

# TANDEM PGS3

Perfection and reliability for simple, automated machine loading

Superior Clamping and Gripping



Gripping Systems

Clamping Technology



Chuck Jaws



Lathe Chucks



Stationary Workholding



Toolholders



Hydraulic Expansion Technology



VERO-S



TANDEM



ROTA



KONTEC



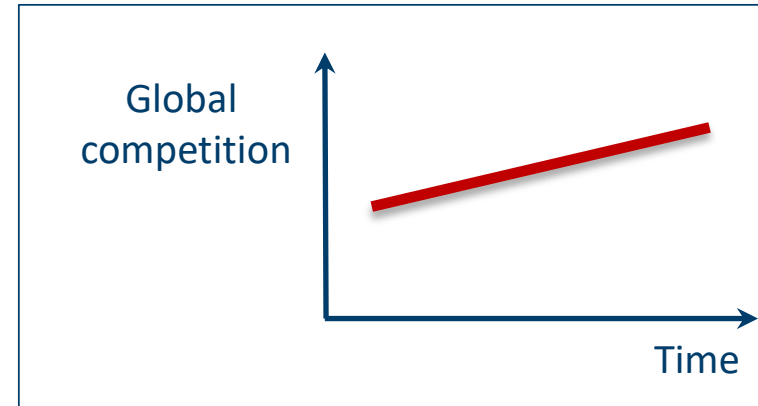
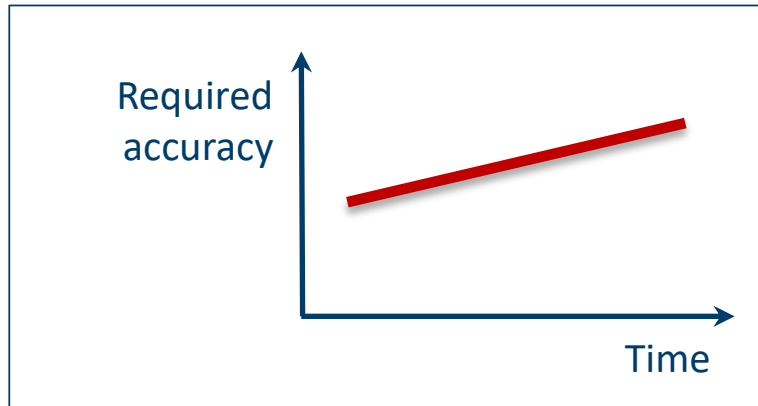
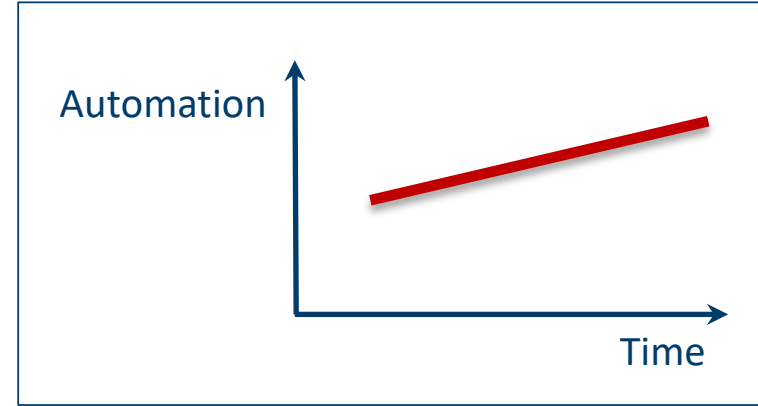
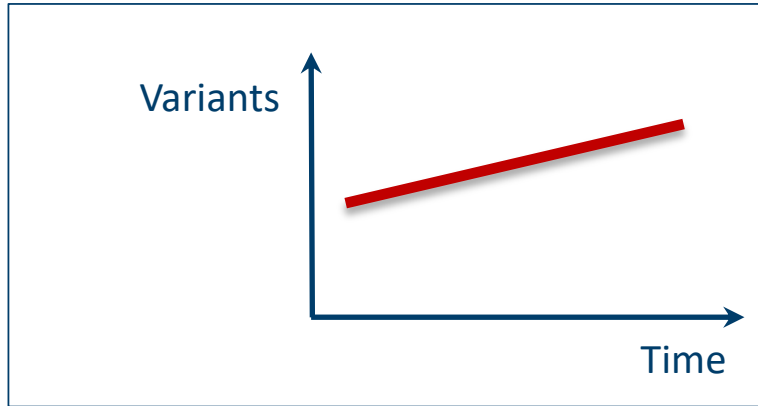
Tombstones



