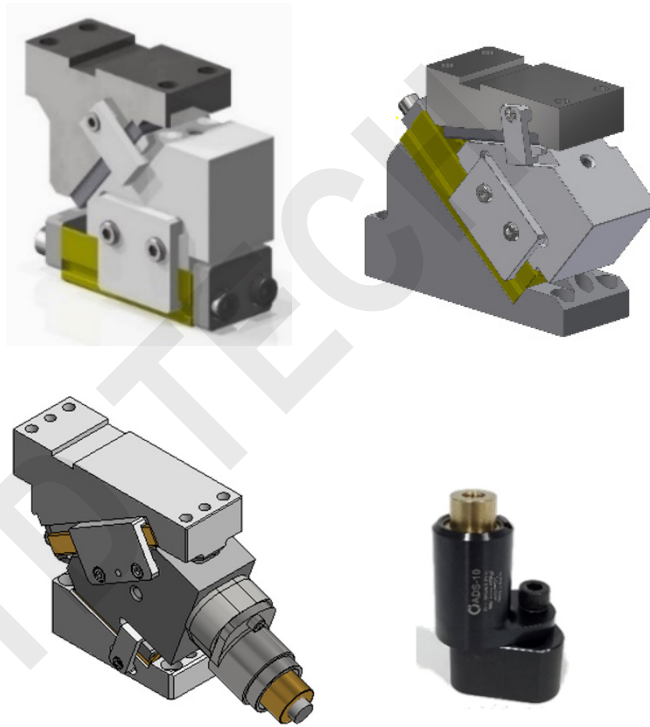


# PRESS DIE STANDARD COMPONENTS



*Analog To Digital Technologies*

YouTube / ATD TECH



**VOL. A1-APC-EN-R5**

Distributor

■ **CI**



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- Webhard: [www.webhard.net](http://www.webhard.net) ID/PW : atdtech
- Tel. : +82-10-2048-1352
- Fax. : +82-504-449-1352

■ **PATENT**

• **Korea**



• **International**



Europe



Europe

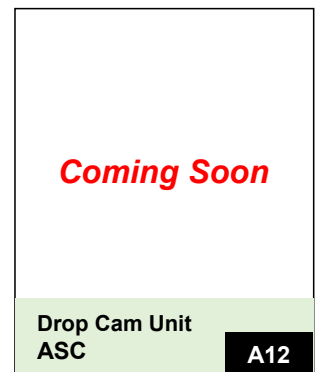
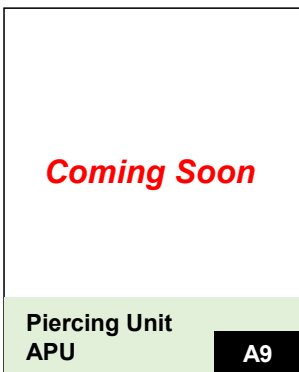
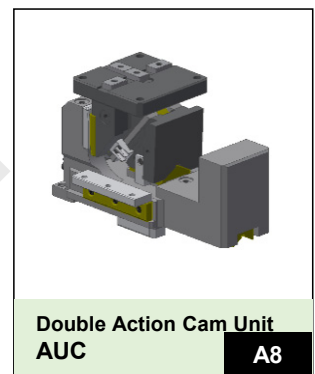
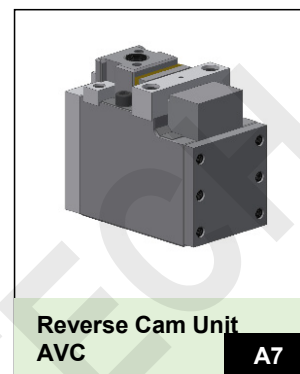
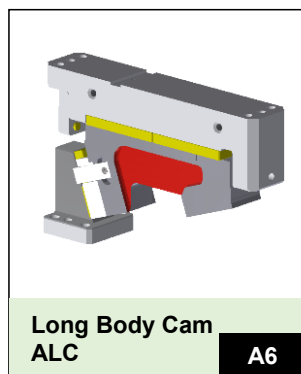
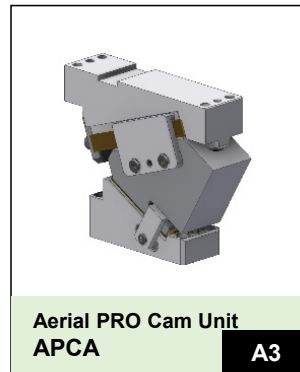
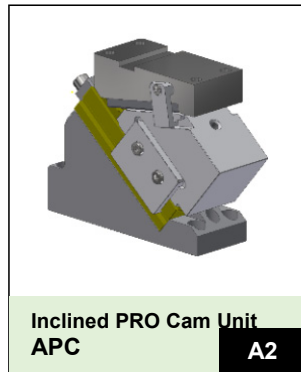
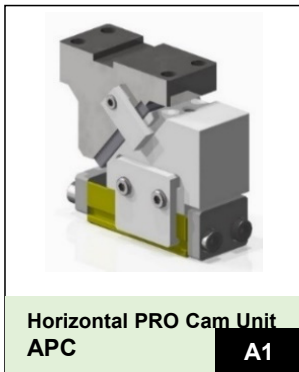


