

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.

combination The 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.

SMWSpannsysteme 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.







- **OPEN CENTER POWER CHUCKS**
- QUICK JAW CHANGE POWER CHUCKS



- DIAPHRAGM CHUCKS
- COLLET CHUCKS
- MANUAL OR POWER OPERATED EXPANDING MANDRELS
- **CLOSED CENTER CYLINDERS**
- PNEUMATIC/HYDRAULIC FRONT-END CHUCKS
- SELF-CENTERING STEADY RESTS FOR TURNING AND GRINDING
- STATIC CHUCKS PNEUMATIC / HYDRAULIC
- **ACCESSORIES**





HG

- Quick jaw change with though 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
- PTF Ø530 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

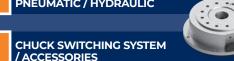


BH / FC

- · High precision power chucks
- BHD-FC Inch Serration
- BHD-FC Metric Serration
- Centrifugal force compensation
- 3 jaws
- BH FC Ø165 630 mm



- · High precision power chucks
- BB-D Inch Serration
- BB-M Metric Serration
- EXTRA Large Through-Hole
- 3 jaws
- BB Ø140 435 mm



CLOSED CENTER POWER CHUCKS



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



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

OPEN CENTER POWER CHUCKS



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



вн

- High precision power chucks
- BH-D Inch Serration
- BH-M Metric Serration
- 2, 3 and 4 jawsBH Ø130-450 mm



BH Big diameters

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



ВP

- 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 chucksWedge-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

QUICK JAW CHANGE POWER CHUCKS



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-R / NT-R

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



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



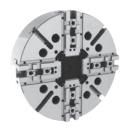
KIT RR

- 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

2+2 JAW CHUCKS



2+2+2 CHUCKS



- 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



- 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

proofline®series

5.6

SHAFT CHUCKS



GSA

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



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



CSC

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



SCG

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

PULL-DOWN CHUCKS



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



- · 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

INDEXING CHUCKS

COLUMN CHUCKS



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
- SIL Ø170-800 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-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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DIAPHRAGM CHUCKS



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

COLLECT CHUCKS



COMOT-DZ

- · Hybrid collet chuck
- Use of vulcanize standard collets
- Clamping of thin walled workpieces
- Long service life due to case hardened componenets and lubrication
- Ideal for bar loader machines
- Best tool accessability
- 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
- 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-CO-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



ЕМ-В

- 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:



*Workpiece: Rotor Distribution plate (Sintermetall)

Examples of Application



EM-G *****Workpiece: Hub flange

DOUBLE PISTON CYLINDER



SPECIAL *Workpiece: $\stackrel{\cdot}{\text{Bearing support}}$

OPEN CENTER CYLINDER



VNK-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 70/37 to 320/127



VSG

- Open center rotating hydraulic
- 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
- 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

MANUAL OR POWER OPERATED EXPANDING MANDRELS - ADAPTER FLANGES



GF 80

- · Bar pulling chuck
- Inch Serration
- Spring operated bar pulling chuck
- Spring actuation
- For stationary outside clamping



- · 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 (Ø14,7 129,7 mm)
- EM-AL: 1 13 (Ø up to 200 max)

9.1

CLOSED CENTER CYLINDER - HYDRAULICS | PNEUMATICS



SIN-S

- Closed center rotating hydraulic cylinders
- Úp 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
- Úp 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

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 14mm
- LPS 4.0 14 = measuring range 14mm
 LPS 4.0 48 = measuring range 48mm
- 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 coolantMedia must be free of contamination
- Filter 25 µm requested
- RU-1-10 / RU1-16 = 1 Medium



RU-2-22

- Rotary union for media supply for rotating cylinders
- For closed or open center cylinders (not for ZHVD-DFR)
- Universal for air, oil or coolant
- The medium must be free of contamination
- Filter 25 µm requested
- RU-2-22 = 2 Media

PNEUMATIC | HYDRAULIC FRONT-END CHUCKS











SP

- EXTRA Large Through-Hole Ø26 - 115 mm
- Inch Serration
- 3 iaws
- 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 iaws
- 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 -

Ш

SELF-CENTERING STEADY RESTS FOR TURNING AND GRINDING



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 1-5.1 (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 20/80 175/460 mm)

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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) depending on chuck model
- USC: Ø140 260 mm.
- US Big díameters: 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



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 iaws
- Integrated dampener
- CC Ø240 470 mm



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 mm)
 KA 7-7.1 (range 340/660 to 650/910 mm)



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 530-540 (range 70/293 mm)



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

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CHUCK SWITCHING SYSTEM / ACCESSORIES