MAGNOS

# TANDEM 3

## Challenges



Increasing relevance of the set-up process

# TANDEM PGS3

## Advantages – Your benefits


- Integrated console plate
- Ready for immediate use
- Base body made of light aluminium
- Low height
- Optimized outside contour
- Cubic design
- High efficiency of the wedge hook system
- Precision wedge hook clamping force block for top-quality demands
- Optimal jaw support due to the use of a very long base jaw guidance



# TANDEM 3 Lead Vises

Way above 300 standard versions

Pneumatic PGS3			
Standard stroke			
	<b>PGS3</b>		
	Size	100	140
	Jaw stroke (mm)	2	3
	Number of versions	1	1

Pneumatic PGS3-LH			
Long stroke			
	<b>PGS3-LH</b>		
	Size	100	140
	Jaw stroke (mm)	6	7
	Number of versions	1	1

**The TANDEM PGS3 clamping force block**



A strong combination partner for light machining and simple automation tasks.

# TANDEM 3

## Variants



### Standard stroke

For the standard stroke, a high force transmission is achieved via a small wedge angle.

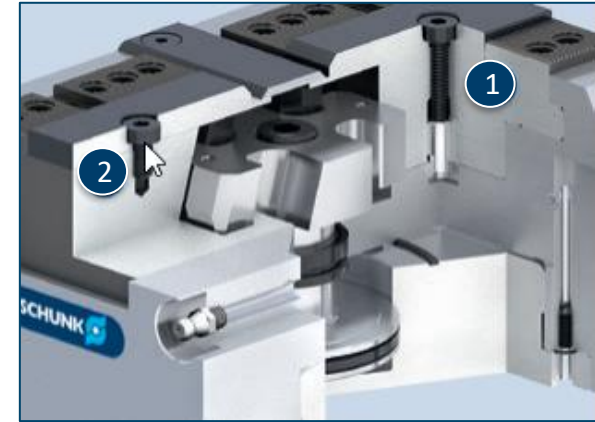
Advantage: High clamping forces.



### Long stroke (-LH)

For a long stroke, a larger jaw stroke is achieved via an increased wedge angle. Due to the enlarged angle, however, the LH version achieves a lower clamping force than the standard stroke version.

Advantage: Longer jaw stroke.