Japan



China

<b>A</b>	<b>CAM SLIDE UNITS &amp; PIERCING UNITS</b>	<b>A</b>
<b>B</b>	<b>DISK STRIPPER</b>	<b>B</b>
<b>C</b>	<b>DISK PAD GUIDE UNITS &amp; MODULE</b>	<b>C</b>
<b>D</b>	<b>BALANCE CONTROL UNITS</b>	<b>D</b>
<b>E</b>	<b>SPRING GUIDE LIFTER</b>	<b>E</b>
<b>F</b>	<b>PRESS DIE STANDARD COMPONENTS</b>	<b>F</b>
<b>G</b>	<b>PRESS DIE AUTOMOTIVE DEVICE</b>	<b>G</b>
<b>H</b>	<b>NEW ITEMS (COMING SOON)</b>	<b>H</b>
<b>I</b>	<b>APPLICATIONS &amp; TECHNICAL SUPPORT</b>	<b>J</b>



- Please contact to ATD sales team or global network for market standard cam units
- For technical support from ATD technical engineer, contact our network with panel data by e-mail

● **DISK STRIPPER & DISK PAD GIDE MODLE**



**Disk Stripper**  
ADS B1



**Disk Stripper**  
ADS-M B1

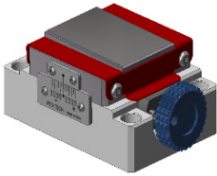


**Disk Pad Gide**  
ADP C1




**Disk Pad Gide Module**  
ADPM C1

● **Balance Controller**



**Padding Force Controller**  
ADU D1

● **Spring Guide Lifter**



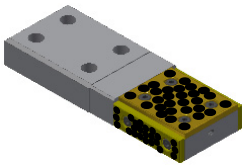
**Spring guide Lifter**  
ACST E1

● **Cam Support Block**

Coming Soon

**Cam Support Block**  
ACTG H1

● **Market Standard**




**Interchangeable Gide**  
AGBTP, AMGB F1

● **Functional Devices**


- The other market standard products can be supplied.
- Contact ATD sales or engineering department for special design, customer required products.
- Coming soon developing components.
- Please contact our sales network for 2D/3D cad data

● **Application**



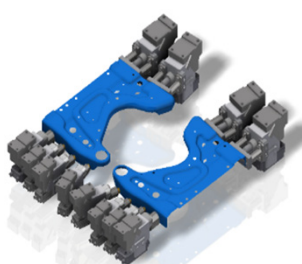
**Applications** J1

● **Supplied**



**Supplied** J1

● **Technical**



**Technical Support** J1



**PATENT PENDING**

The **APC cam series** is a rigid, die-mounted steel cam system, ideally suited for use in **progressive dies** and **standard press dies**.

