

2024



Always a step ahead

PRODUCTS RANGE

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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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.



1 MANUAL CHUCKS

2 CLOSED CENTER POWER CHUCKS

3 OPEN CENTER POWER CHUCKS

4 QUICK JAW CHANGE POWER CHUCKS

5 APPLICATION CHUCKS

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1 MANUAL CHUCKS



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 Ø550 - 2000 mm

CLOSED CENTER POWER CHUCKS



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



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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



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fully sealed – low maintenance

KNCS-N

- Large Through-Hole
- High speed only for N version
- High flexibility
- 2 or 3 jaws
- Fully sealed on 3G version
- KNCS-N / NB Ø140-1000 mm
- KNCS-3G Ø170 - 630 mm (*)
- KNCS-NB-CL Ø630 mm



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fully sealed – low maintenance

AP-R / NT-R

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



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APL-RR / 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

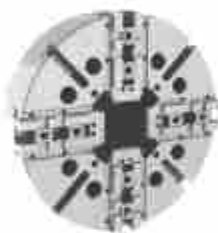


KIT RR

- 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



proofline® series
fully sealed – low maintenance

TSX

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



proofline® series
fully sealed – low maintenance

TEF-TER

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



proofline® series
fully sealed – low maintenance

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



proofline® series
fully sealed – low maintenance

GSA

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



proofline® series
fully sealed – low maintenance

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



proofline® series
fully sealed – low maintenance

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



proofline® series
fully sealed – low maintenance

SCG

- 4 jaw (2+2) compensating chucks
- For grinding
- Centerpoint quick change or adjustable centers
- Hydraulic actuation
- SCG Ø206 mm



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fully sealed – low maintenance

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



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fully sealed – low maintenance

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



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TX

- High precision pull-down chucks
- Active pull-down
- Tongue & Groove
- 3 jaws
- TX Ø170-530 mm



proofline® series
fully sealed – low maintenance

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



proofline® series
fully sealed – low maintenance

SJL / SJLS

- 6 jaws (2+2+2) all sizes
- Jaws equalizing as a pair/mechanism lockable
- Metric Serration or Tongue & Groove by model
- For thin walled or deformation sensitive components
- Centrifugal force compensation
- SJL Ø170-900 mm
- SJLS Ø225-400 mm



proofline® series
fully sealed – low maintenance

AXN

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

**ACS-I**

- Self centering column chucks
- Pull-down chucks
- ACS-I for internal clamping
- 3 and 6 jaws
- ACS-I Ø130 - 300 mm

**ACS-E**

- Self centering column chucks
- Pull-down chucks
- ACS-E for external clamping
- 3 and 6 jaws (Ø110 - 450 mm)
- 5 jaws (Ø145 - 520 mm)



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D

- Quick jaw change
- O.D. or pitch line clamping
- Centrifugal force compensation
- D: Ø160 - 400 mm



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D-KOMBI

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



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D-PLUS

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



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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 vulcanized 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-CC
- Preparation for air sensing
- Radial fine adjustment
- COMOT-AZ Ø42-65-100 mm

**COMOT-NZ**

- Hybrid collet chuck
- Use of vulcanized standard collets
- Clamping of thin walled work pieces
- Rigid axial stop front or in the bore
- Optional use of expanding mandrels of the connect series EMX-F-CC-NZ
- COMOT-NZ Ø42-65-100 mm

**KSZ-MB / PPBE**

- Collect chuck
- For bar machining
- Push-actuation
- Quick set-up by means of bayonet locking cap
- For highest speeds
- Clamping / unclamping of chuck during spindle rotation is possible
- KSZ-MB Ø40-60-80 mm

MANUAL OR POWER OPERATED EXPANDING MANDRELS - ADAPTER FLANGES

**EM-B**

- Hand or power operated expanding mandrels
- Large expandability
- Flange mounting
- Very rigid design
- EM-B: Ø 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 55025

**Special mandrels**

- Special solutions for your applications

**EM-B-S**

Workpiece: Distribution plate

EM-B-S

Workpiece: Rotor (Sintermetall)