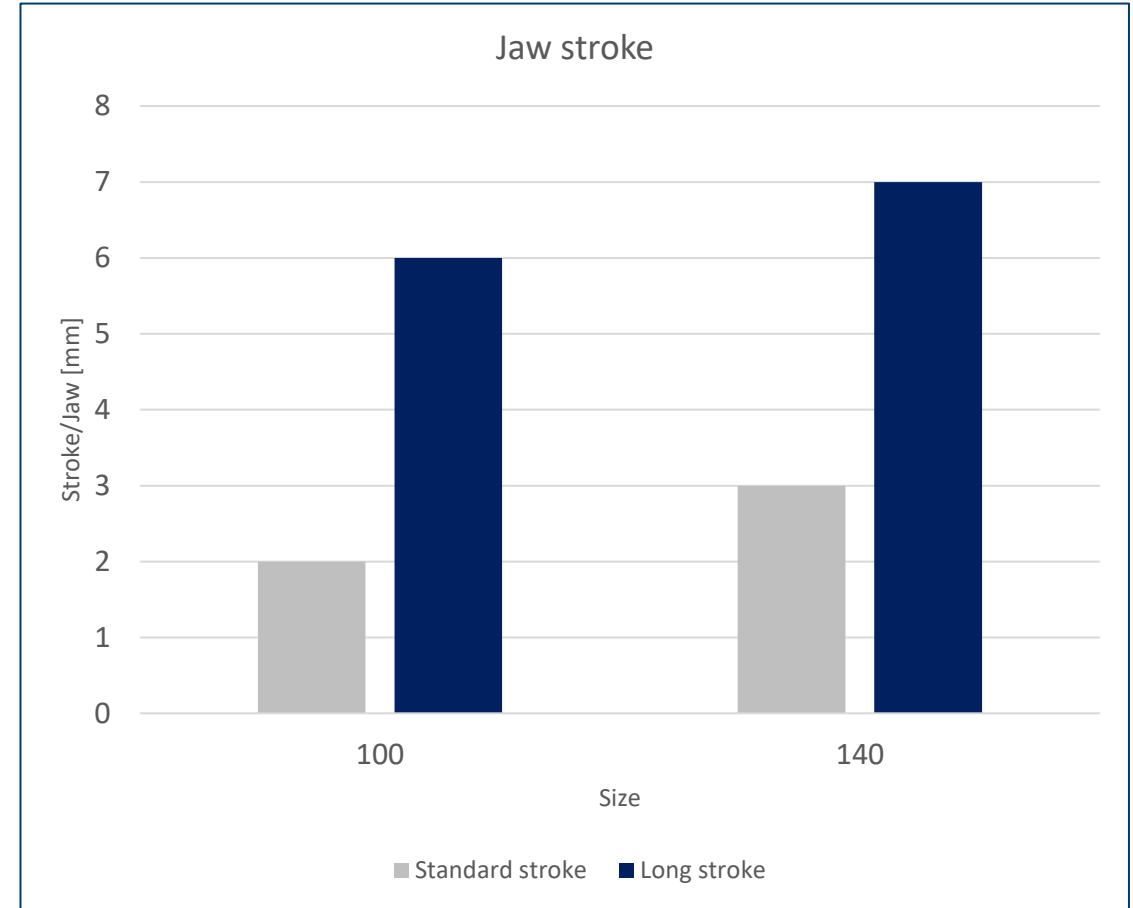
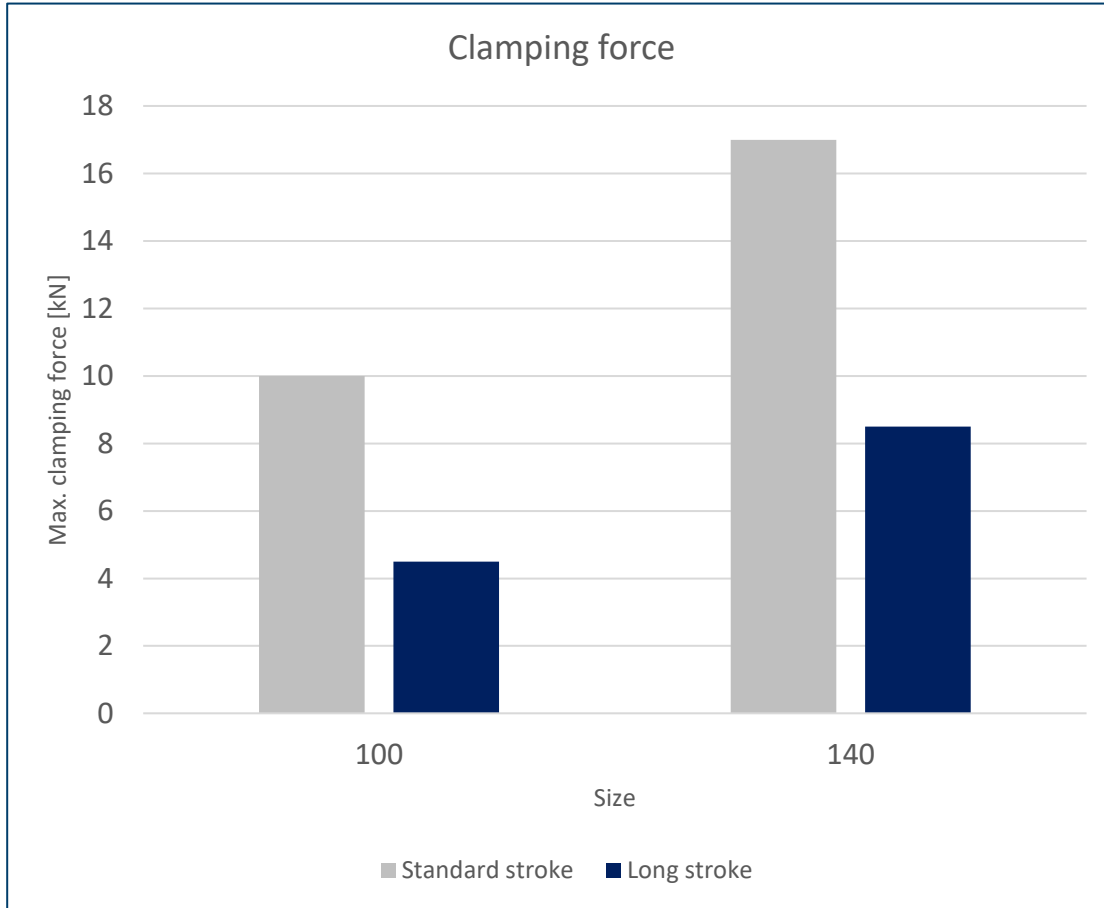
### With fixed jaw (-F)

