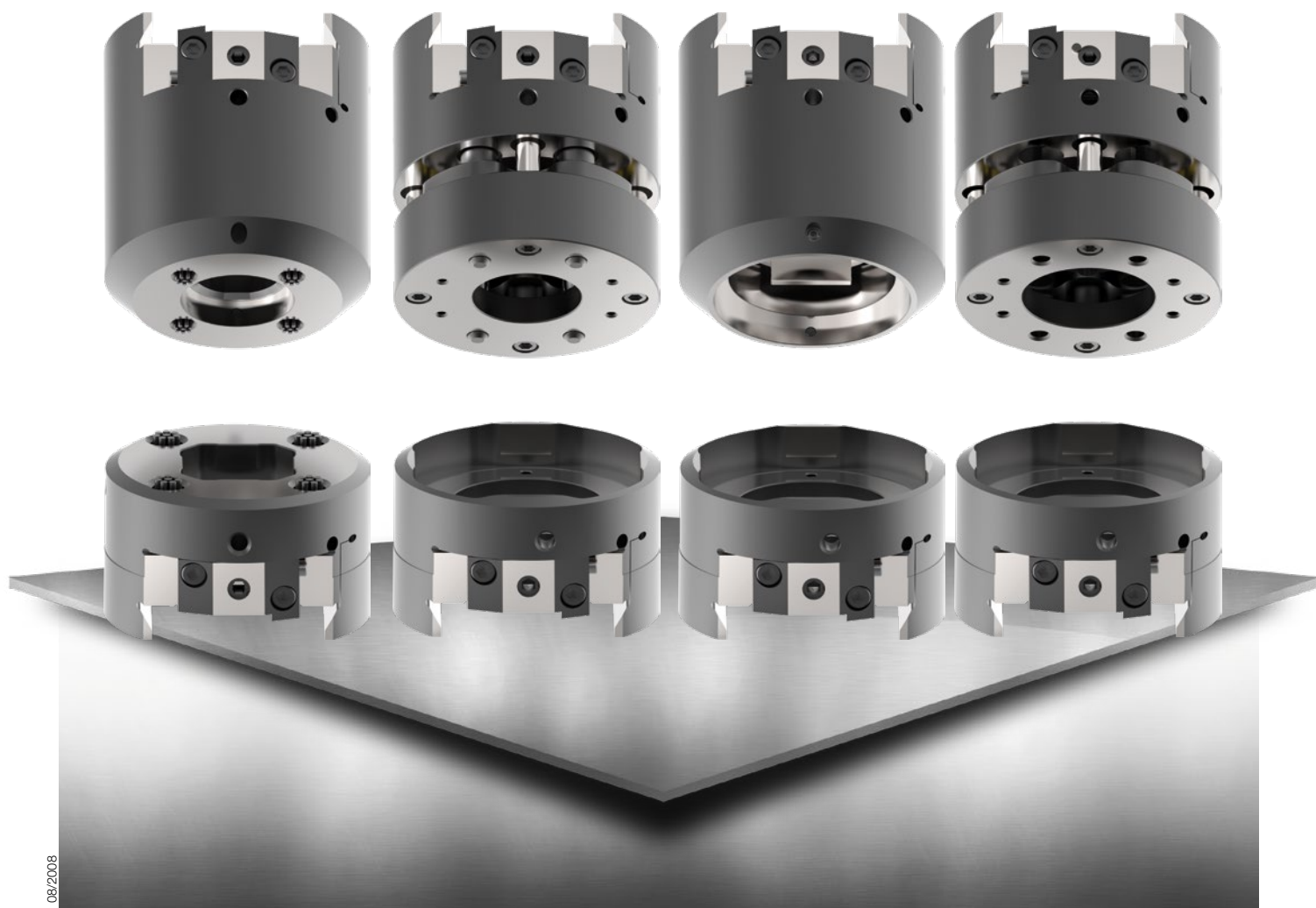
SALVAGNINI

■ to 33 mm solid

■ to 42 mm spring-loaded

■ to 60 mm solid

■ to 50,8 mm spring-loaded



08/2008





SALVAGNINI | THICK TURRET | TRUMPF



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