A1

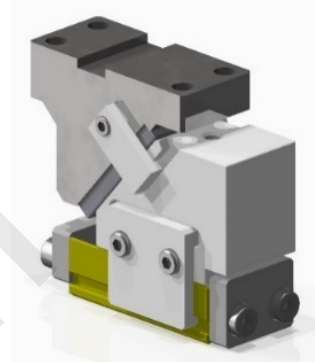
▪ **Features**

1. **Responsiveness to high SPM**

**The APC Series: World’s First Standardized Lower Cam Unit**

Designed for compact, die-mounted applications, the APC Series integrates a gas return spring and ensures stable, rigid cam motion.

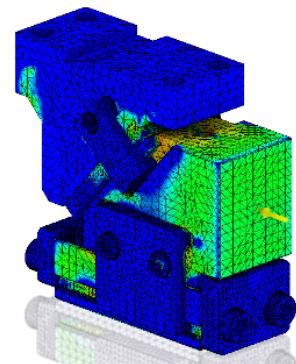
Its self-lubricating internal components feature a surface hardness over **HB260**, offering superior wear resistance and durability compared to conventional units.



2. **Variable cam width and stroke, working angle**

The mounting surface widths are compactly designed in four sizes: **50 mm, 65 mm, 90 mm, and 125 mm**. Each size offers stroke options: **18 mm, 30 mm, 45 mm, and 60 mm**.

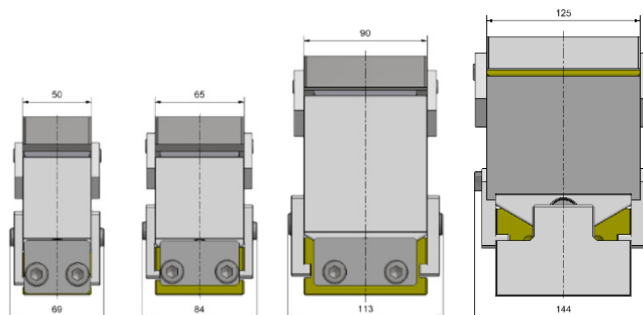
The cam units are available in **seven working angles**, ranging from **0° to 30° in 5° increments**.



3. **Compact overall width**

**Compact Design for Progressive Die Integration**

The APC Series offers a reduced overall width and shut height, enabling tighter installation in progressive dies compared to conventional cam units.

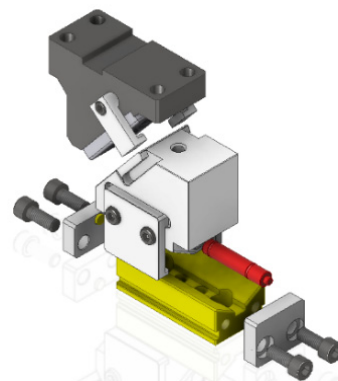


**4. For High tensile strength and aluminum material**

**Gas Spring Reliability with Recommended Pairing**

The APC Series incorporates gas springs for consistent and reliable return motion, even when processing high-tensile or thick materials.

For optimal die performance and extended durability, we recommend pairing with the ATD Disk Stripper (**ADS**) or Disk Pad Guide Module (**ADPT**).

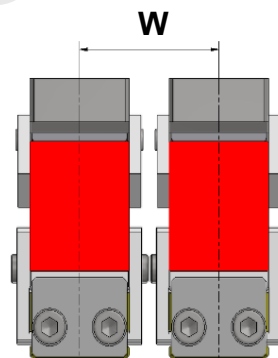


**5. Closer placing into the small die**

**Compact Design with Rear-Side Disassembly**

The APC Series features a streamlined overall profile and supports rear-side disassembly, allowing closer and more flexible placement within tight die layouts.