One chuck jaw is screwed immovably to the body. The force transmission takes place via the movable jaw.

- ① Fixed clamping jaw
- ② Movable clamping jaws

# TANDEM PGS3

## Clamping force and jaw stroke



# TANDEM PGS3

## Functional diagram

- ① Wedge hook drive
- ② Integrated console plate
- ③ Long jaw guidance
- ④ Compact design
- ⑤ Improved design which is insensitive to dirt
- ⑥ Jaw interface with tongue and groove
- ⑦ Simple lateral control of the clamping force block
- ⑧ Piston guided in the body



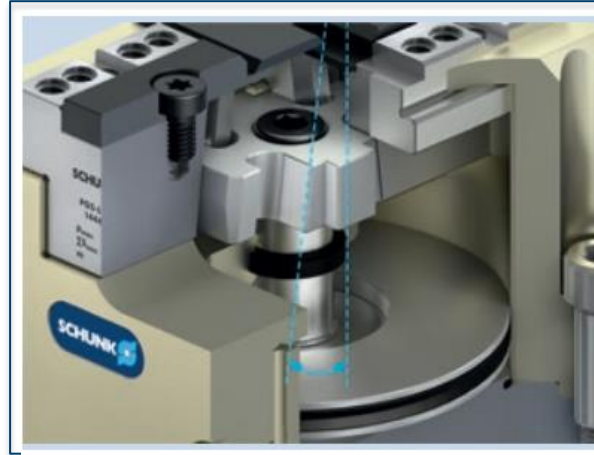
# TANDEM PGS3

## Highlights



### Pneumatic drive

Clamping and loosening is performed via a double-acting pneumatic cylinder with permanent pressure.



### Standard stroke

For the standard stroke, a high force transmission is achieved via a small wedge angle.

Benefit: The PGS3 has high clamping forces.



### Long stroke

For a long stroke, a larger jaw stroke is achieved via an increased wedge angle. Due to the enlarged angle, however, the LH-version achieves a lower clamping force than the standard stroke version.

