

2024



Always a step ahead

RANGE OF PRODUCTS

www.smwautoblok.com

SMW-Autoblok Group

SMW-AUTOBLOK group was born in 1942 and in the mid-'60 it began the expansion to foreign markets, mainly France, Germany, England and USA.

In 1993 the breakthrough, with the acquisition of GERMAN SMW SPANNSYSTEME GmbH, with his cutting-edge products and his strong position in Germany, USA and Japan markets. Born that way the SMW-AUTOBLOK mark, the operation that permits to widen significantly the range of products and to exceed the "critical mass" for further worldwide expansion.

The combination of these premier manufacturing entities created the SMW-AUTOBLOK group and resulted in the most extensive product line of high-quality workholding and advance solutions for machine tools in the world. Our production facilities are in Caprie-Italy, Meckenbeuren-Germany, Nottingham UK, Wheeling IL-USA, Shanghai-China and Pune-India.

The global corporate organization SMW-AUTOBLOK achieved substantial global growth by providing a superior level of customer service and technical support for our application driven product line.

Covering more than 55 countries with 20 direct subsidiaries and specialized agents. With Mario Pinto, specialized in live tooling and OML in advanced static workholding the SMW-AUTOBLOK has achieved an unmatched position in the worldwide market.

Furthermore, thanks to the acquisition of Tobler, our range of SMW-AUTOBLOK expanding standard and special mandrels becomes the most complete on the market.

The recent acquisition of Tecnomagnete with the new company foundation MAG-Autoblok Tecnomagnete completes the range of clamping systems for machine tools with high-tech magnetic systems.

Autoblok S.p.A.

**SMW
Spannsysteme GmbH**



Mario Pinto S.p.A.

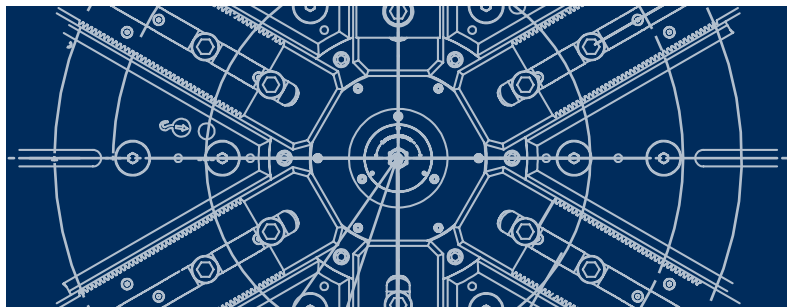
OML srl

Telbrook

TOBLER

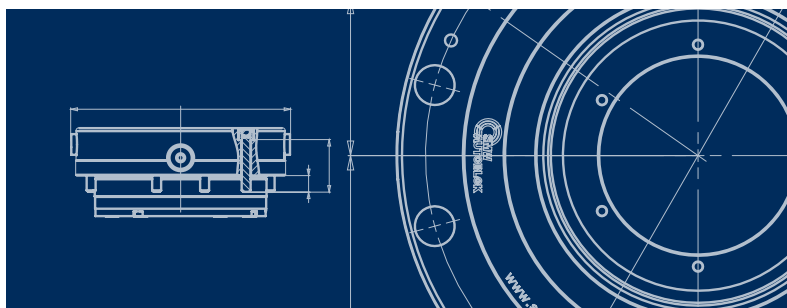
**MAG-Autoblok
Tecnomagnete**

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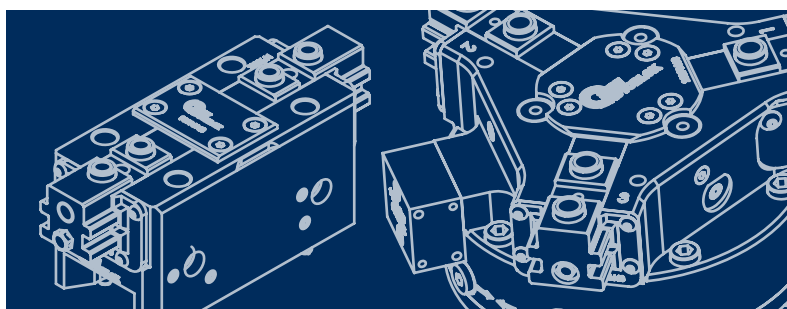
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TURNING PORTFOLIO

All SMW-AUTOBLOK turning products are dedicated to rotary work-holding equipment on lathes. Our work-holding products allow the highest productivity, the answer to the highest demand for parallelism and repeatability, and compensate for the centrifugal forces for high speed.



Manual chucks 1

Closed center power chucks 2

Open center power chucks 3



Quick jaw change power chucks 4



Pull-down chucks 5



Diaphragm chucks 6



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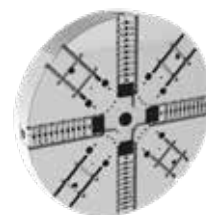
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1

MANUAL CHUCKS



*** proofline® series**
fully sealed – low maintenance



HG

- Quick jaw change with through hole
- Tongue & Groove - 3 jaws
- Lubrication channels in the jaw guide ways
- HG-N Ø160-630
- HG-NB Ø800-1000
- HG-2G Ø315-630 mm (*)
- HG-F Ø160-400 mm
- HG-B-2G Ø800-1000 mm (*)

PTF

- Independent manual chucks
- TONGUE & GROOVE
- Closed center
- 4 jaws (all diameters)
- Manual clamping and radial setting of jaws
- PTF Ø 530 - 2000 mm

CLOSED CENTER POWER CHUCKS



proofline® series
fully sealed – low maintenance



NT - NTL

- High precision fully sealed power chucks
- Centrifugal force compensation
- INCH / METRIC SERRATION by model
- TONGUE & GROOVE for C version
- 3 jaws
- NT Ø170 - 400 mm
- NTL Ø260 - 1000 mm

IN - IL

- High precision power chucks
- INCH SERRATION for D version
- MODULE 2 SERRATION for D version and large diameters
- TONGUE & GROOVE for C version
- 3 or 4 or 6 jaws based on the model and diameter
- IN, IL Ø500-800 mm
- IN, IL large diameters Ø1000-1600 mm

OPEN CENTER POWER CHUCKS



BH - FC

- High precision power chucks
- BHD-FC Inch serration
- BHD-FC metric serration
- Centrifugal force compensation
- 3 jaws
- BH - FC Ø165 - 630 mm



BB

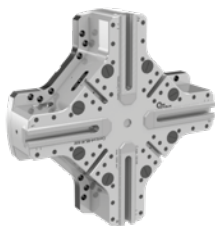
- High precision power chucks
- BB-D Inch serration
- BB-M metric serration
- EXTRA large through-hole
- 3 jaws
- BB Ø140 - 435 mm



proofline®series
fully sealed – low maintenance

JBX

- High precision, resistance and power manual jaw box
- with semi-finished body 2G version
- Accessory for face plates, 4 jaws independent manual or chucks
- Internal or external clamping
- JBX 300 mm
- JBX-2G 200-400 mm

**Centco4 MLW**

- Independent self centering clamping in 2 axis
- INCH SERRATION
- 2+2 jaws
- Weight-optimized chuck body
- Centco4 MLW Ø 315 - 1400 mm

**AN - AL**

- High precision power chucks
- INCH / METRIC SERRATION by model
- TONGUE & GROOVE for C version
- 2 and 3 jaws (4 jaws only Ø 400 mm)
- AN, AL Ø125 - 400 mm
- AN C version Ø165 - 400 mm



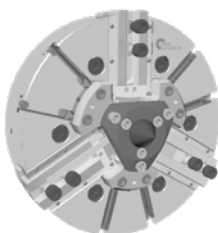
proofline®series
fully sealed – low maintenance

AP - APL

- High precision fully sealed power chucks
- INCH / METRIC SERRATION by model
- TONGUE & GROOVE for C version
- 2 or 3 jaws
- AP Ø170 - 400 mm
- APL Ø215 - 1000 mm

**IR**

- High precision power chucks
- TONGUE & GROOVE
- Radial setting of jaws
- 3-6 or 4 jaws (all diameters)
- IR Ø660 - 2500 mm

**IND-CP**

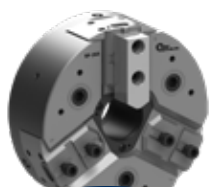
- High precision power chucks
- INCH SERRATION and MODULE 2
- Self centering and compensating power chuck
- 3 jaws
- IND-CP Ø500 - 1250 mm

**BH**

- High precision power chucks
- BH-D Inch serration
- BH-M metric serration
- 2, 3 and 4 jaws
- BH Ø130-450 mm

**BH Big diameters**

- High precision power chucks
- BH-D Inch serration
- 3 jaws
- BH Ø500-800 mm



proofline®series
fully sealed – low maintenance

BP

- High precision power chucks
- INCH / METRIC SERRATION by version
- 3 jaws
- BP Ø220 - 320 mm

**HFKN**

- LARGE THROUGH-HOLE
- INCH / METRIC SERRATION or TONGUE & GROOVE by version
- High precision power chucks
- Wedge-bar design
- 3 jaws
- HFKN Ø110 - 500 mm

**HFKS-2G**

- LARGE THROUGH-HOLE
- INCH / METRIC SERRATION
- High precision power chucks
- Wedge-hook design with centrifugal force compensation
- 3 jaws
- Reduced weight
- HFKS-2G Ø165 - 320 mm