Examples of Application**EM-G**

Workpiece: Hub flange

**SPECIAL**

Workpiece: Bearing support

**VNIK-T2**

- Open center rotating hydraulic cylinders
- Large Through-Hole
- Up to 45 bar
- Extra short overall dimensions
- Stroke control via proximity switch or LPS 4.0
- Through-Hole: Ø37.5-127.5 mm
- size from 70/97 to 320/127

**VSG**

- Open center rotating hydraulic cylinders
- Up to 30 bar
- EXTRA Large Through-Hole
- Stroke control via proximity switch
- Through-Hole: Ø165 - 204 mm
- size from 450/165 to 550/205

**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 4.0

**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 4.0



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 121.7 mm)
- EMX-F/FP: 1-6 (Ø 19.7 a 132.9 mm)
- EMX-C: 1-5 (Ø 25 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 (Ø 18 - 105 mm)



EM-A / EM-AL

- Hand or power operated expanding mandrels
- Large expansibility
- Flange mounting
- Very rigid design
- EM-A: 1 - 11 (Ø 14.7 - 129.7 mm)
- EM-AL: 1 - 13 (Ø up to 200 max)



SIN-S

- Closed center rotating hydraulic cylinders
- Up to 70 bar
- Central bore for air or coolant
- Stroke control via proximity switch or LPS 4.0
- SIN-S 50-250



SIN-L

- Closed center rotating hydraulic cylinders
- Up to 70 bar
- Central bore for air or coolant
- Stroke control via proximity switch or LPS 4.0
- EXTRA Long Stroke on L version
- SIN-L 70-175



SIN-HL

- Closed center rotating hydraulic cylinders
- Up to 70 bar
- Central bore for air or coolant
- Stroke control via proximity switch or LPS 4.0
- High-low gripping force clamping on HL version
- SIN-HL 85-175



CSN

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



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 14mm
- LPS 4.0 43 = measuring range 43mm
- LPS 4.0 80 = measuring range 80mm
- LPS 4.0 120 = measuring range 120mm



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

- Rotary union for media supply for rotating cylinders
- For closed and open center cylinders
- Universal for air, oil or coolant
- Media must be free of contamination
- Filter 25 µm requested
- RU-1-10 / RU-1-16 = 1 Medium



RU-2-22

- Rotary union for media supply for rotating cylinders
- For closed and open center cylinders (not for ZHD-DR)
- Universal for air, oil or coolant
- The medium must be free of contamination
- Filter 25 µm requested
- 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
- M 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®



SLU / SLU-A

- 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 mm)
- SLU-A 1-6 (range 4/52 to 160/460 mm)



SLU-X

- Self-centering Steady Rest STANDARD LINE
- Monitoring open via proximity switch
- Special sizes on request
- SLUX 1-3.1 (range 6/70 to 85/350 mm)



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)
- SLUB 3-6 (range 12/152 to 125/460 mm)
- SLUB-A 3-6 (range 12/130 to 160/460 mm)



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 mm)
- SRA 2 - 6 (range 20/90 - 175/460 mm)



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) depending on chuck model
- USC: Ø140 - 260 mm
- US Big diameters: Ø400 - 800 mm



US-CL / US-A

- 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-D: Ø130 - 315 mm
- PB-D: Ø130 - 315 mm
- HB-C: Ø165 - 315 mm
- PB-C: Ø165 - 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 - 800 mm



CC

- Inch Serration
- Stationary centering and dampening chuck
- 3 jaws
- Integrated dampener
- CC Ø240 - 470 mm



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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
- K2-6.1 (range 25/180 to 215/910 mm)
- KA 7-7.1 (range 340/660 to 650/910 mm)



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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 mm)
- KLU-A 630-540 (range 70/293 mm)



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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 mm)



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



CHUCK SWITCHING SYSTEM / ACCESSORIES



STP

- Stationary chuck, pneumatic
- Built-in pneumatic cylinder
- Inch Serration
- 3 jaws
- Through-hole (Ø16-92 mm)
- 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.