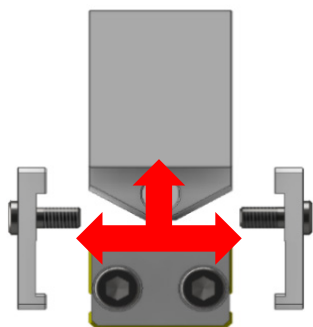
Series	50	65	90	125
W	70mm	85mm	115mm	145mm



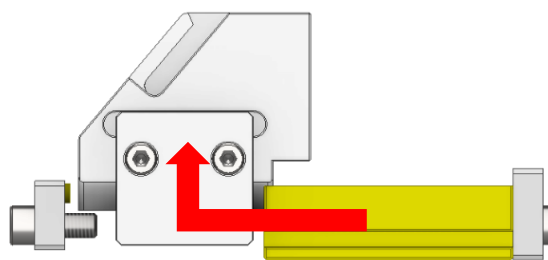
**6. Dis-assembly directions**

The APC Series supports both upward and rear-side disassembly, providing excellent flexibility to suit various die layouts.

• **Upward**



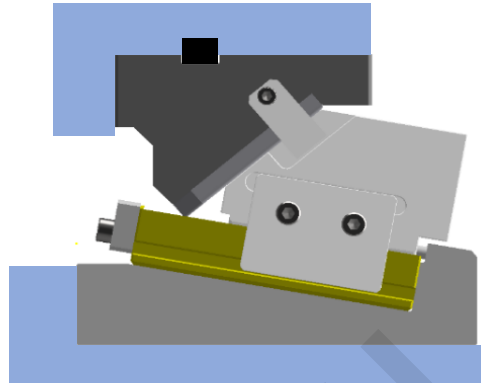
• **Backward**



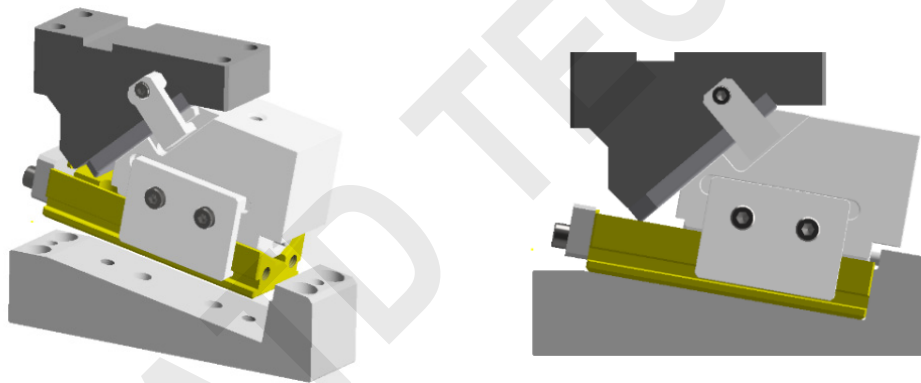
PATENT PENDING

## 7. Recommended mounting Structure

Adequate thrust support must be provided in both the upper and lower die sections, as shown below.



## 8. APC / Inclined Cam



The **APC series** features an inclined cam structure with attachments, available in **45mm** and **60mm** strokes. This inclined design maintains the same width as the horizontal APC version.

- **Punch-mounted face width:** 50mm, 65mm, 90mm, 125mm
- **Working stroke:** 18mm, 30mm, 45mm, 60mm
- **Working angle:** 5° to 30° (in 5° increments)

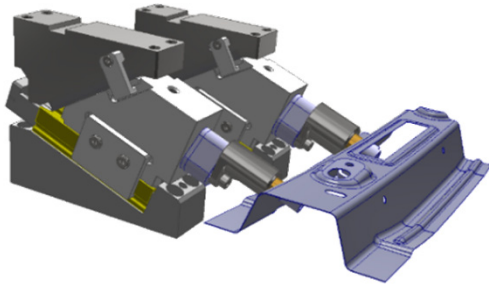
## 9. Order made

The APC series is composed of standardized, compatible components that can be customized to meet the unique requirements of your application. For more information, please contact our technical team or your local distributor.