**Centco4**

- LARGE THROUGH-HOLE
- INCH / METRIC SERRATION
- Centrifugal force compensation
- 2+2 jaws
- Independent self centering clamping in 2 axis
- Centco4 Ø210 - 630 mm

**KNCS-N**

- Large through-hole
- High speed only for N version
- High flexibility
- 2 or 3 jaws
- Fully sealed on 2G version
- KNCS-N /NB Ø140-1000 mm
- KNCS-2G Ø170 – 630 mm
- KNCS-NB-CL Ø630 mm

**AP-NT R**

- Fully sealed
- Closed center
- 3 jaws
- Centrifugal force compensation
- AP-R Ø170-400 mm
- NT-R Ø170-400 mm

**APL - NTL RR**

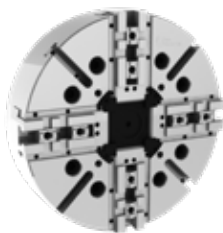
- HIGH PRECISION 3 JAW SEALED POWER CHUCK
- Suitable for manual and/or robotic use
- LONG STROKE
- 3 jaws
- Centrifugal force compensation
- APL-RR Ø215-400 mm
- NTL-RR Ø260-400 mm

**KIT RR**

- QUICK JAW CHANGE SYSTEM TO CONVERT STANDARD CHUCK IN QUICK-CHANGE CHUCK Ø 210 - 400
- Easy coupling and uncoupling with spring loaded button
- Safety against accidental release
- Suitable for manual and/or robotic use
- Ready for robotized change

5.2

2+2 JAW CHUCKS

**TPT**

- 2+2 independent jaw movement
- TONGUE & GROOVE
- Closed center
- Individual jaw regulation
- TPT Ø210-800 mm
- TPT-RC Ø1000 - 2000 mm

**TSX**

- High precision pull-down chucks
- Active pull-down
- TONGUE & GROOVE
- 2+2 jaws
- TSX-C Ø265-315 mm

**TEF-TER**

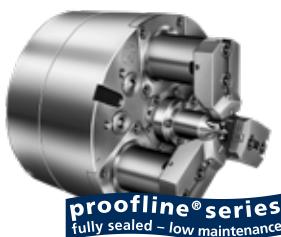
- Pull-down chucks
- 2+2+2 equalising (12 point contact)
- 6 Floating or Rigid jaws by model
- Active pull-down
- TONGUE & GROOVE
- TEF Ø260-850 mm
- TER Ø260-850 mm

**IEP**

- 6 jaws (2+2+2) all sizes
- INCH SERRATION or TONGUE & GROOVE by model
- MODULE 2 SERRATION for D version and large diameters
- Closed center
- Centrifugal force compensation
- IEP Ø400-800 mm
- IEP-D large diameters Ø1000-1600 mm

5.6

SHAFT CHUCKS

**GSA**

- Compensating clamping of master jaws
- Retractable jaws
- Complete machining of shafts in one setup
- GSA Ø200-480 mm

**W**

- Compensating or self centering clamping
- Quick change for jaws and face driver
- Retractable jaws via retractable jaw carrier
- Complete machining of shafts in one setup
- W Ø215-460 mm

**CSC**

- Axially movable and lockable center point
- Retractable jaws via retractable jaw carrier
- Balancing chambers for fine balancing on the machine
- CSC Ø260-325 mm

**TS**

- Active pull-down
- TONGUE & GROOVE
- Quick jaw change on RM versions
- Compensating chucks on TS-CP vers.
- 2 or 3 jaws based on the model and diameter
- Floating or Rigid jaws based on the model
- TS-C/TS-CP Ø135-650 mm
- TS-RM Ø170-530 mm

**TSB**

- TONGUE & GROOVE
- Large through-hole
- Compensating chucks on CP vers.
- 3 jaws
- Floating or Rigid jaws based on the model
- TSB Ø220-330 mm

**TX**

- High precision pull-down chucks
- Active pull-down
- TONGUE & GROOVE
- 3 jaws
- TX Ø170-530 mm

**FRC-N FRS**

- Lever chucks
- Large compensating stroke
- TONGUE & GROOVE
- Center point adjustable
- Rigid jaws
- 3 jaws
- FRC-N Ø215-365 mm
- FRS Ø215-365 mm

**SJL SJLS**

- 6 jaws (2+2+2) all sizes
- Jaws equalising as a pair / mechanism lockable
- METRIC SERRATION or TONGUE & GROOVE by model
- For thin walled or deformation sensitive components
- Centrifugal force compensation
- SJL Ø225-800 mm
- SJLS Ø225-400 mm

**AXN**

- Automatic indexing chuck
- Hydraulic clamping and indexing
- Divisions: 4 x 90° / 8 x 45° / 3 x 120° / 6 x 60° or specials
- 2 jaws
- AXN Ø210 - 1250 mm

**ACS**

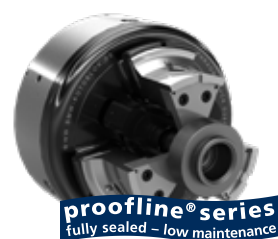
- Self centering column chucks
- Pull-down chucks
- ACS-E: for external clamping
- ACS-I: for internal clamping
- 3 and 6 jaws
- 5 jaws (only ACS-E 5-520)
- ACS Ø110 - 520 mm

**D**

- QUICK JAW CHANGE
- O.D. or pitch line clamping
- Centrifugal force compensation
- D: Ø160 - 400 mm

**D-KOMBI®**

- With pull-down fingers jaw
- QUICK JAW CHANGE
- Radial and axial clamping
- Flat gripping force curve
- D-KOMBI: Ø210 - 400 mm

**D-PLUS**

- Open center with through-hole
- Radial O.D. or pitch line clamping
- Centrifugal force compensation
- D-PLUS: Ø260 - 315 mm

**D-VARIO**

- Radial fine adjustment of the center line
- Key Lock System = Quick positioning of jaws for gears with different number of teeth
- Modular system with jaws for pitch line or outside clamping
- D-VARIO: Ø215 mm

**COMOT-DZ**

- Hybrid collet chuck
- Use of vulcanize standard collets
- Clamping of thin walled workpieces
- Long service life due to case hardened components and lubrication
- Ideal for bar loader machines
- Best tool accessibility
- Seal against contamination of the collet
- COMOT-DZ Ø42-65 mm

**COMOT-AZ**

- Hybrid collet chuck
- Use of vulcanized standard collet
- Optional premium adapter for the use of slotted high-precision collets
- Optional use of expanding mandrels of the connect series EMX-F-CO
- Preparation for air sensing
- Radial fine adjustment
- COMOT-AZ Ø42-65-100 mm

**COMOT-NZ**

- Hybrid collet chuck
- Large selection of standard collets
- Low deformation clamping of thin walled workpieces
- Long service life due to case hardened components and lubrication
- Sealed against contamination
- Rigid axial stop front or in the bore
- Optional use of expanding mandrels of the connect series EMX-F-CO-NZ
- COMOT-NZ Ø42-65-100 mm

**KSZ-MB / PPBE**

- Collect chuck
- For bar machining
- Push actuation
- Quick and simple installation to all lathes
- Quick set-up by means of bayonet locking cap
- For highest speeds
- Clamping / unclamping of chuck during spindle rotation is possible
- KSZ-MB Ø42-52-60-70-80 mm

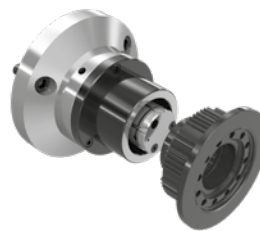
MANUAL OR POWER OPERATED EXPANDING MANDRELS - ADAPTER FLANGES

**EM-B**

- Hand or power operated expanding mandrels
- Large expansibility
- Flange mounting
- Very rigid design
- EM-B: 0 - 4 (Ø16 - 129,5 mm)

**Adapter flanges EM / EMX**

- ISO-A for expanding mandrels
- The expanding mandrels have a cylindrical mounting
- Flanges for machine spindle ISO-A 702/1-DIN 55026

**Special mandrels**

- Special solutions for your applications



EM-B-S
*Workpiece:
Distribution plate



EM-B-S
*Workpiece: Rotor
(Sintermetall)



EM-G
*Workpiece:
Hub flange



SPECIAL
*Workpiece:
Bearing support

9.2

OPEN CENTER CYLINDER

**VNK**

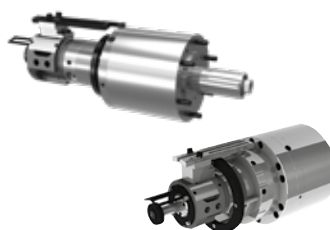
- Open center rotating hydraulic cylinders
- Up to 45 bar
- Extra short overall dimensions
- Stroke control via proximity switch or LPS
- THROUGH-HOLE: Ø37.5-127.5 mm

**VSG**

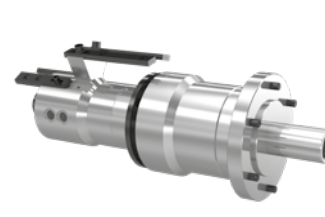
- Open center rotating hydraulic cylinders
- Up to 45 bar
- EXTRA large through-hole
- Stroke control via proximity switch or LPS
- THROUGH-HOLE: Ø165 - 204 mm