1 ZERO POINT SYSTEMS



2 TWIN VISES



3 5-AXIS VISES



4 MULTIPLE CLAMPING SYSTEM



5 PRECISION MACHINE VISES



6 MANUAL CHUCKS



7 STATIONARY CHUCKS



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 - 2/3 clamping jaws

- Spring to close and TURBO function to increase the holding force
- Air sensing to confirm pallet presence for automation applications (only PREMIUM SC)
- Stroke control SC for automation application
- Air cleaning (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 two 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/ 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 couplers (only PREMIUM SC-6S)



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 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 ± 0.05mm**
- Only for clamping
- TYPE C FLOATING PIN**
- Floating ± 0.5mm

L4

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 one APS 140 PREMIUM SC
- Universal applicable
- Fast and easy setup
- 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 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

L7

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



proofline® series
fully sealed – low maintenance

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



proofline® series
fully sealed – low maintenance

WPS XL

Workpiece positioning system

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



proofline® series
fully sealed – low maintenance

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



proofline® series
fully sealed – low maintenance

SLX-Digit

Hydraulic long-stroke vise

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



STS-2G

STS-2G Ø80 / STS-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 DP10 with sintergrip inserts and DP20 with Clak parallels
- Modular self-centering: double clamping: fixed clamping
- Interface for Zero-Point clamping systems and Plus5 52/36



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
- High 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
- Optional interface with Zero-Point system



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

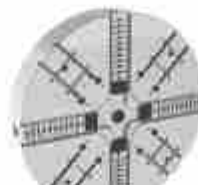


proofline® series
fully sealed – low maintenance

HG

Quick jaw change chucks

- 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
- 2G additional lubrication channels and grease pockets in jaw guide



PTF

Independent manual chucks


- Tongue & Groove
- Closed center
- 4 jaws (all diameters)
- Manual clamping and radial setting of jaws
- sizes Ø530 - 2000 mm!



Centco4 MLW

Independent self-centering clamping in 2 axis

- Inch Serration
- 2+2 jaws
- Weight-optimized chuck body
- sizes Ø315 - 1400 mm

More MANUAL CHUCKS details on the TURNING PORTFOLIO 



TV

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

- Pneumatic / Hydraulic version
- Normal/Long Stroke and Fixed jaw
- Air purge



proofline® series
fully sealed - low maintenance

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



proofline® series
fully sealed - low maintenance

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



proofline® series
fully sealed - low maintenance

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



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

5.1 PRECISION MACHINE VISES



TG / MG

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 (Automatic-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



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Centco4 digit-HLW

Hydraulic chuck 2+2 jaws chuck Ø750 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

- High precision 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.



1 ZERO-POINT SYSTEMS



2 APS UNIT SINGLE AND MULTIPLE



3 ROTARY PLATE



4 GRIPPERS



5 PDS



6 MECHATRONIC GRIPPERS



7 AT-PM



8 PALLET SINGLE AND MULTIPLE



9 STORAGE



1

ZERO POINT SYSTEMS | APS

More APS details on the STATIONARY PORTFOLIO



proofline® series
fully sealed – low maintenance

APS 100 - 140 - 160 - 190 - 250

- 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 valves

- SAB-1 STANDARD: the safety valve maintains air pressure in the cylinder, pallet transportation / storage or machining without feed
- SAB-1 VISUAL CHECK (optional): is different from SAB-1 STD for the red visual pin. This system permits to see when the valve is activated

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
MANUAL OPERATION
APS MODULE