STP

- Stationary chuck, pneumatic -Built-in pneumatic cylinder
- Inch Serration
- 3 jaws
- Through-hole (Ø26-92 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 Cartrige content 500g
- and Can content 1000g

 K67 Cartrige content 500g
 and Can content 1000g
- Grease gun for cartriges also refillable from grease can

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











3 5-AXIS VISES



4 MULTIPLE CLAMPING SYSTEM



5 PRECISION MACHINE VISES



6 MANUAL CHUCKS



7 STATIONARY CHUCKS



ZERO POINT SYSTEMS | APS



APS 100

1.1

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)



APS 140

BASIC/PREMIUM SC/PREMIUM LIGHT/ PREMIUM LIGHT SC - 2/3 damping 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)

APS SETTING TABLES

1.3

CLAMPING UNITS



SERIES 800-SERIES 1200

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



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 C

CLAMPING PALLETS

1.6

SPECIAL CLAMPING UNITS





APS

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

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



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)



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
- Stroke control SC for automation application
- N.6 seats prepared to mount couplers (only PREMIUM SC-6S)



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

.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 one 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





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

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



proofline® series

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

2

Hydraulic long-stroke vise

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

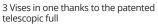
5-AXIS MACHINE TOOLS

MCS. MULTIPLE





IMG



- 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



Mechanical zero point system

- 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

CLAMPING SYSTEM



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

PLUS 5

- · Locking and unlocking system of

CV / CV-S / CV-VCS / CV-CN

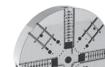
- Quick change system CLAK-SYSTEM for jaws and parallels optional available
- Wide range of accessories
- Compact design
- Optional interface with Zero-Point system

SINTERGRIP

MANUAL CHUCKS







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 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



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



proofline®series

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

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



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

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
- ÚSC 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



proofline® series

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

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.











ROTARY PLATE



GRIPPERS



PRS



MECHATRONIC **GRIPPERS**



АТ-РМ



SINGLE AND MULTIPLE



STORAGE

ZERO POINT SYSTEMS | APS

More APS details on the STATIONARY PORTFOLIO







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

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

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 stiftness at a total height of only 60 mm
- Easy mounting on the machine table due to positioning holes

MODULE HEIGHT EXTENSION ONE APS

SAB-1 VALVE

DISTRIBUTOR



- · Without integrated Feedings (for example 3-axis machine)
- Preparated for 5-axis machines until 6 Feedings



with APS INCLUDED

- Without integrated Feedings (for example 3-axis machine)
- Preparated for 5-axis machines until 6 Feedings



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



CUSTOMIZED

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

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





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

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



MANUAL

MANUAL OPERATION APS MODULE

SIZES Ø202 - Ø260 - Ø330 - Ø420 - Ø520 - Ø650 - Ø1000 - Ø1400



AUTOMATIC

AUTOMATIC OPERATION APS MODULE

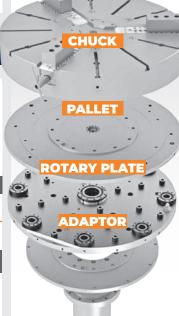
SIZES Ø202 - Ø260 - Ø330 -Ø420 - Ø520 - Ø650



AUTOMATIC

AUTOMATIC OPERATION APS MODULE + 3 Feedings

SIZES Ø202 - Ø260 - Ø330- Ø420 -Ø520-Ø650



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

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

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

- laws prepared for the guick jaws change and fixed mounting of the jaw
- Analogic linear stroke control sensor
- 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-..E/I = OD / ID clamping

- Stroke control types: linear and ON/OFF inductive/analogic linear and ON/OFF magnetic

UNIVERSAL 3 GRIPPERS



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

Pneumatics - Protected. With aluminium body

- Functional parts heat-treated for high precision and long life
- · Jaws with calibrated bushings and
- 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

- Possibility to insert spring workstop
- · Analogic linear stroke control sensor
- O.D. (also with springs) and/or I.D.
- 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-..E/I = 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-..E/I = OD / ID clamping
- Stroke control types: linear and ON/OFF inductive/analogic linear and ON/OFF magnetic

INDUCTIVE

COUPLING SYSTEM

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



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

- A6 +



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-.E/I = OD / ID clamping
- Stroke control types: linear and ON/OFF inductive/analogic linear and ON/OFF magnetic

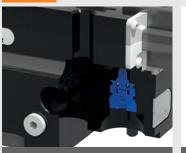


2PXL 250

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-.E/I = OD / ID clamping
- Stroke control types: linear and ON/OFF inductive/analogic linear and ON/OFF magnetic