9.3

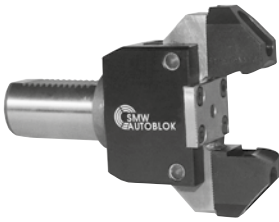
DOUBLE PISTON CYLINDER

**DCN/DCU/DCR/DCE**

- Double piston rotating hydraulic cylinders
- Up to 70 bar
- Modular system for different piston strokes
- Central bore for air, coolant or oil
- Stroke control via proximity switch or LPS

**ZHVD-SZ**

- Double piston rotating hydraulic cylinders
- Up to 80 bar
- Central bore for air, coolant or oil
- Stroke control via proximity switch or LPS



GF 80

- BAR PULLING CHUCK
- Inch serration
- Spring operated bar pulling chuck
- Spring actuation
- For stationary outside clamping



EMX

- Highest repeatability
- Large expansibility
- Preparation for air sensing
- Segment sleeves vulcanized (option)
- FP version: with pull-down
- C version: Case hardened / wear resistant segment sleeves
- EMX-P: 1-11 (Ø 14.7 a 131.7 mm)
- EMX-F/FP: 1-6 (Ø 19.7 a 132.9 mm)
- EMX-C: 1-5 (Ø25 a 120 mm)



EMX-S

- Power operated
- For TURNING, GRINDING and MILLING
- Case hardened / wear resistant segment sleeves
- Large expansibility
- Very rigid design
- EMX-S: 1 - 4 (Ø18 - 105 mm)



EM-A EM-AL

- Hand or power operated expanding mandrels
- Large expansibility
- Flange mounting
- Very rigid design
- EM-A: 1 - 11 (Ø14,7 - 131,7 mm)

9.1

CLOSED CENTER CYLINDER - HYDRAULICS | PNEUMATICS



SIN-S

- Closed center rotating hydraulic cylinders
- Up to 70 bar
- Central bore for air or coolant
- Stroke control via proximity switch or LPS
- SIN-S 50-250



SIN-HL/L

- Closed center rotating hydraulic cylinders
- Up to 70 bar
- Central bore for air or coolant
- Stroke control via proximity switch or LPS
- High-low gripping force clamping on HL version
- EXTRA long stroke on L version
- SIN-HL/L 85-175



CSN

- Rotating pneumatic cylinders
- Up to 7 bar
- Stroke control
- Optional safety valve
- CSN 100-250

9.4

SENSOR - INTERFACE - UNION



Positioning system LPS 4.0

- Linear positioning system cylinder stroke
- Analog or digital output signal
- Monitoring of the entire cylinder stroke
- LPS 4.0 14 = measuring range 14 mm
- LPS 4.0 48 = measuring range 48 mm
- LPS 4.0 80 = measuring range 80 mm
- LPS 4.0 120 = measuring range 120 mm



Binary Interface Box 4.0

- Binary Interface Box
- Binary output signal
- Suitable to LPS 4.0 series
- Easy setup - Plug & Play
- Binary signal backward compatible to LPS 4.0



RU-1-10 / RU-1-16 / RU-2-22

- Rotary union for media supply for rotating cylinders
- Universal for air, oil or coolant
- RU-1-10 / RU1-16 = 1 MEDIUM
- RU-2-22 = 2 MEDIA

**SP**

- EXTRA LARGE THROUGH-HOLE Ø26 - 115 mm
- INCH SERRATION
- 3 jaws
- SP-ES: Chuck with rapid and clamping stroke
- SP-L: Chuck with long jaw stroke
- SP: Ø125-350mm

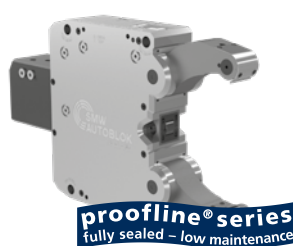
BIG BORE®

- With pneumatic sequence chucks on FZA2G version
- EXTRA LARGE THROUGH-HOLE
- INCH SERRATION

- DIFFERENT FEATURES BY MODEL:
- N: Standard jaw stroke - 3 jaws
- N ES: rapid and clamping stroke - 3j
- SC: rapid and clamping stroke - 3j - Proofline®
- EXL2G: EXTRA large rapid and clamping stroke - 3j - Sealed master jaws

- AZ2G: Self centering or compensating clamping - 3j
- FZA2G: EXTRA large jaw stroke - 3 integrated centering jaws and 3 compensating jaws
- EXL-SC2G: Clamping with spring - 3j - Proofline®

SELF-CENTERING STEADY RESTS FOR TURNING AND GRINDING

**SLU**

- Self-centering Steady Rest BASIC LINE
- Monitoring open / closed via proximity switch
- Special sizes on request
- Pivoting upper arm for automatic vertical loading (A version)
- Hardened arms
- SLU 1 - 6 (range 4/64 to 125/460)
- SLU-A 1-6 (range 4/52 to 160/460)

SLU-X

- Self-centering Steady Rest STANDARD LINE
- Monitoring open via proximity switch
- Special sizes on request
- SLUX 1-5.1 (range 6/70 to 85/350)

SLUB

- Self-centering Steady Rest STANDARD LINE
- Monitoring open / closed via proximity switch
- Special sizes on request
- EXTRA compact with side mounted cylinder and additional pivoting upper arm for automatic vertical loading (A version)
- SLUB 3-6 (range 12/152 to 125/460)
- SLUB-A 3-6 (range 12/130 to 160/460)

SR - SRA

- Self-centering Steady Rest PREMIUM LINE
- Integrated fine adjustment of the center line on CL version
- Integrated coolant / air flush
- Diameter measuring system or monitoring open via proximity switches
- SR 2 - 6 (range 20/101 - 125/460)
- SRA 2 - 6 (range 20/80 - 175/460)

STATIC CHUCKS PNEUMATIC / HYDRAULIC

**USC - US Big diameters**

- Unit with static cylinder
- With stroke control
- Can be equipped with different types of chucks
- 2, 3 or 4 jaws (large diameters)
- USC: Ø140-260 mm.
- US Big diameters: Ø400-800 mm

US

- STATIONARY CYLINDER AND CHUCK UNIT (DIFFERENT FROM THE MODEL)
- Closed center chucks type CL/AN/AL
- Pneumatic static cylinder
- US Ø80 - 315 mm

MJ MANUAL JACK

- STAND ALONE
- Use of power chucks on milling machines, 5 axis machines, milling and turning machines
- Ideal for Multi pallet FMS systems
- SIZES: Ø300-720 Plain Back

HB PB

- STATIONARY CHUCK, HYDRAULIC - BUILT-IN HYDRAULIC CYLINDER
- INCH SERRATION or TONGUE & GROOVE by model
- 2 and 3 jaws
- HB Ø130 - 315 mm
- PB: Ø130 - 315 mm



proofline®series
fully sealed – low maintenance

SF-RZ

- 2 Position hydraulic ring indexing chuck
- 3 self centering jaws
- Large evacuation windows for easy chip flow
- Fully automatic and controlled indexing
- SF-RZ Ø400 - 600 mm



SF-RAZ

- 2 Position hydraulic ring indexing chuck
- TONGUE & GROOVE
- 6 jaws (3 self centering and 3 compensating jaws)
- Large evacuation windows for easy chip flow
- Fully automatic and controlled indexing
- SF-RAZ Ø750 - 1050 mm
- SF-RAZ2G Ø710 - 1100 mm



HYND-S HYDL-S

- POWER CHUCKS WITH BUILT-IN HYDRAULIC CYLINDER
- INCH SERRATION
 - 3 or 4 jaws
 - Hydraulic oil supplied through the machine spindle wall
 - HYDL-S - Long Stroke
 - HYND-S Ø180 - 400 mm
 - HYDL-S Ø500 - 800mm



CC

- INCH SERRATION
- Stationary centering and dampening chuck
- 3 jaws
- Integrated dampener
- CC Ø240 - 470 mm



proofline®series
fully sealed – low maintenance

K / KA

- Self-centering Steady Rest PREMIUM LINE
- Compact design
- Integrated coolant / air flush
- Diameter measuring system or monitoring open via proximity switches
- Special sizes on request
- K 2 - 6.1 (range 25/180 to 215/510)
- KA 7-7.1 (range 340/660 to 650/910)



proofline®series
fully sealed – low maintenance

KLU / KLU-A

- Self-centering Steady Rest PREMIUM LINE
- Narrow arms for crankshafts
- Integrated coolant / air flush
- Diameter measuring system or monitoring open via proximity switches
- Special sizes on request
- KLU 215 - 429 (range 20/101 to 30-245)
- KLU-A 530-540 (range 70/293)



proofline®series
fully sealed – low maintenance

RX

- Self-centering Steady Rest PREMIUM LINE
- Extra compact design
- Patented double cam system
- Integrated coolant / air flush
- Monitoring Steady Rest open via proximity switch
- Special sizes on request
- RX 2 - 6.1 (range 10/210 to 250-685)



SRG / SRG-B

- Grinding Steady Rest with fine adjustment of the center
- Horizontal and vertical fine adjustment of the grinding center
- Retractable Steady Rest arms
- Port for compressed air against dust and coolant
- Monitoring via proximity switches
- Ideal for follow down grinding

13

CHUCK SWITCHING SYSTEM / ACCESSORIES



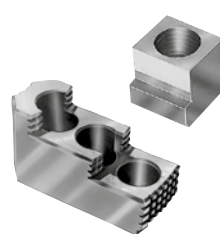
STP

- Stationary chuck, pneumatic - Built-in pneumatic cylinder
- INCH SERRATION
- 3 jaws
- With through-hole
- STP: Ø125 - 280 mm



CCS

- MANUAL CHUCK SWITCHING SYSTEM
- Highest repeatability and change-over accuracy
- Automatic coupling of chuck in a single actuation
- Large through-hole
- Optical control for the locking status



Top jaws, T-nuts

- Hard top jaws
- Soft top jaws
- T-nuts



GREASE

- Special grease for manual and power chucks
- K05 - Cartridge content 500g and Can content 1000g
- K67 - Cartridge content 500g and Can content 1000g
- Grease gun for cartridges - also refillable from grease can

STATIONARY PORTFOLIO

All SMW-AUTOBLOK stationary products are dedicated to static work-holding for machining centers, milling machines, and special machines.