- Please contact our sales network for 2D/3D cad data

▪ **Applications**

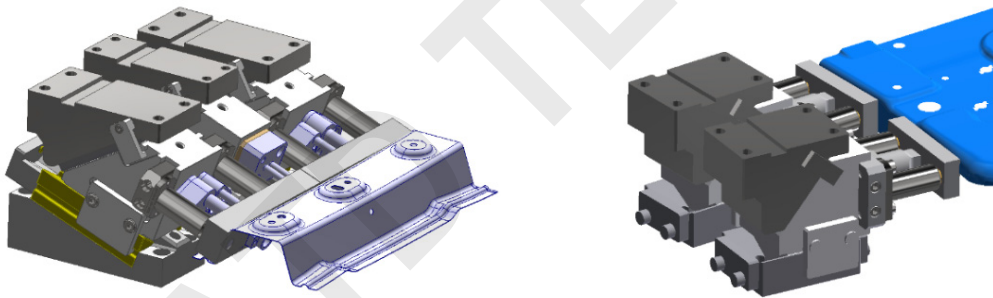
**1. ADS Placing**



For the cam piercing process, **ATD Disk Strippers (ADS)** can be used as an alternative to cam pads, ensuring more reliable cam and punch return. This results in longer punch life and improved production efficiency.

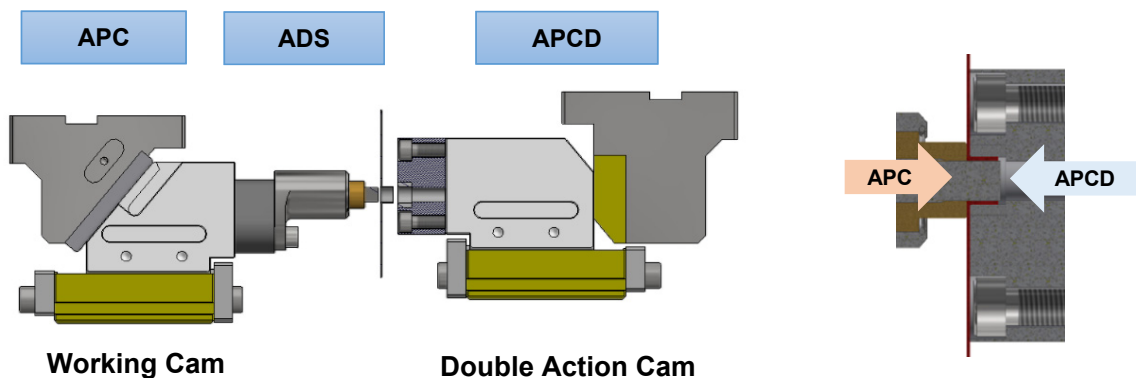
**2. ADP Module**

When multiple punches are mounted closely together, individual **ADS** stripper applications may not be feasible. In such cases, the **ADP** modular cam pad mounting system ensures reliable cam piercing.



**3. APCD / Double Action Cam**

The **APCD series** is a double-action cam unit developed based on the APC standard structure, designed for bulging processes. It utilizes both **APC standard cams** and **ADS**, offering versatile application capabilities.



**PATENT PENDING**

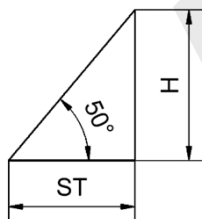
▪ **How to order / Code**

①            ②            ③            ④            ⑤  
**APC - 50 - 00 - 45 - GK - S**

- ① **SLIDER WIDTH**            [ 50mm, 65mm, 90mm, 125mm ]
- ② **WORKING ANGLE**        [ 00, 05, 10, 15, 20, 25, 30 ]
- ③ **WORKING STROKE**      [ 18mm, 30mm, 45mm, 60mm ]
- ④ **Options**
  - Gas Spring Brand  
**GK**(Kaller), **GD**(Dadco), **GP**(Powertec)  
**NG**(without gas spring)
  - Wide Slider (**APC 125 Series only**)  
**WC** (Ref. Page A1-6)
  - Stepped Slider for trimming, flanging  
**B** (Ref. Page A1-6)
- ⑤ **Special Order**