SIZES 0202 - 0260 - 0320 - 0400
- 0520 - 0650 - 01000 - 01400



AUTOMATIC
AUTOMATIC OPERATION
APS MODULE

SIZES 0202 - 0260 - 0320 -
0400 - 0520 - 0650



AUTOMATIC
AUTOMATIC OPERATION
APS MODULE + 3 Feedings

SIZES 0202 - 0260 - 0320 - 0400
- 0520 - 0650

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

UNIVERSAL 2 GRIPPERS



PP 125-160-200-250

- Protected - Pneumatics - Hydraulics.
With steel body
- Tongue & Groove master jaws
 - Analogic linear stroke control 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
- Analogic linear stroke control 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
 - Analogic linear stroke control 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
- 2PXS-N/L = Normal/Long Stroke
 - 2PXS-NS = Normal Stroke + springs
 - 2PXS-LS = Long Stroke + springs
 - 2PXS-EI = OD / ID clamping
 - Stroke control types: linear and ON/OFF inductive/analogic, linear and ON/OFF magnetic

4.3

UNIVERSAL 3 GRIPPERS



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

- Pneumatics - Protected.
With aluminium body
- Functional parts heat-treated for high precision and long life
 - Jaws with calibrated bushings and groove
 - Analogic linear stroke control sensor
 - Possibility to insert spring workstop
 - 3MN-S spring model only for OD cl.



3MN 320-380 RR

- Protected - Pneumatics - Quick jaws change. With aluminium body
- Jaws with calibrated bushings and groove
 - Possibility to insert spring workstop
 - Analogic linear stroke control sensor
 - O.D. (also with springs) and/or I.D. clamping
 - Safety valve SAB-1 STD



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-EI = OD / ID clamping
 - Stroke control types: linear and ON/OFF inductive/analogic, linear 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-EI = OD / ID clamping
 - Stroke control types: linear and ON/OFF inductive/analogic, linear 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 gripper
- Long Stroke gripper
- 2 fingers parallel
- Profinet / EthernetIP
- Mechanical self locking and additional engine brake
- IP67 Protection class



C40 AUTOMATION

- Cubical coupling system (40x45x22 mm)
- Ideal suited for EOAT applications
- Power supply 24V
- Transmission distance 0 - 3 mm
- Energy transmission 15W (24V)
- Signal transmission
- IO-Link (COM 1, COM 2, COM 3) / 6 PNP Signals + 2 Analog signals 0-10V
- IP67 Protection class

6.2

INDUCTIVE COUPLING SYSTEM



2PXM 125-160-200

Medium Sizes Universal 2-Grippers
With aluminium body

- 2PXM-N/L = Normal/Long Stroke
- 2PXM-NS = Normal Stroke + springs
- 2PXM-LS = Long Stroke + springs
- 2PXM-...EII = OD / ID clamping
- Stroke control types:
linear and ON/OFF inductive/analogic
linear and ON/OFF magnetic



2PXL 250

Large Sizes Universal 2-Grippers
With aluminium body

- 2PXL-N/L = Normal/Long Stroke
- 2PXL-NS = Normal Stroke + springs
- 2PXL-LS = Long Stroke + springs
- 2PXL-...EII = OD / ID clamping
- Stroke control types:
linear and ON/OFF inductive/analogic
linear 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 2PXS, 2PXM, 2PXL grippers



3PXL 250

Large Sizes Universal 3-Grippers
With aluminium body

- 3PXL-N/L = Normal/Long Stroke
- 3PXL-NS = Normal Stroke + springs
- 3PXL-LS = Long Stroke + springs
- 3PXL-...EII = OD / ID clamping
- Stroke control types:
linear and ON/OFF inductive/analogic
linear 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



6.3 VISES FOR AUTOMATION



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



proofline® series
fully sealed - low maintenance

SLX digit

- Vises for automation applications
- Digitized vise (hydraulic)
- Monitoring of the jaw position (55 mm)
- Automated jaw change
- Hydraulic operation
- Max clamping force 75 kN



proofline® series
fully sealed - low maintenance

SLX e-motion

- Vises for automation applications
- Mechatronik Long Stroke vise
- Mechatronik 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



8.1

ONE APS PALLET



Round semifinished Pallet

- Induction-hardened material
- The pallets are prepared for handling with robot using the PP-L and PL-L grippers and the corresponding top jaws



Pallet for manual chucks

- Induction-hardened material
- The pallets are prepared for handling with robot using the PP-L and PL-L grippers and the corresponding top jaws
- Suitable with DIN 7024
- Usable with HG-N / DG / SGG
- With Ø125 - 210 chucks