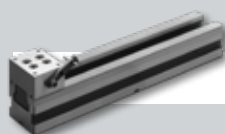
Zero point systems 1



Twin vises 2



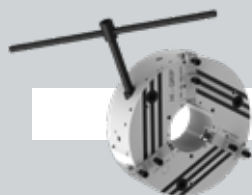
5-Axis vises 3



Multiple Clamping System 4



Precision machine vises 5



Manual chucks 6



Stationary chucks 7

1.1

ZERO POINT SYSTEMS | APS



proofline® series
fully sealed – low maintenance

APS 100

BASIC/PREMIUM

- Spring to close and TURBO function to increase the holding force
- 2 clamping jaws
- Air sensing to confirm pallet presence for automation applications (only PREMIUM)
- Air cleaning of the clamping pin seat (only PREMIUM)



proofline® series
fully sealed – low maintenance

APS 140

BASIC/PREMIUM SC/PREMIUM LIGHT/PREMIUM LIGHT SC

- Spring to close and TURBO function to increase the holding force
- 2-3 clamping jaws
- Air sensing to confirm pallet presence for automation applications (only PREMIUM SC)
- Stroke control SC for automation application
- Air cleaning of the clamping pin seat (not for BASIC)

1.2

APS SETTING TABLES



SERIES 800-SERIES 1200

- Accurate precision
- Rotation speed variable
- Hand set jogging function with 3 speed
- Reduced set-up
- Safety pull cord
- customized setting tables are possible

1.3

CLAMPING UNITS



with 2 pieces APS 140

- Pre-assembled clamping unit with 2 pieces APS 140 Premium Light or Basic
- Universal applicable
- Fast and easy set-up
- Specific models for vertical or horizontal machining center

1.5

CLAMPING PALLETS



APS

- Pre-assembled clamping pallet for APS 100 / 140
- Universal applicable
- Ready to use
- Fully assembled
- Rust protected
- High quality steel (1.1730)

1.6

SPECIAL CLAMPING UNITS



for vertical turning lathes

- Pre-assembled clamping unit with APS190 Premium and APS140 Premium Light
- For vertical turning machining center
- Universal applicable with ASA flanges or directly on the spindle nose
- Fast and easy set-up
- Visual control for open and turbo
- Air cleaning



proofline® series
fully sealed – low maintenance

APS 160

PREMIUM LIGHT SC

- Spring to close and TURBO function to increase the holding force
- 3 clamping jaws
- Air sensing to confirm pallet presence for automation applications
- Stroke control SC for automation application
- Air cleaning of the clamping pin seat



proofline® series
fully sealed – low maintenance

APS 190

PREMIUM SC/PREMIUM SC-6S

- Spring to close and TURBO function to increase the holding force
- 3 clamping jaws
- Air sensing to confirm pallet presence for automation applications
- Stroke control SC for automation application
- N.6 seats prepared to mount pneumatics/hydraulics couplers (only PREMIUM SC-6S)



proofline® series
fully sealed – low maintenance

APS 250

PREMIUM SC

- Spring to close and TURBO function to increase the holding force
- 6 jaws locking of the clamping pin for the strongest and vibration free holding
- Air sensing to confirm pallet presence for automation applications
- Stroke control SC for automation application



Clamping pins

TYPE A CENTERING PIN

- Used for centering and clamping
- TYPE B REFERENCE PIN
- Used for reference and clamping
- TYPE C PULL-DOWN PIN $\pm 0.05\text{mm}$
- Only for clamping
- TYPE C FLOATING PIN
- Floating $\pm 0.5\text{mm}$

1.4

MODULE HEIGHT EXTENSIONS



for 5-axis machining center

- Ready for the most common machine table T-slots centerline
- Pre-assembled clamping unit with 4 pieces APS 140 Premium Light or Basic
- For 5-axis machining center
- Universal applicable
- Fast and easy set-up



H60

- Specifically designed for ROTARY TABLES and small 5-AXIS MACHINES
- Pre-assembled clamping unit with 1 piece APS 140 Premium SC
- Universal applicable
- Fast and easy set-up
- Anti rotating protection
- Air cleaning
- For every unit the key (Id. No. 46162133) is included



H100

- Pre-assembled module extension unit with 1 piece APS 190 Premium
- Universal applicable
- Fast and easy set-up
- Anti rotating protection
- Air cleaning
- For every unit the key (Id. No. 46162133) is included



H80/H120/H180

- Pre-assembled module extension unit with 1 piece APS140 Premium SC
- Universal applicable
- Fast and easy set-up
- Anti rotating protection
- Air cleaning
- For every unit the key (Id. No. 46162133) is included

1.7

WPS



for 5 AXIS machine

- Ready for the most common machine table T-slots centerline
- Pre-assembled clamping unit with 5 pieces APS 140 Premium Light or Basic
- Universal applicable
- Fast and easy set-up
- Specifically designed for Rotary Tables and small 5-axis machines



for 3 AXIS machine

- Pre-assembled clamping unit with 6 pieces APS 140 Premium Light or Basic
- Universal applicable
- Fast and easy set-up



proofline® series
fully sealed – low maintenance

WPS Mini

- Mini workpiece positioning system
- Mini version - 40 mm diameter
- Manual quick actuation (270° rotation)
- Highest repeatability
- Maximum pull-in and holding forces



proofline® series
fully sealed – low maintenance

WPS Max

- Workpiece positioning system
- Ideal for workpiece direct clamping
- Highest precision
- Single quick-actuation
- Opening / closing with only 3.5 rotations
- Maximal holding forces

**WPS Z-Flex****WORKPIECE POSITIONING SYSTEM**

- Ideal for workpiece direct clamping
- Highest precision
- Single quick-actuation
- Opening / closing with only 3.5 rotations
- Maximal holding forces
- Continuously adjustable

**WPS XL****WORKPIECE POSITIONING SYSTEM**

- XL version Ø140 mm
- Ideal for workpiece direct clamping
- Highest precision
- Single quick-actuation
- Maximal holding forces

**WPS ZeroAct****CONNECTABLE FLEXIBLE ZERO POINT MODULE**

- Up to 3 modules connectable in a row with central actuation
- Very flat design
- Manual quick actuation (270° rotation)
- Highest repeatability
- Maximum pull-in and holding forces

**SLX-Digit****Hydraulic long-stroke vise**

- Digitized by integrated sensoric
- Automated quick jaw change
- Self-centering clamping

**ST5-2G****ST5-2G 080 / ST5-2G 125 Long version**

- Sealed spindle for protection against contamination
- Self-centering clamping
- Very compact design
- Large clamping range
- With SinterGrip clamping insert jaws
- Interfaces for zero point clamping systems

**IMG****3 VISES IN ONE THANKS TO THE PATENTED TELESCOPIC FULL**

- PROTECTED MECHANISM
- Ideal for OP10 with sintergrip inserts and OP20 with Clak parallels
- Modular: self centering; double clamping; fixed clamping
- Interface for Zero Point clamping systems and Plus5 52/96

**PLUS 5****MECHANICAL ZERO POINT SYSTEM**

- Locking and unlocking system of the pins with a rotation of only 180 degrees
- High pull down force
- Does not require a torque wrench. The limit switch determines locking / unlocking
- Repeatability

**CV CV-S CV-VCS CV-CN**

- Quick change system CLAK-SYSTEM for jaws and parallels optional available
- Wide range of accessories
- Compact design

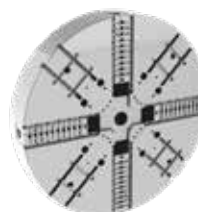
More **MANUAL CHUCKS** details on the **TURNING PORTFOLIO**

**Sintergrip****CLAMPING INSERTS**

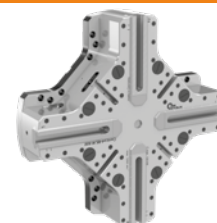
- Low clamping depth of only 3.5 mm
- No pre-marking necessary
- Highest stability and active vibration absorption
- Increase of the cutting forces compare to other systems

**HG****QUICK JAW CHANGE**

- TONGUE & GROOVE
- 3 jaws
- HG-N Ø160-630 mm
- HG-NB Ø800-1000 mm
- HG-2G Ø315-630 mm
- HG-B-2G Ø800-1000 mm
- HG-F Ø160-400 mm

**PTF****INDEPENDENT MANUAL CHUCKS**

- TONGUE & GROOVE
- Closed center
- 4 jaws (all diameters)
- Manual clamping and radial setting of jaws
- PTF Ø 530 - 2000 mm

**Centco4 MLW****INDEPENDENT SELF CENTERING CLAMPING IN 2 AXIS**

- INCH SERRATION
- 2+2 jaws
- Weight-optimized chuck body
- CENTCO4 MLW Ø315 - 1400 mm



TV

Protected vise Ø100-160-200-250-315 (315 only Pneumatic vers.)