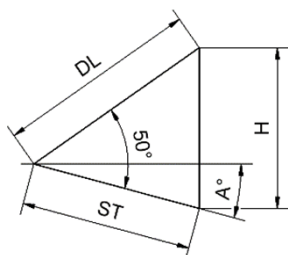
▪ **Cam Diagram**

• **Horizontal**



ST	18	30	45	60
H	21.4	35.7	53.6	71.5

• **Inclined**

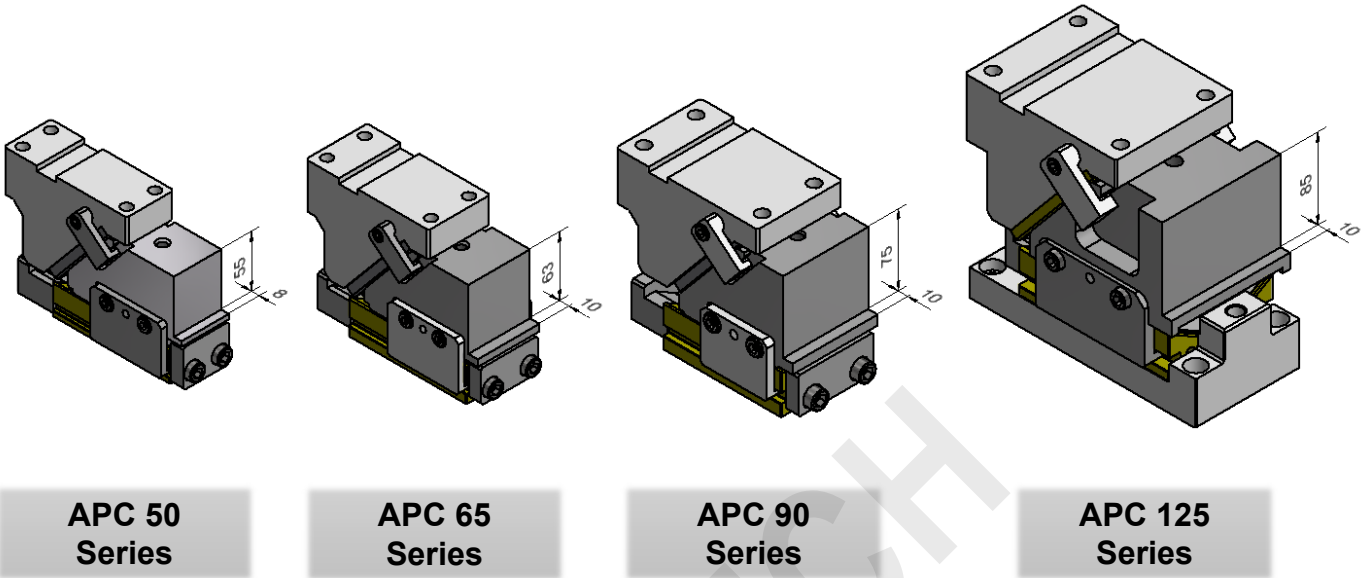


ST	-	A					
		5	10	15	20	25	30
45	DL	63.4	57.8	53.1	48.8	45	41.5
	H	48.7	45	42.1	39.8	38	36.7
60	DL	84.5	77.1	70.7	65.1	60	55.3
	H	65	60	56.1	53	50.7	48.9