Advantage: Longer jaw stroke.

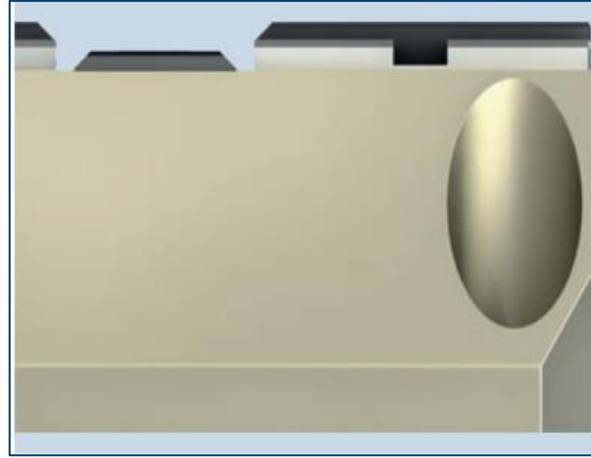
# TANDEM PGS3

## Highlights



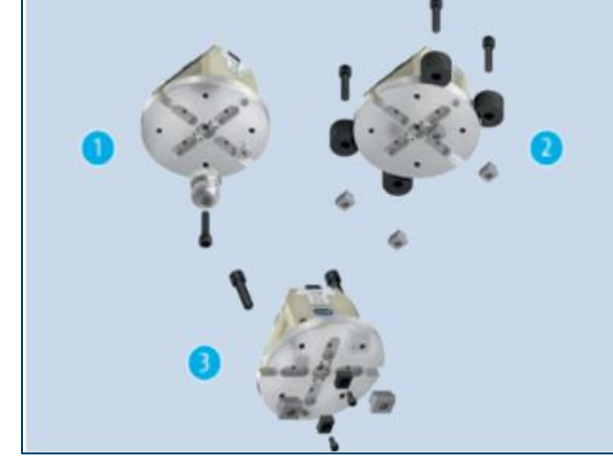
### Easy commissioning

Quickly and easy commissioning. Due to the integrated console plate, the clamping force block can be mounted directly on the machine table or quick-change pallet system. The lateral air connections allow the vise to be controlled directly with a 5/3-way valve.



### Chip-repellent design

The special design of the base jaw and cover strip prevents chips becoming permanently lodged. During the clamping process, the chips are pushed from the base jaw by the incline of the cover strip.



### Mounting options

The clamping force block can be used for minimizing the set-up time. It can be placed on the VERO-S NSE3 with anti-twist protection using the existing VERO-S interface.

- 1 Fastening via quick-change pallet system
- 2 Fastening via cylindrical clamps
- 3 Mounting via T-nuts

# TANDEM PGS3

## Documents

### Catalog chapter

**PGS3**  
Pneumatische Kraftspannblöcke | Pneumatic clamping force blocks

**PGS3**  
*Perfection and reliability for simple, automated machine loading*

**Perfektion und Zuverlässigkeit für die einfache, automatisierte Maschinenbeladung**

TANDEM PGS3 ist der neue kompakte pneumatische Kraftspannblock für die automatisierte Zerspannung von kleinen Bauteilen. Trotz seiner kleinen Größe punktet das wartungsarme Kraftpaket mit großem Backenhub, beachtlicher Spannkraft und hoher Wiederholgenauigkeit für präzises und effizientes Spannen.

Der Kraftspannblock bietet mehrere Möglichkeiten der Befestigung auf dem Maschinentisch – ohne zusätzliche Konsolplatte. Über den integrierten Flansch kann der TANDEM PGS3 unmittelbar auf Maschinentischen, Teilappazitäten oder SCHUNK VERO-S WS3 TWS Spannstationen von Bearbeitungszentren montiert werden. Die äußerst kompakte Bauweise sorgt für eine größtmögliche Nutzung des Arbeitsraums.