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

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



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



VISES FOR AUTOMATION



F100 ETH / 2IOL

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

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

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

AT-PMFAST 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 corrisponding 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 corrisponding top iaws
- Suitable with DIN 702/4
- Usable with HG-N / DG / SGS
- 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 corrisponding top jaws

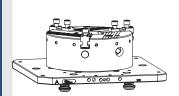


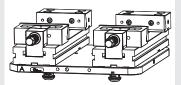
Two parts Pallet

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

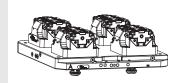
8.3

MULTIPLE CLAMPING PALLET









Q400 for manual chucks

For mounting SGSF chucks

 Clamping Pallet Q400 prepared for Chucks 200-250-315 SGSF 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 corrisponding top jaws

Q400 - STV 180-225

Pallet with 4 Feedings

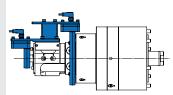
 4 APS 140 clamping pallet stv holder

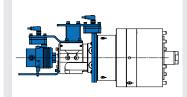
Q400 - STV 125

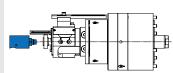
Pallet with 4 Feedings

 4 APS 140 multiple clamping pallet holder n.4 125 STV









AT-PM double piston cyilinder

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

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 PP-L and PL-L grippers and the corrisponding top

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 corrisponding top jaws
- A for APS 140
- B for APS 190
- C for mounting on Matsuura 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 corrisponding top
- 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

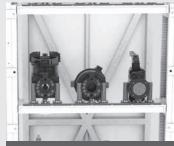
9

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 vises

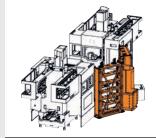
Pallet Q400 and vises storage plans

• 125 IMG e 160 IMG 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.









DIGITAL PRODUCTS

AND LINEAR POSITIONING SYSTEM



NEW TYPES OF CLAMPING SYSTEMS

1- CONVENTIONAL:

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

2- HYDRID:

DIGITALIZATION LEVEL

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

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

DIGITALIZATION + CLAMPING



Centco4 digit

 Digitalized 4-jaw chuck with hydraulic actuation



SLX e-motion

• Electromechanical Long Stroke vice



proofline® series

CC e-motion

• Electromechanical 4-jaw chuck



proofline® series

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, centeringmounting between centers or flange
- manual actuation
- inside clamping smooth or spline
- high accuracy concentricity ≤ 3µm



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 ≤ 5µm
- 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 ≤ 5µm



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 mmexpansibility 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.







2 SPECIAL CHUCKS



STATIC SOLUTION WITH STANDARD CHUCKS



SPECIAL EQUIPMENT



Automotive -Water Pump



Automotive -Shaft

SPECIAL CHUCKS



Industry -Locking Turbine



Industry -Horizontal <u>Machining Ce</u>nter

STATIC SOLUTION WITH STANDARD CHUCKS



Compressor -Shell



Compressor -Crankshaft

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.



- 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



SPECIAL DIAPHRAGM FIXTURES



High Accuracy High Repeatability



Up to Ø1500 3600 Clamping

2 S

SPECIAL TOMBSTONES

3

LIGHTWEIGHT MANUAL FIXTURES







Special Tombstones

Manual Clamping Fixtures

4

AEROFOIL BLADE FIXTURES





Convex or Concave **Shapes**

For Complex Geometry

5

SMALL BLADE FIXTURES & VACUUM FIXTURES









Vacuum Fixtures

Slot Machining Fixtures

MULTIPLE APPLICATIONS





Special Chuck Fixtures

Stator Blade Turning Fixtures

MULTIPLE APPLICATIONS







Special Centralising Fixtures

i

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.



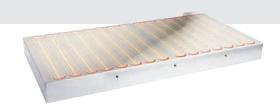
1.1 Milling

- \bullet 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 selfcentering 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





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.







2 QUICK CHANGE HOLDER



3 ROTATING TOOLHOLDERS



4 SLOTTING TOOL



5 HOBBING TOOL



6 STEADY REST FOR TURRET

STATIC HOLDERS



TH CUT

CUTTING TOOL HOLDER



TH AX

AXIAL TOOL HOLDER

QUICK CHANGE HOLDER



TH-RAD

POLYGONAL SHANK



LT-A

HSK

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

SLOTTING TOOL





LT-ST

SLOTTING TOOL 90°

QUICK CHANGE HOLDER



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

STEADY REST AND SUPPORTS

TOOL HOLDER TILTABLE

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



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



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







KNCS-2G



APS



TWIN VISE



AUTOMATION



SMW-electronics MotionAct -360°rotation



SMW-AUTOBLOK Spannsysteme GmbH

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