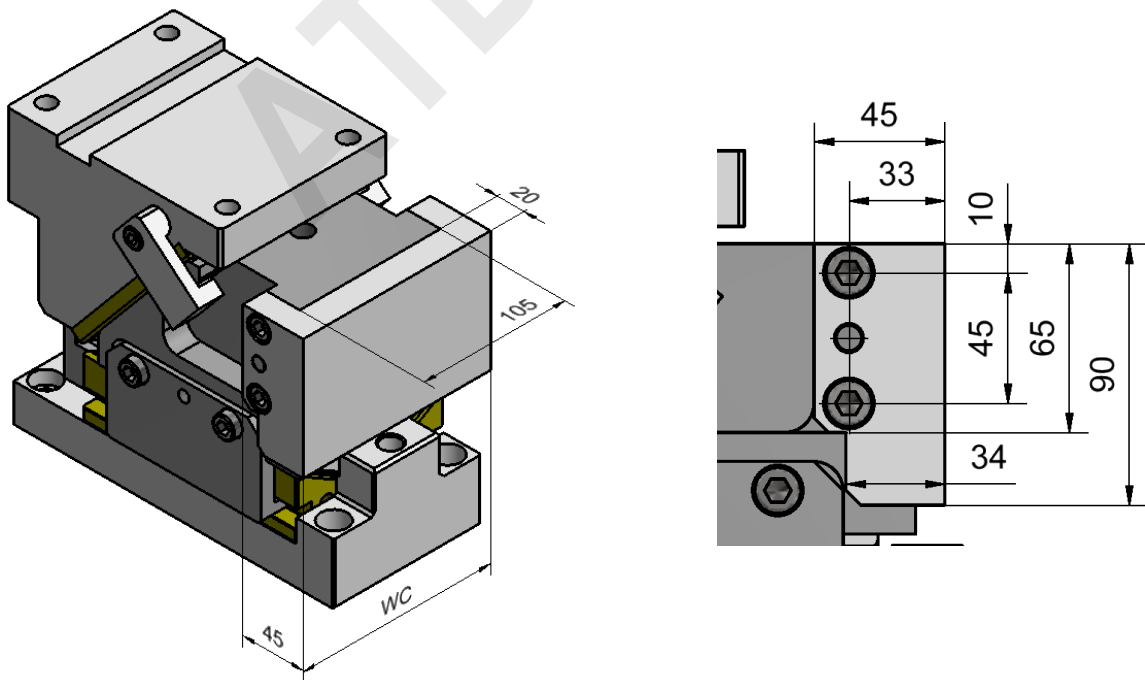
**Patent Pending**

- **B option** (Stepped Slider for Steel Block)

A1



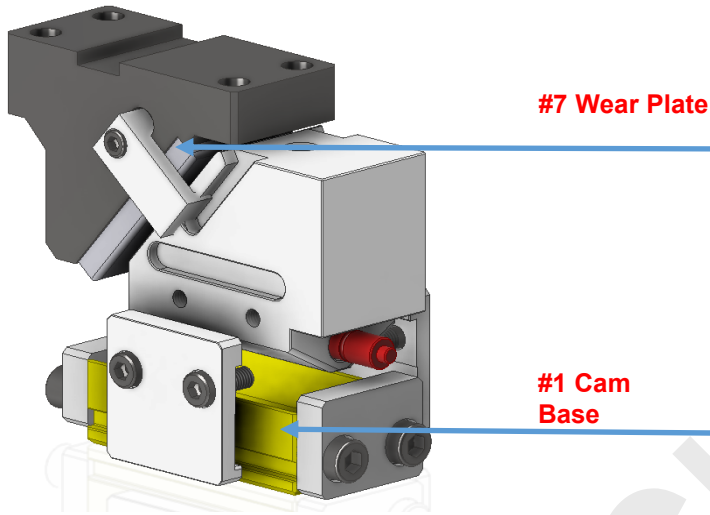
- **WC option** (Wide Slider, APC 125 Series only)