**PGS3**  
Pneumatische Kraftspannblöcke | Pneumatic clamping force blocks

**Vorteile – Ihr Nutzen**

**Integrierte Konsolplatte**  
Direkte Montage auf T-Nutentischen sowie VERO-S Spannmodulen mit Verdrehicherung

**Direkt einsetzbar**  
Durch seitliche Luftanschlüsse am Kraftspannblock

**Grundkörper aus leichtem Aluminium**  
Dadurch absolut kombinationsstark in der leichten Bearbeitung und der einfachen Automatisierung

**Geringe Bauhöhe**  
Maximale Nutzung des Maschinenraumes und maximale Systemsteifigkeit

**Optimierte Außenkontur**  
Für beste seitliche Zugänglichkeit und optimalen Spänefall

**Quadratische Bauform**  
Ideal für 6-Seitenbearbeitung in zwei Aufspannungen auf 4-Achs-Maschinen

**Hoher Wirkungsgrad des Keilhakensystems**  
Prozesssicheres Spannen durch hohe Spannkraft

**Präzisions-Keilhaken-Kraftspannblock für höchste Qualitätsansprüche**  
Ermöglicht exzellente Bearbeitungsergebnisse

**Optimale Backenabstützung durch sehr lange Grundbackenführung**  
Ermöglicht höchste Spannkraft bei langer Lebensdauer

**Advantages – Your benefits**

**Integrated console plate**  
Direct mounting on T-slot tables as well as VERO-S clamping modules with anti-twist protection

**Ready for immediate use**  
Due to lateral air connections on the clamping force block

**Base body made of light aluminum**  
Highly combinable with easy machining and simple automation

**Low height**  
Maximum use of the machine room and maximum rigidity of the system

**Optimized outside contour**  
For best side access and optimal chip falling

**Cubic design**  
Ideal for 6-sided machining with 2 set-ups on 4-axis machines

**High efficiency of the wedge hook system**  
Process-reliable clamping due to high clamping forces

**Precision wedge hook clamping force block for top-quality demands**  
Allows excellent machining processes

**Optimal jaw support due to the use of a very long base jaw guidance**  
Allows high clamping forces at a long service life

SCHUNK

### Homepage

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#### PGS3 Plug & Work



#### Description

Pneumatically operated 2-jaw clamping force block with VERO-S interface for automated metal cutting of small components. These are available with standard jaw stroke and long stroke.

#### Advantages – Your benefits

##### Integrated console plate

Direct mounting on machine tables, dividing heads, as well as VERO-S clamping modules with anti-twist protection

##### Ready for immediate use

Due to lateral air connections on the clamping force block

##### Base body made of light aluminum

Highly combinable with easy machining and simple automation

##### Low height

Maximum use of the machine room and maximum rigidity of the system

##### Optimized outside contour

For best side access and optimal chip falling

##### Cubic design

Ideal for 6-sided machining with 2 set-ups on 4-axis machines

##### High efficiency of the wedge hook system

Process-reliable clamping due to high clamping forces

##### Precision wedge hook clamping force block for top-quality demands

Allows excellent machining processes

##### Optimal jaw support due to the use of a very long base jaw guidance

Allows high clamping forces at a long service life

#### Options and special information

Perfection and reliability for simple, automated machine loading

TANDEM PGS3 is the new compact pneumatic clamping force block for automated metal cutting of small components. When it comes to precise and efficient clamping, the low-maintenance powerhouse scores despite its small

# TANDEM PGS3 top jaws

# TANDEM PGS3 Jaws

## Top jaw blanks

**Mounting: Via tongue and groove**

## KTR/KTR-H



KTR/KTR-H				
Description	ID	Length [mm]	Width [mm]	Height [mm]
KTR 100	0402121	47	55	25
KTR 140	1349707	65	70	35
KTR-H 100	1349708	47	55	48
KTR-H 140	0402222	65	70	70

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