Manual vises Pallet holder

- Hardened and tempered material
- The pallets are prepared for handling with robot using the PP-L and PL-L grippers and the corresponding top jaws

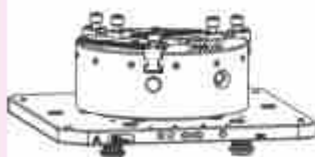


Two parts Pallet

- Induction-hardened material
- The pallets are prepared for handling with robot using the PP-L and PL-L grippers and the corresponding top jaws

8.3

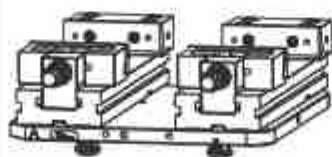
MULTIPLE CLAMPING PALLET



Q400 for manual chucks

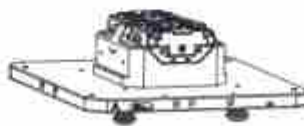
- For mounting SGGF chucks
- Clamping Pallet Q400 prepared for Chucks 200-250-315 SGGF Handling Robot

- 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 stor holder



Q400 - STV 125

- Pallet with 4 Feedings
- 4 APS 140 multiple clamping pallet holder n.4 125 STV

7.2

DOUBLE PISTON CYLINDERS

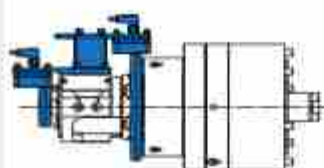


AT-PM double piston cylinder

- ATPM actuation + T5 or AP chucks
- ATPM actuation + collects
- With 4 safety valves ATPM control
- Pallet positioning accuracy < 0,005 mm

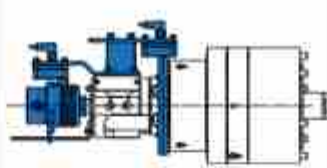
7.3

LPS 4.0 KIT (OPTIONAL)



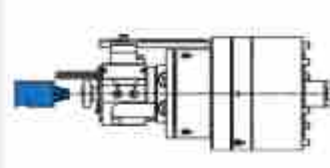
LPS 4.0 Kit

- 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

8.2

MULTIPLE CLAMPING PALLET



Pallet-88

- Hardened and tempered material
- The pallets are prepared for handling with robot using the PP-L and PL-L grippers and the corresponding top jaws



STV Pallet holder

- For STV-2 125/180 and STV-3 180 with SAB-1 STD
- Hardened and tempered material
- The pallets are prepared for handling with robot using the PP-L and PL-L grippers and the corresponding top jaws
- A - for APS 140
- B - for APS 190
- C - for mounting on Matsura and Mazak



STV Pallet holder

- For STV-2 180/225 and STV-3 180/225
- Hardened and tempered material
- The pallets are prepared for handling with robot using the PP-L and PL-L grippers and the corresponding top jaws
- With 4 pneumatic Feedings



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

9

STORAGE AND LOADING STATION



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



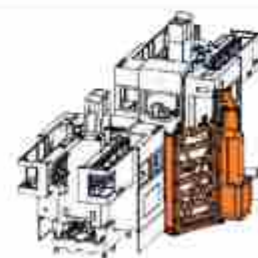
SINGLE PALLET

- Single pallet storage plans
- Chucks switching plan on the lathe
- 3 / 4 vices
- Pallet Q400 and Vises storage plans
- 125 IMG's 160 IMG vices plans



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.