**WC** : 140mm ~ 160mm (every 10mm)

**PATENT PENDING**

▪ **Maintenance Parts**



• **How to order**

APC 50-15-30-#7

APC 90-15-60-#1

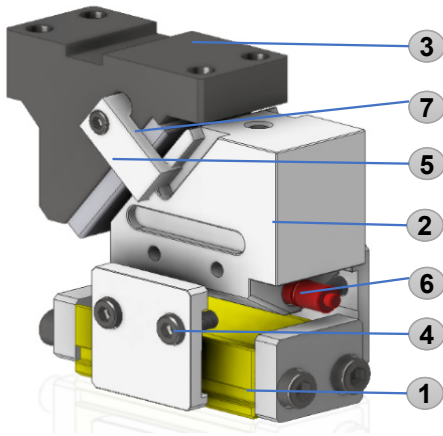
APC 125-15-60-#1

▪ **Gas Springs**

APC	(GK) Kaller	(GD) Dadco	(GP) Powertec	Final Force N(kgf)
APC-50-xx-18	R15-19-BLUE	C.070.025.RD	PS70-19-BU	460(47)
APC-50-xx-30	R15-38-BLUE	C.070.038.RD	PS70-38-BU	480(49)
APC-50-xx-45	R15-50-BLUE	C.070.050.RD	PS70-50-BU	500(51)
APC-50-xx-60	R15-63.5-BLUE	C.070.063.RD	PS70-64-BU	535(55)
APC-65-xx-18	R15-19-RED	C.070.025.YW	PS70-19-BU	695(71)
APC-65-xx-30	R15-38-RED	C.070.038.YW	PS70-38-BU	715(73)
APC-65-xx-45	R15-50-RED	C.070.050.YW	PS70-50-BU	745(76)
APC-65-xx-60	R15-63.5-RED	C.070.063.YW	PS70-64-BU	803(82)
APC-90-xx-18	R15-19-YELLOW	C.070.025.BK.177	PS70-19-BU	930(95)
APC-90-xx-30	R15-38-YELLOW	C.070.038.BK.177	PS70-38-BU	961(98)
APC-90-xx-45	R15-50-YELLOW	C.070.050.BK.177	PS70-50-BU	1,000(102)
APC-90-xx-60	R15-63.5-YELLOW	C.070.063.BK.177	PS70-64-BU	1,070(109)
APC 125-xx-45	M2-50-RED	C.180.050.RD	PKM-050-RD	2,238(228)
APC-125-xx-60	M2-63.5-RED	C.180.063.RD	PKM-063-RD	2,227(227)

• Options : GK, GD, GP

▪ **Components / Maintenance Parts**



No.	Part Name	Mat'l
①	Cam Base	*HB260+
2	Cam Slider	Steel, HQT
3	Cam Driver	Steel
4	Side Plate	Steel, HQT
5	Return Plate	Steel, HQT
6	Gas Spring	Kaller, Dadco
⑦	Wear Plate	Sintered

• ①, ⑦ : **Maintenance Parts**

• How to order maintenance parts order : APC Code – Part No.

▪ **Recommended Theoretical Working Force (Ref.)**

APC	Standard Working Force kN (ton)	Max. Working Force kN (ton)	Return Force N(kgf)
APC-50-xx-18	39.2(4.0)	58.8(6.0)	460(47)
APC-50-xx-30			480(49)
APC-50-xx-45			500(51)
APC-50-xx-60			535(55)
APC-65-xx-18	49(5.0)	73.5(7.5)	695(71)
APC-65-xx-30			715(73)
APC-65-xx-45			745(76)
APC-65-xx-60			803(82)
APC-90-xx-18	78.4(8.0)	117.6(12.0)	930(95)
APC-90-xx-30			961(98)
APC-90-xx-45			1,000(102)
APC-90-xx-60			1,070(109)
APC-125-xx-45	112.2(11.0)	173.5(17.0)	2,238(228)
APC-125-xx-60			2,227(227)

• **Working Force Guidelines**

Recommended working forces are theoretical values derived from the wear plate capacity and cam structure.

Regular maintenance and replacement of wear plates are essential to maintain performance.

Maximum force ratings are based on loading at the center of the mounting surface and may vary with actual mounting positions.

ATD TECH