

July. 2013

AUTO WELL Global Network



AUTO WELL Enterprise Company Limited

We reserve the right to modify and improve our products without prior notice.

Agent

No. 537-8, Chung-San Rd., Ching Shui, Taichung City 436, Taiwan

+ 886 4 2622 2303

+ 886 4 2622 2313

autowell@ms25.hinet.net

autowell.com.tw



Auto Well

VARIOUS PRECISION VISES

AUTO WELL ENTER. CO., LTD.



Registered
ISO 9001:2008

Registered
ISO 9001:2008



AUTO WELL ENTERPRISE COMPANY LIMITED VARIOUS PRECISION VISES

for CNC machining centers and milling machines

Auto Well Enter. Co., Ltd was founded in 1980 and started from produce the Hydraulic Power Machine Vise. The promoter, Philip Lin, devotes to develop the Machinery Industry and abides staunchly by the faith: Honor, Quality, Service, and Creation. The most plentiful wealth Auto Well has is the accumulations of many elite and excellent techniques during these 30 years. We have passed the ISO Certification. We satisfy the customers by keep studying creation, develop high quality products, and perfect service. Nowadays, we are the earliest and most professional precise vise manufacturer in Taiwan.

The quality guarantee of Auto

Well is come from the excellent manufacture ability. Inside, we carry through the quality policy: "Do the right thing, do the thing right." We are not like the other vise manufacturers in Taiwan which are just fabricate the vise. Perhaps almost all of their spare parts are buying from outside. The product policy of Auto Well is "primary quality, secondly the cost." There are several CNC and surface grinding machines in our company, so we can control and process the quality of precision by ourselves. We use the ERP and ISO quality security system to be the nuclear of management. Outside, we use "internationalization and liberalization" to lead our marketing and provide the customer the best and fastest service via overseas marketing. The depart-

ments of administrative, financial, sales, R&D and quality which are cooperate closely with each other to become a firm management team. The foregoing is making the precise vise of Auto Well reach the international highest standard.

We are the first precise vise manufacturer that passed the ISO international quality certification in Taiwan. Our products are sold to U.S.A., Canada, UK, Germany, Holland, Italy, Australia, Japan, Korea, China, Singapore, Malaysia, Thailand, South Africa, etc... In the current great environment of the international market, we keep the existing products improving. Furthermore, our R&D department develops new products in order to satisfy different customers and different demands. We have obtained various kinds of domestic and international rewards, authentication and patent registrations. All of these are the duties for Auto Well should to be responsible for the precise vise industry in Taiwan.

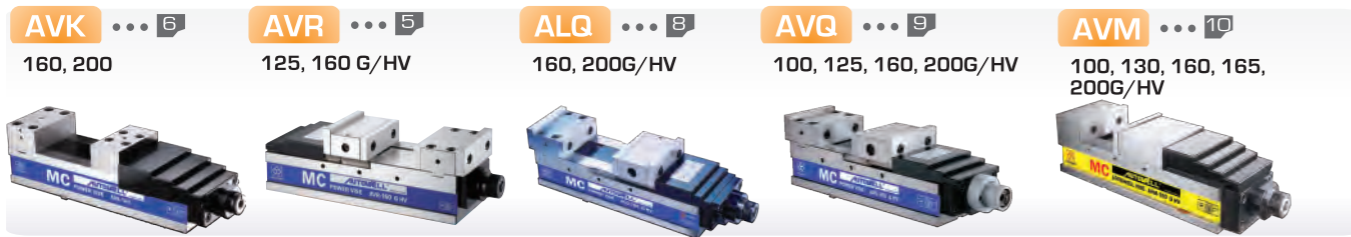


全力以赴 追求卓
創新科技 品質至
品質政策：
提供高優質的產
品與服務

 autowell.com.tw

workholding

MC Power Vises AVK, AVR, ALQ, AVQ, AVM, AVC, AVL, AMP system ... 4



Double Station Vises TLD, ALD, TLR, HLD, ALT system ... 16



Aluminum Double Station Vises ADS, ADS-4B system ... 26



Wellock Vises ATW, AMC, MG system ... 30

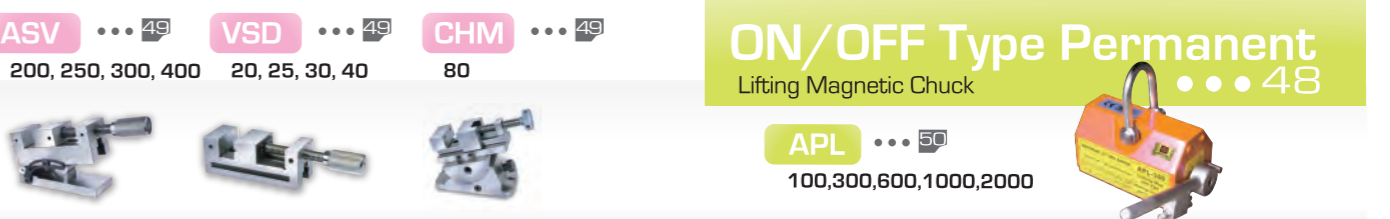
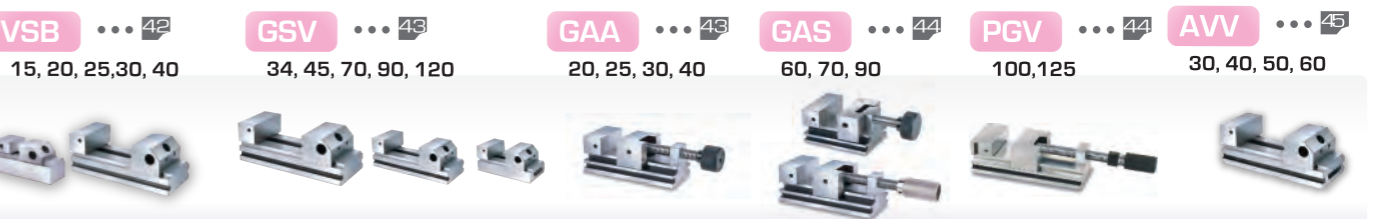