1 INDUCTIVE COUPLING AND MEASURING SYSTEM



2 DIGITAL PRODUCTS AND LINEAR POSITIONING SYSTEM



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



proofline® series
fully sealed - low maintenance

Centco4 digit

- Digitalized 4-jaw chuck with hydraulic actuation



proofline® series
fully sealed - low maintenance

SLX e-motion

- Electromechanical Long Stroke vice



proofline® series
fully sealed - low maintenance

CC e-motion

- Electromechanical 4-jaw chuck



proofline® series
fully sealed - low maintenance

ZeroAct e-motion

- Clamping station with electromechanical zero point system



Expanding Mandrels for mounting between centers

- grinding, balancing, inspection operations
- mounting between centers
- manual actuation
- large clamping range $\varnothing 8$ 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 $\pm 3\mu\text{m}$



Expanding Mandrels with spindle morse taper mounting type

- turning, milling, grinding, hobbing
- spindle morse taper mounting
- automatic or manual actuation
- clamping range $\varnothing 5.5$ to $\varnothing 2.7$ 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 $\pm 5\mu\text{m}$
- Proofline: total sealing mandrels



Expanding Mandrels for flange mounting with pull-down sleeves

- turning, milling, grinding
- flange mounting
- automatic actuation
- clamping range $\varnothing 5.5$ 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 $\pm 5\mu\text{m}$



Expanding Mandrels for flange mounting with pull-down segment sleeves

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



Expanding Mandrels and special chucks for finishing operation

- sliding jaws mandrels
- double taper sleeves
- segments mandrels

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.



1 SPECIAL EQUIPMENT



2 SPECIAL CHUCKS



3 STATIC SOLUTION WITH STANDARD CHUCKS



4 SPECIAL SOLUTIONS



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**



**Off Highway -
Joint**



**Compressor -
Compressor impeller**



**Off Highway -
Variable Pole**



**Electric engines -
Engine cover**



**Automotive -
Support**



**Other -
Shaft**



**Electric engines -
Motor housing**



**Hydraulic -
Cover**



**Off Highway -
Cover**

SPECIAL APPLICATIONS

TELBROOK

A DESIGN & MANUFACTURING SERVICE FOR CUSTOMERS WITH BESPOKE REQUIREMENTS.



1 SPECIAL DIAPHRAGM FIXTURES

2 SPECIAL TOMBSTONES

3 LIGHTWEIGHT MANUAL FIXTURES

4 AEROFOIL BLADE FIXTURES

5 SMALL BLADE FIXTURES & VACUUM FIXTURES

6 MULTIPLE APPLICATIONS

Thin walled fixtures



1 SPECIAL DIAPHRAGM FIXTURES



High Accuracy
High Repeatability



Up to Ø1500
3600 Clamping

2 SPECIAL TOMBSTONES



Special Tombstones

3 LIGHTWEIGHT MANUAL FIXTURES



Manual Clamping Fixtures

4 AEROFOIL BLADE FIXTURES



Convex or Concave Shapes



For Complex Geometry

5 SMALL BLADE FIXTURES & VACUUM FIXTURES



Vacuum Fixtures

6 MULTIPLE APPLICATIONS



Slot Machining Fixtures

MULTIPLE APPLICATIONS



Special Chuck Fixtures



Stator Blade Turning Fixtures

MULTIPLE APPLICATIONS



Precision Ground Fixtures Baseplates



Special Centralising Fixtures

1 MACHINE TOOLS WORKHOLDING

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 guarantees 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.

2 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

1



LIGHT LIFTING

2



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.



1 STATIC HOLDERS



2 QUICK CHANGE HOLDER



3 ROTATING TOOLHOLDERS



4 SLOTTING TOOL



5 HOBGING TOOL



6 STEADY REST FOR TURRET



1

STATIC HOLDERS



TH CUT

CUTTING TOOL HOLDER



TH AX

AXIAL TOOL HOLDER

QUICK CHANGE HOLDER



TH-RAD

POLYGONAL SHANK



LT-A

HSN

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 BR8

BORING BAR HOLDER



TH RAD

RADIAL TOOL HOLDER



LT-S

POLYGONAL SHANK



LT-A

POLYGONAL SHANK



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

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



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



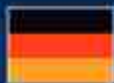
TWIN VISE



AUTOMATION



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

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CUSTOMER'S APPLICATION FOR STATIC WORK-HOLDING

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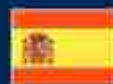
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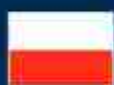
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