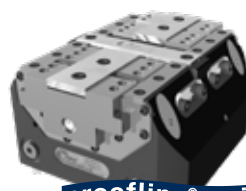
- Pneumatic / Hydraulic version
- NORMAL/LONG STROKE and FIXED JAW
- Air purge



STV-2 STV-3

Spring and air operated vise Ø125 (only 2 jaws) 180-225

- 2 or 3 jaws
- Springs to clamp, pneumatic to open
- Turbo function to increase the clamping forces
- NORMAL/LONG STROKE
- Pneumatic jaw stroke control valve
- Air purge
- Air sensing



PT

Protected vise Ø100-125-160-200-250 (250 only Hydraulic vers.)

- Protected against swarf and chips
- Pneumatic / Hydraulic version
- NORMAL/LONG STROKE and FIXED JAW
- Pneumatic jaw stroke control valve
- Air purge
- Air sensing



PT RR

Protected vise Ø160-200-250

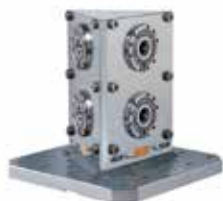
- QUICK JAWS CHANGE
- Pneumatic / Hydraulic version
- Pneumatic jaw stroke control valve
- Long stroke
- Air sensing
- OD and ID clamping

4.2

TOMBSTONES

5.1

PRECISION MACHINE VISES



RT

TOMBSTONES, ANGLE PLATES, PLATES AND SUBPLATES

- Wide range of standard
- Products and shortest delivery times
- Highest stiffness and anti-vibration design
- Best accessibility of the machine spindle to the workpiece
- Highest accuracy and precision



Tci / Mci

PRECISION BENCH VISE

- Quick pre-positioning for the movable jaw
- Pull down jaws with 1 serrated clamping side
- Jaws for SinterGrip clamping
- Parallels quick change system CLAK
- Wide range of standard accessories
- Interface Zero point clamping system (optional)



Tti-2G

NC CLAMPING VISE

- Mechanical precise power transmitter
- Low maintenance sealed spindle
- Easy and quick cleaning
- Exact clamping force pre-adjustment (up to 11 steps)
- Standard jaw interface (Allmatic-interchangeable)



VCM

NC CLAMPING VISE WITHOUT POWER TRANSMITTER

- High clamping forces
- Easy and quick cleaning
- Huge range of accessories

7.1

STATIONARY CHUCKS

More STATIONARY CHUCKS details on the TURNING PORTFOLIO



USC

WITH STROKE CONTROL

- Pneumatic static cylinder
- Unit with static cylinder
- With stroke control
- Can be equipped with different types of chucks
- USC Ø140 - 260 mm



HB / PB

INCH SERRATION and TONGUE&GROOVE

- Pneumatic and Hydraulic version
- Built-in hydraulic cylinder
- 2 and 3 jaws
- HB / PB Ø130 - 315 mm



Centco4 digit-HLW

HYDRAULIC CHUCK 2+2 JAWS CHUCK Ø 750 MM

- Digitized by integrated sensor technology
- Monitoring of different process parameters even during processing
- Non-contact power supply for sensors and signal output by means of inductive couplers



GTX CHUCK

- Manual actuated
- For standard collets
- Highest repeatability
- Sensitive adjustment of clamping force

GTX Collects

- Collets for GTX
- Round, square, hexagonal

AUTOMATION

All SMW-Autoblok automation products were born to answer customer needs of advancing automated production.

Our clamping solutions that see vises, pallets, and clamping units are designed to make production faster, more flexible, and safe.

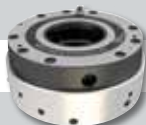
In accordance with SMW-Electronics new lines of Automation products were born.



Zero-Point Systems 1



APS UNIT single and multiple 2



ROTARY PLATE 3



GRIPPERS 4



PRS 5



Mechatronic Grippers 6



AT-PM 7



PALLET single and multiple 8

STORAGE 9

1

ZERO POINT SYSTEMS | APS

More APS details on the STATIONARY PORTFOLIO



APS 100 - 140 - 160 - 190 - 250

CUSTOMER BENEFITS:

- Fully sealed (proofline)
- Low installation height due to the compact design
- Modular construction kit system
- Significantly reduced cost due to reduced set-up times
- CLAMPING SYSTEM WITH 3 JAWS AT 120°
- STROKE CONTROL SYSTEM
- MAXIMUM RIGIDITY
- MAXIMUM ACCURACY
- TURBO FUNCTION

2.4

CLAMPING UNIT FOR MULTIPLE APS

WITHOUT INTEGRATED FEEDING ON MACHINE



1 FEEDING

WITHOUT INTEGRATED FEEDING ON MACHINE (for ex. 3 axis machines)

- 1 FEEDING: for 2/4 APS 140 BASIC

2 or 3 FEEDINGS

WITHOUT INTEGRATED FEEDING ON MACHINE (for ex. 3 axis machines)

- 2 FEEDINGS: for 2/4/6 APS 140E PREMIUM LIGHT/BASIC
- 3 FEEDINGS: for 2/4 APS 140E PREMIUM LIGHT SC

2.7

PRE-ASSEMBLED CLAMPING UNIT FOR MULTIPLE APS

More CLAMPING UNIT details on the STATIONARY PORTFOLIO



for multiple APS with 2, 4, 5 or 6 APS 140 or SPECIAL

- Quick pneumatic connections
- Turbo function for highest pull-in forces
- Solid base plate (height 28 mm) for maximum stiffness at a total height of only 60 mm
- Easy mounting on the machine table due to positioning holes

2.1

MODULE HEIGHT EXTENSION ONE APS



APS 100/140/ 190

WITHOUT INTEGRATED FEEDINGS
(for example 3 axis machine)
PREPARED for 5-axis machines
until 6 FEEDINGS

with APS INCLUDED

WITHOUT INTEGRATED FEEDINGS
(for example 3 axis machine)
PREPARED for 5-axis machines
until 6 FEEDINGS

2.2

SAB-1 VALVE



SAB-1

The safety valve SAB-1 maintains air pressure in the cylinder pallet transportation / storage or machining without feed.

2.3

DISTRIBUTOR

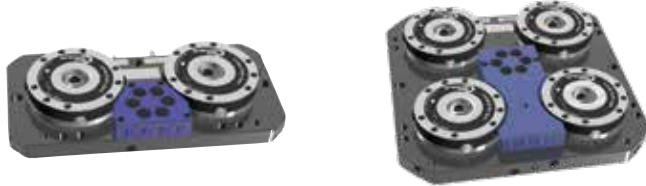


CUSTOMIZED

To be designed specifically for each machine until to 6 feedings
(must be defined in case of order)

2.5

MEDIA FEED WITHOUT INTEGRATED MACHINE FEEDINGS (for example 3 axis machines)



for Plate with 2 APS 140E

- Tool holder shaft support
- Works as a support even when a tailstock is not available
- Application on turret
- No coolant needed
- Models available for all machines

for Plate with 4 APS 140E

- Tool holder shaft support
- Works as a support even when a tailstock is not available
- Application on turret
- No coolant needed
- Models available for all machines



2.6

MEDIA FEED



5 AXIS 2-4-6 FEEDINGS

- for plate with 4 APS 140 E PREMIUM LIGHT SC
- MEDIA FEED PREPARED FOR 4 COUPLERS (AT MAXIMUM)
- Couplers not included

3.1

ROTARY PLATE FOR ROBOT OR MANUAL TOOLING FAST SET-UP ON TURNING WORK HOLDING



MANUAL

OPERATION APS MODULE

Manual tooling fast set-up for pallets and chucks
SIZES Ø202 - Ø260 - Ø330 - Ø420 - Ø520 - Ø650 - Ø1000 - Ø1400

AUTOMATIC

OPERATION APS MODULE

Robot or manual tooling fast set-up on turning spindles
SIZES Ø202 - Ø260 - Ø330 - Ø420 - Ø520 - Ø650

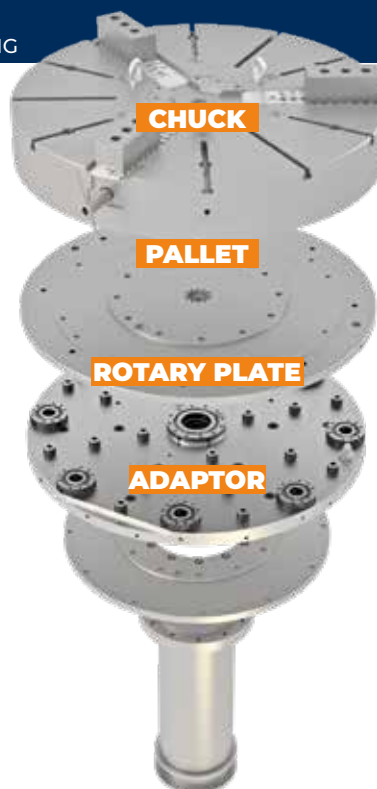
AUTOMATIC

OPERATION APS MODULE + 3 FEEDINGS

Robot or manual tooling fast set-up on turning spindles
SIZES Ø202 - Ø260 - Ø330 - Ø420 - Ø520 - Ø650

Applications/Customer benefits

- Pallet / tooling fast set-up
- Chucks fast set-up on turning spindles, manual connection (with screw) between chuck and cylinder for manual Rotary Plate
- Tooling presence with air sensing function for automatic Rotary Plate
- SC stroke control function
- Positioning accuracy < 0,005 mm
- 3 Pneumatic feedings (6 bar) available on pallet for automatic Rotary Plate+3 feedings



3.2

ACCESSORIES



PNEUMATIC ROTATING MANIFOLDS

- 4 PNEUMATIC Feedings ROTATING MANIFOLD to use with standard RU 2-22 rotating joint
- 3 PNEUMATIC Feedings ROTATING MANIFOLD for APS modules Automatic operation

MAGNET PROTECTION COVERS

- USE IN ROTATION ONLY WITH CLOSED APS
- for APS 140 - 160 - 190 and 250

4.1

2-GRIPPERS PP PL 2PX



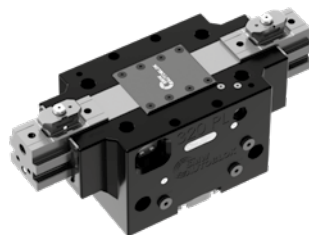
PP 125-160-200-250

- PROTECTED - PNEUMATICS - HYDRAULICS. With steel body
- Tongue&Groove master jaws
 - Stroke control jaws analogic continuous inductive sensor (optional)
 - Pneumatic open/close stroke control master jaws valve (optional)
 - Air sensing
 - Possibility of rear and side feeding
 - Normal and Long Stroke type



PL 64-80-100-125-160-200-250

- PROTECTED - PNEUMATICS With aluminium body
- Stroke control jaws analogic continuous inductive sensor (optional)
 - Possibility of rear and side feeding
 - PLS springs version to increase the clamping force in O.D. Clamping (optional)
 - Pneumatic open/close stroke control master jaws valve (optional)



PL 320-380 RR

- PROTECTED - PNEUMATICS - QUICK JAWS CHANGE. With aluminium body
- Jaws prepared for the quick jaws change and fixed mounting of the jaw
 - Stroke control jaws analogic continuous inductive sensor (optional)
 - Possibility of rear and side feeding
 - Pneumatic open/close stroke control master jaws valve (optional)



2PXS 64-80-100

- SMALL SIZES UNIVERSAL 2-GRIPPERS With aluminium body
- PXS-N/L=normal/long stroke
 - PXS-NS=normal stroke + springs
 - PXS-LS=long stroke + springs
 - PXS-..E/I=OD / ID clamping
 - Stroke control types: continuous and ON/OFF analogic continuous and ON/OFF magnetic

4.3

3-GRIPPERS 3MN 3PX



3MN 64-80-100-125-160-200-250

- PNEUMATICS - PROTECTED
- The pallets are prepared for handling with robot using the PPL vises and the corresponding top jaws
- Aluminium body to contain the gripper weight
- POSSIBILITY TO INSERT SPRING WORKSTOP
- MNS spring model only for OD cl.



3MN 320-380 RR

- PNEUMATICS - PROTECTED - QUICK JAWS CHANGE
- The pallets are prepared for handling with robot using the PPL vises and the corresponding top jaws
- Jaws prepared for the quick jaws change and fixed mounting of the jaw



3PXS 64-80-100

- SMALL SIZES UNIVERSAL 3-GRIPPERS With aluminium body
- 3PXS-N/L=normal/long stroke
 - 3PXS-NS=normal stroke + springs
 - 3PXS-LS=long stroke + springs
 - 3PXS-..E/I=OD / ID clamping
 - Stroke control types: continuous and ON/OFF analogic continuous and ON/OFF magnetic



3PXM 125-160-200

- MEDIUM SIZES UNIVERSAL 3-GRIPPERS. With aluminium body
- 3PXM-N/L=normal/long stroke
 - 3PXM-NS=normal stroke + springs
 - 3PXM-LS=long stroke + springs
 - 3PXM-..E/I=OD / ID clamping
 - Stroke control types: continuous and ON/OFF analogic continuous and ON/OFF magnetic

6.1

MECHATRONIC GRIPPERS



MX-S 50

- UNIVERSAL SMALL GRIPPERS
- 2 fingers parallel
- IO-Link / Digit IO
- Mechanical self locking
- IP40 Protection class



MX-M 80

- UNIVERSAL MEDIUM GRIPPERS
- 2 fingers parallel
- IO-Link / Digit IO
- Mechanical self locking
- IP64 Protection class



MX-L 320/520

- UNIVERSAL LARGE GRIPPERD
- Long stroke gripper
- 2 fingers parallel
- Profinet / EthernetIP
- Mechanical self locking and additional engine brake
- IP67 Protection class





2PXM 125-160-200

MEDIUM SIZES UNIVERSAL 2-GRIPPERS. With aluminium body

- PXM-N/L=normal/long stroke
- PXM-NS=normal stroke + springs
- PXM-LS=long stroke + springs
- PXM-..E/I=OD / ID clamping
- Stroke control types: continuous and ON/OFF analogic continuous and ON/OFF magnetic



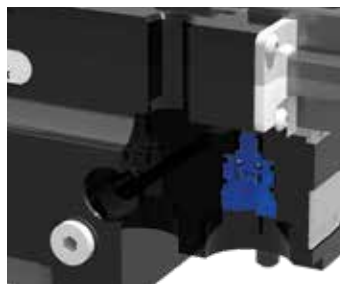
2PXL 250

LARGE SIZES UNIVERSAL 2-GRIPPERS With aluminium body

- PXL-N/L=normal/long stroke
- PXL-NS=normal stroke + springs
- PXL-LS=long stroke + springs
- PXL-..E/I= clamping
- Stroke control types: continuous and ON/OFF analogic continuous and ON/OFF magnetic

4.2

ACCESSORIES



PNEUMATIC VALVE (optional)

The pneumatic open/close stroke control valve signals the locking jaws end-of-stroke positions, both in fully open and fully closed positions.



FINGERS/TOP JAWS

FOR PP-L VISES AND 2PX GRIPPERS



3PXL 250

LARGE SIZES UNIVERSAL 3-GRIPPERS With aluminium body

- 3PXLN/L=normal/long stroke
- 3PXL-NS=normal stroke + springs
- 3PXL-LS=long stroke + springs
- 3PXL-..E/I=clamping
- Stroke control types: continuous and ON/OFF analogic continuous and ON/OFF magnetic

5

PRS



PRS 55-85-110-160-240

- PNEUMATIC HEAD CHANGING
- Automatic head/gripper changing system for robots
- Pneumatic operation
- Spring clamping + TURBO
- hydraulic connectors are not expected



6.2

INDUCTIVE COUPLING SYSTEM



F100 ETH / 210L

INDUCTIVE COUPLING SYSTEMS FOR ENERGY AND SIGNALS

- Energy transmission 75W (24V)
- Signal transmission Ethernet 100 Base-T or 2x IO-Link (COM 1, COM 2, COM 3)
- IP67 Protection class



F180 ETH

INDUCTIVE COUPLING SYSTEMS FOR ENERGY AND SIGNALS

- Energy transmission 240W (24V) / 400W (48V)
- Signal transmission Ethernet 100 Base-T
- IP67 Protection class

6.3

VISES FOR AUTOMATION



proofline® series
fully sealed – low maintenance

SLX digit

- Vises for automation applications
- Digitized vise (hydraulic)
- Monitoring of the jaw position
- Automated jaw change
- Hydraulic operation



proofline® series
fully sealed – low maintenance

SLX e-motion

- Vises for automation applications
- Mechatronic long stroke vise
- Mechatronic clamping drive
- Monitoring of the clamping force and jaw position
- Pre-positioning and clamping force preadjustment
- High-Low clamping

7.1

AT-PM

FAST AND QUICK CHANGE OF CHUCKS ON THE LATHE

AT-PM 200/170

CHUCKS
Ø 170 - 210 - 260

AT-PM 240/220

CHUCKS
Ø 210 - 260 - 315

AT-PM 320/300

CHUCKS
Ø 315 - 400 - 530

Applications/Customer benefits

- QUICK CHUCKS CHANGE ON LATHE
- Quick chucks change available diameter on lathe
- Quick connection to double cylinder between automatic feeding
- Pallet positioning accuracy pallet < 0,005 mm

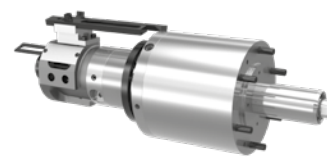
Technical features

- Hardened materials for high accuracy and durability
- AT-PM operation with hydraulic double cylinder
- Air sensing function for pallet positioning
- Balancing 6.3



7.2

DOUBLE PISTON CYLINDERS



AT-PM double piston cylinder

- ATPM actuation + TS or AP chucks
- ATPM actuation + collects
- With 4 safety valves ATPM control
- Pallet positioning accuracy < 0,005 mm

8.1

ONE APS PALLET



Round semifinished Pallet

- Induction-hardened material
- The pallets are prepared for handling with robot using the PPL vises and the corresponding top jaws

Pallet for manual chucks

- Induction-hardened material
- The pallets are prepared for handling with robot using the PPL vises and the corresponding top jaws
- SUITABLE WITH DIN 702/4

Manual vises Pallet holder

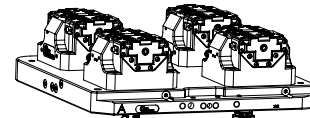
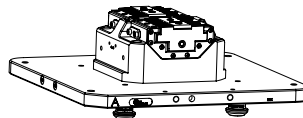
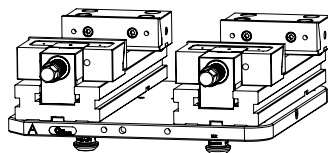
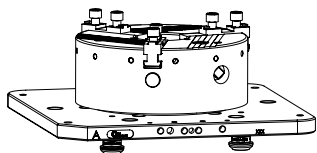
- Hardened and tempered material
- The pallets are prepared for handling with robot using the PPL vises and the corresponding top jaws

Two parts Pallet

- Induction-hardened material
- The pallets are prepared for handling with robot using the PPL vises and the corresponding top jaws

8.3

MULTIPLE CLAMPING PALLET



Q400 for manual chucks

PALLET PREPARED FOR MOUNTING SGSF CHUCKS

- Clamping Pallet Q400 prepared for Chucks 200-250-315 SGSF Handling Robot

PALLET PREPARED FOR MOUNTING HG-N CHUCKS

- Pallet Q400 + Mounting D220 Autc 260HG Loading Robot
- Pallet Q400 + Mounting D300 Autc 315HG Loading Robot
- Pallet Q400 + Mounting D380 Autc 400-500HG Manual Loading

Q400-MC150X200 / TCT150X200

PREPARED FOR N.1 OR 2 VISES

- The pallets are prepared for handling with robot using the PPL vises and the corresponding top jaws

Q400 - STV 180-225

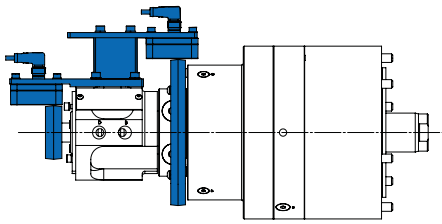
PALLET WITH 4 FEEDINGS

- 4 APS 140 CLAMPING PALLET STV HOLDER

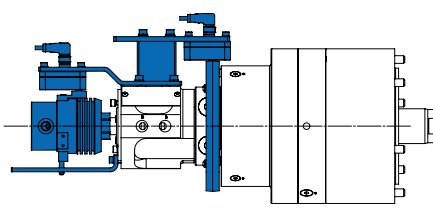
Q400 - STV 125

PALLET WITH 4 FEEDINGS

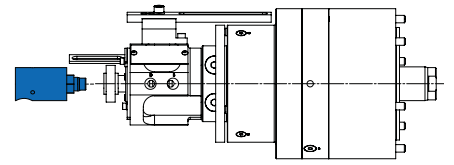
- 4 APS 140 MULTIPLE CLAMPING PALLET HOLDER N.4 125 STV

**LPS 4.0 Kit**

- kit for DCE-4V 64/64
- kit for DCR-4V 60/100
- kit for DCR-4V 90/160

**LPS 4.0 Kit - RU-2-22**

- kit for DCE-4V 64/64
- kit for DCR-4V 60/100
- kit for DCR-4V 90/160

**Rotary union RU-1-16**

- rotary union for 1 medium RU-1-16

**Pallet-88**

- Hardened and tempered material
- The pallets are prepared for handling with robot using the PPL vises and the corresponding top jaws

**STV Pallet holder****WITH SAB-1**

- Hardened and tempered material
- The pallets are prepared for handling with robot using the PPL vises and the corresponding top jaws
- A - for APS 140
- B - for APS 190
- C - for mounting on MATSUURA E MAZAK

**STV Pallet holder****WITH FEEDINGS**

- Hardened and tempered material
- The pallets are prepared for handling with robot using the PPL vises and the corresponding top jaws

**Semifinished pallet - 2/4/6**

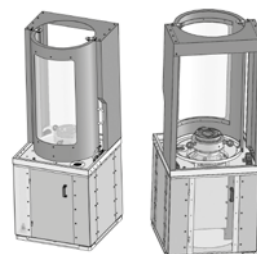
- MULTIPLE CLAMPING PALLET WITH 2 APS 140
- BASIC / PREMIUM version
- MULTIPLE CLAMPING PALLET WITH 4 APS 140
- BASIC / PREMIUM version
- MULTIPLE CLAMPING PALLET WITH 6 APS 140
- BASIC version

**STORAGE WAREHOUSE**

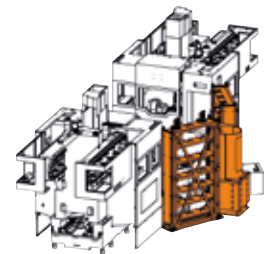
- FOR SINGLE PALLET
Prepared for n.3 D350 max pallet for every plan
- FOR PALLET Q400
Prepared for n.2 pallet 500x500 for every plan

**SINGLE PALLET**

- SINGLE PALLET STORAGE PLANS
- Chucks switching plan on the lathe
- 3 / 4 VISES
- PALLET Q400 AND VISES STORAGE PLANS
- 125IMG e 160IMG vises plane

**LOADING STATION 500-750**

- D500: with one rotating unit casing a pallet D350 MAX with APS 190 pin mounting
- D750: with a rotating unit Q400 4 APS wheelbase 200

**ROBOTIZED AREA**

- Storage warehouse
- Storage casing
- Plane kit
- Loading station
- Jaws kit

SMW-electronics

SMW-Autoblok has evolved from a hardware producer of high-precision work-holding to a turn-key supplier of hardware, software, and electronic components.



Inductive coupling and Measuring system

1



Digital products and Linear positioning system

2

DIGITALIZATION LEVEL

+

NEW TYPES OF CLAMPING SYSTEMS

1- CONVENTIONAL:

- Manual, pneumatic or hydraulic actuation
- Without digitization
- Safety: Pressure control, self-locking

2- HYBRID:

- Manual, pneumatic or hydraulic actuation
- Digitized with inductive couplers for end position control, pressure control, clamping force control, e-sensing, stroke monitoring
- Safety: End position control, pressure control, stroke control, self-locking

3- ELECTRIC:

- Electromechanical drive
- Digitized as the hybrid systems
- Safety: As in the hybrid systems with additional motor brake

1

WIRELESS TECHNOLOGIES



Inductive Coupler F100

- Non-contact transmission of energy and signals



Inductive Coupler for Smart Tool Holder

- Non-contact transmission of energy and signals



Pallet Coupler F100/66

- Non-contact transmission of energy and signals



Ultrasonic Sensor USP 4.0

- Non-contact ultrasonic measuring system

2

DIGITALIZATION + CLAMPING



Centco4 digit

- Digitalized 4-jaw chuck with hydraulic actuation



SLX e-motion

- Electromechanical long stroke vice



CC e-motion

- Electromechanical 4-jaw chuck



ZeroAct e-motion

- Clamping station with electromechanical zero point system

HIGH PRECISION EXPANDING MANDRELS FOR FINISHING OPERATIONS



Expanding Mandrels for mounting between centers

- grinding, balancing, inspection operations
- mounting between centers
- manual actuation
- large clamping range Ø8 to 235 mm
- expansibility until 5 mm



Self clamping Mandrels

- run-out inspection, centering
- mounting between centers or flange
- manual actuation
- inside clamping smooth or spline
- high accuracy concentricity $\leq 3\mu\text{m}$



Expanding Mandrels with spindle morse taper mounting type

- turning, milling, grinding, hobbing
- spindle morse taper mounting
- automatic or manual actuation
- clamping range Ø 5,5 to 82,7 mm
- expansibility until 2 mm



Hydraulic membrane chucks or mandrels

- hard turning, grinding, shaving, centering
- spindle nose attachment or in between centers
- automatic or manual actuation
- internal or external clamping smooth with one or further membranes
- high accuracy with concentricity $\leq 5\mu\text{m}$
- Proofline: total sealing mandrels



Expanding Mandrels for flange mounting with pull-down sleeves

- turning, milling, grinding
- flange mounting
- automatic actuation
- clamping range Ø 5,5 to 15 mm
- expansibility 0.5 mm



Quick workholding change system

- turning, grinding applications
- spindle nose attachment
- automatic or manual actuation
- high accuracy with concentricity $\leq 5\mu\text{m}$



Expanding Mandrels for flange mounting with pull-down segment sleeves

- turning, milling, grinding
- flange mounting
- automatic or manual actuation
- clamping range Ø 18 to 131 mm
- expansibility until 1 mm



Expanding Mandrels and special chucks for finishing operation

- sliding jaws mandrels
- double taper sleeve
- segments mandrels

TOBLER

SMW-Autoblok Tobler products are the most complete range of expanding and special chucks in the workpiece clamping market.

Tobler, an industry specialist in high precision, high-quality workpiece gripping systems for all inter and outer clamping joined SMW-AUTOBLOK in June 2020.



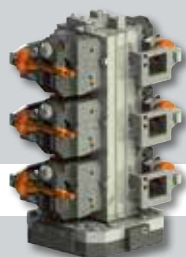
High precision expanding mandrels for finishing operations



SPECIAL APPLICATIONS

PETACCIATO

All Autoblok Petacciato special solutions are designed as special equipment and machinery for clamping on machine tools, special chucks, and static solutions with standard chucks.



Special equipment 1



Special chucks 2



Static solution with standard chucks 3



Special solutions 4

1

SPECIAL EQUIPMENT



Automotive - Water Pump



Automotive - Shaft

2

SPECIAL CHUCKS



Industry - Locking Turbine



Industry - Horizontal Machining Center

3

STATIC SOLUTION WITH STANDARD CHUCKS



Compressor - Shell



Compressor - Crankshaft

4

SPECIAL SOLUTIONS



Railway - Wheel



Aerospace - Ring



**Automotive -
Milling**



**Automotive -
Gear shift work**



**Automotive -
Cylinder head**



**Automotive -
Brake Pump**



**Off Highway -
Joint**



**Off Highway -
Oil Pump**



**Off Highway -
Hydraulic valve**



**Compressor -
Compressor impeller**



**Off Highway -
Variable Pole**



**Electric engines -
Engine cover**



**Other -
Shaft**



**Electric engines -
Motor housing**



**Hydraulic -
Cover**

SPECIAL APPLICATIONS

TELBOOK

A DESIGN & MANUFACTURING SERVICE FOR CUSTOMERS WITH BESPOKE REQUIREMENTS.



**SPECIAL DIAPHRAGM
FIXTURES**

1

**SPECIAL
TOMBSTONES**

2

**AEROFOIL BLADE
FIXTURES**

3

**AEROSPACE HYDRAULIC
FIXTURE APPLICATION**

4

**THIN WALLED
FIXTURES**

5

**SMALL BLADE FIXTURES
& VACUUM FIXTURES**

6

**LIGHTWEIGHT
MANUAL FIXTURES**

7

**MULTIPLE
APPLICATIONS**

8



**High Accuracy
High Repeatability**



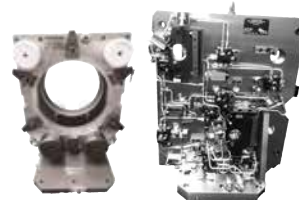
**Up to Ø1500
3600 Clamping**



**Convex
or Concave
Shapes**



For Complex Geometry



**SPECIAL
TOMBSTONES**



**Slot
Machining
Fixtures**



**Vacuum
Fixtures**



**Special
Centralising
Fixtures**



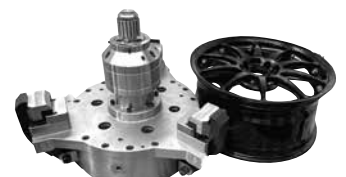
**Stator Blade
Turning
Fixtures**



**Precision Ground
Fixtures
Baseplates**



**Manual
Clamping
Fixtures**



**Special
Chuck
Fixtures**

All these systems are permanent electro-systems, this means that they need energy only during the clamping and unclamping process. No energy consumption, no heat, no risk of losing the workpiece during machining.

1.1 Milling

- Innovative patented technology with monoblock steel frame.
- Without any presence of epoxy resin, meets the best features of clamping force, accuracy, and service life.



1.2 Turning

- The Radial Pole offers a clamping system without no deformation and with 3 free faces for machining.
- The use of mobile extensions guaranties plane and parallel surfaces.
- IN THE IMAGE: MHC Hybrid Magnetic Solution with mechanical self-centering system.

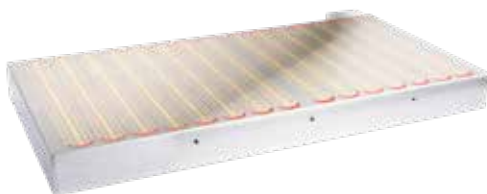


1.3 Grinding

- A safe clamping system for grinding parts of thickness starting from 2 mm.
- With a perfect demagnetization.

1.4 EDM

- Innovative technology, totally water-tight to clamp the workpieces during the erosion.



HAND CONTROLLED MAGNETIC LIFTERS

Complete line with capacity 125 – 2000 Kg. Their compact size and low weight maximize the crane capacity.

The monoblock structure is machined with high-precision details to ensure maximum magnetic efficiency and operational reliability.

Different types for load with regular and reduced thickness.



MaxX 125-2000



MaxX TG 150-300

TECNOMAGNETE

SMW-Autoblok's new Mag-Autoblok Tecnomagnete division includes a full line of permanent electromagnetic chucking systems for quick and flexible work-holding on horizontal and vertical milling machines, vertical turning centers, FMS systems, grinding machines, EDM, etc. A full line of magnetic lifters for loading and unloading workpieces is also offered.



Machine tools workholding



Light lifting



Sheet metal stamping



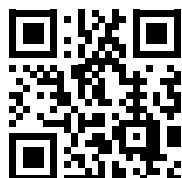
Heavy lifting



LIVE-TOOLING PORTFOLIO

SMW-Autoblok has been developing, designing, and manufacturing static and rotating holders, used by customers worldwide.

A wide range of high-precision and reliable products, manufactured with advanced machines and technologies, severely tested and certified.



Static Holders 1



Quick change holder 2



Rotating Toolholders 3



Slotting Tool 4



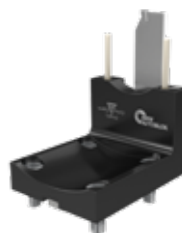
Hobbing Tool 5



Steady Rest for turret 6

1

STATIC HOLDERS



TH CUT
CUTTING TOOL HOLDER



TH AX
AXIAL TOOL HOLDER

QUICK CHANGE HOLDER



TH-RAD
POLYGONAL SHANK



LT-A
HSK

3.2

ANGULAR TOOL HOLDER FOR MOTORIZED TURRETS



LT-A
TOOL HOLDER ANGLE 90°



LT-A OFS / DBL ANGLE 90°
TOOL HOLDER OFFSET
TOOL HOLDER DOUBLE OFFSET

4

SLOTTING TOOL

SLOTTING TOOL
Machining speed up to 700 strokes/min.
Ratio in-out 1:1
With/without Y axis adjustment.
Several star-type turrets included in our program.
Standard and customized special insert-holders.



LT-ST
SLOTTING TOOL 90°

**TH BRB**

BORING BAR HOLDER

**TH RAD**

RADIAL TOOL HOLDER

**LT-S**

POLYGONAL SHANK

**LT-A**

POLYGONAL SHANK

3.1

STRAIGHT TOOL HOLDER FOR MOTORIZED TURRETS

**LT-S**

TOOL HOLDER STRAIGHT

**LT-S2**

TOOL HOLDER DOUBLE STRAIGHT

**LT-S OFS**

TOOL HOLDER STRAIGHT OFFSET

**LT-S2 OFS**TOOL HOLDER DOUBLE STRAIGHT
OFFSET**LT-A2 V**TOOL HOLDER ANGLE 90° DOUBLE
VERTICAL**LT-A2 H**TOOL HOLDER ANGLE 90° DOUBLE
HORIZONTAL**LT-A α°**

SPECIAL FIX ANGLE HOLDER

**LT-T**

TOOL HOLDER TILTABLE

5

HOBBING TOOL

HOBBING TOOL
100% Plug & Play.
Patented hexagonal
transmission.
Highest rigidity and accuracy.
Direct mounting on turret.
Speed max. 6000 rpm/min.
Available with different
transmission ratio.
Shafts available in various sizes.
Qualified post-sales assistance.

**LT-HOB-SAW**

HOBBING / SAW

6

STEADY REST AND SUPPORTS

**STEADY REST**

SELF-CENTERING STEADY REST FOR
TURRET
• Plug & play without cable connection
• Arms opening by spring system
• Arms closing by coolant or air system
• Highest rigidity and accuracy

**SHAFT SUPPORT**

TOOL HOLDER SHAFT SUPPORT
• Works as a support even when a
tailstock is not available
• No coolant needed
• Customized clamping dimensions
• Models available for all machines

proofline® series

fully sealed – low maintenance

Advantages of the fully sealed chucks

LONG LIFE



All power chucks need generous lubrication to maintain a long operating life at hi-accuracy.

Fully sealed chucks with constant lubrication have a longer operating life: up to 5-10 times, also with not optimal lubrication.

PROCESS OPTIMIZATION



A constant gripping force allows a fine optimization of the production process thanks to the correct setting of the gripping force (to drive the component, but not to distort it) and the increase of the cutting parameters to increase productivity.

HIGHER ACCURACY



Constant lubrication means constant gripping force and constant deformation of the body and the internal parts of the chuck thus guaranteeing a higher repeatability and a higher constancy of the process (CPK).

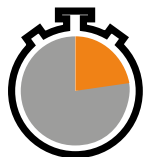
INCREASED PRODUCTIVITY



Constant and always available clamping force under all working conditions allows you to push on the accelerator of cutting speed and productivity by enabling cycle time reductions impossible in non-hermetic chucks.

All without compromising safety.

REDUCED DOWN TIME



Lubrication and maintenance intervals are no more daily but monthly or yearly reducing the loss of productivity for maintenance almost to zero.

USE IN HOSTILE ENVIRONMENT



High pressure coolant, forging and casting scale powder, dry machining, abrasive powders, corrosive or grease diluting coolants, fine and abrasive chips...

All situations extremely difficult for non-sealed chucks are not a problem for the fully sealed power chucks in the proofline® series.

HIGHER SAFETY



A non-sealed chuck, not cleaned and lubricated can lose up to 50% of the clamping force causing an important safety problem.

Sealed chucks, with constant lubrication and protected from the penetration of coolant and chips, have a constant gripping force allowing a safer operation.

ECO-FRIENDLY



To use less grease and to avoid its dispersion in the coolant or in the machine chip conveyor, improves the ecology of the working environment beside reducing the maintenance costs and for the disposal of the used up coolants.



MAIN OUR CATALOGS



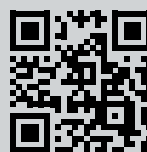
SOME OF OUR VIDEOS



**QUICK
CHANGE JAWS
KIT-RR**



KNCS-2G



APS



TWIN VISE



AUTOMATION



**SMW-electronics
MotionAct -
360°rotation**

**SMW-AUTOBLOK Spannsysteme GmbH**

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