VARIOUS PRECISION VISES

Hydraulic Power Vises MP, HP, HPT system ... 36



Precision Accessories For Grinding Machine ... 40



Accessories ... 51



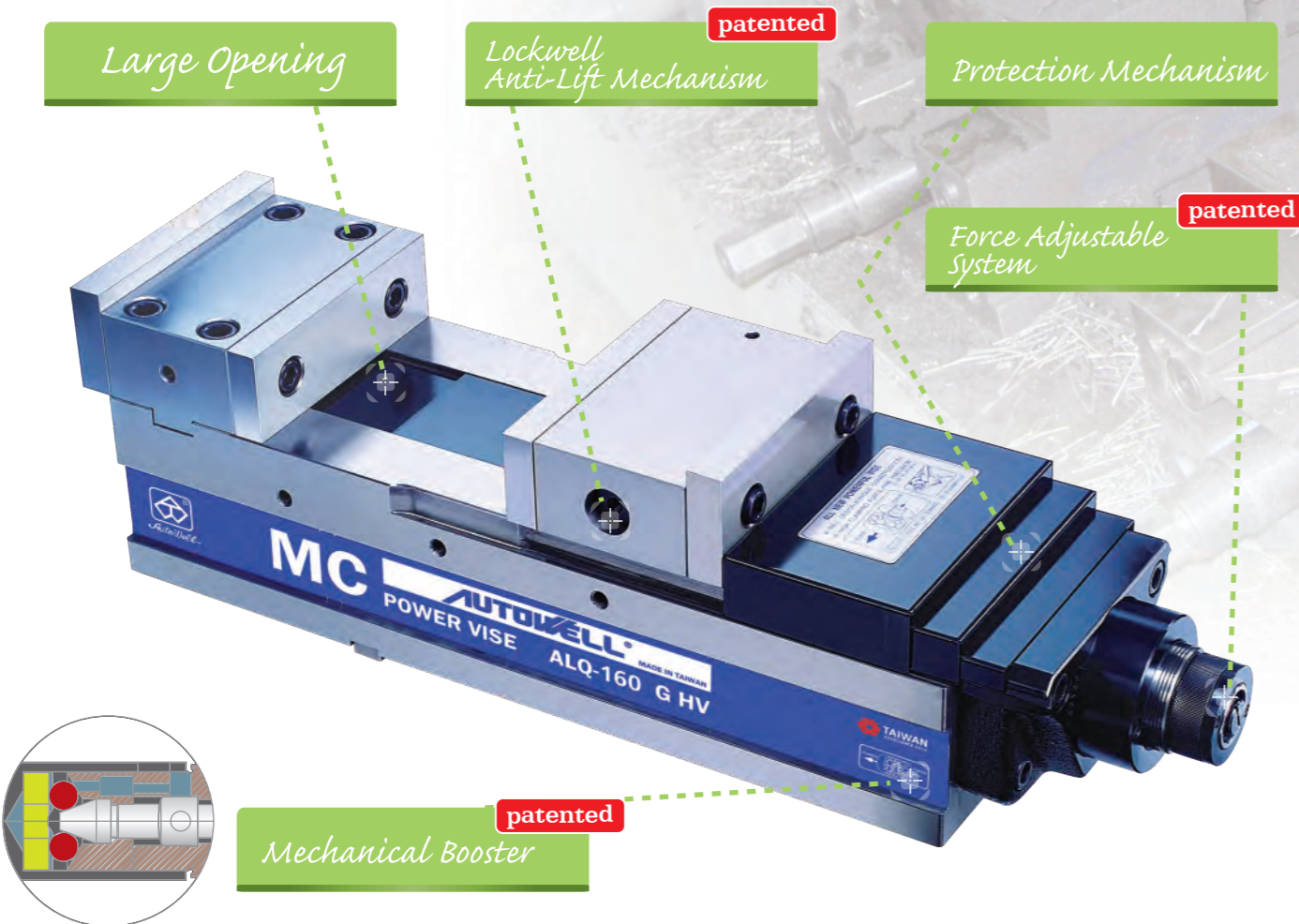
MC Mechanical Super Vise



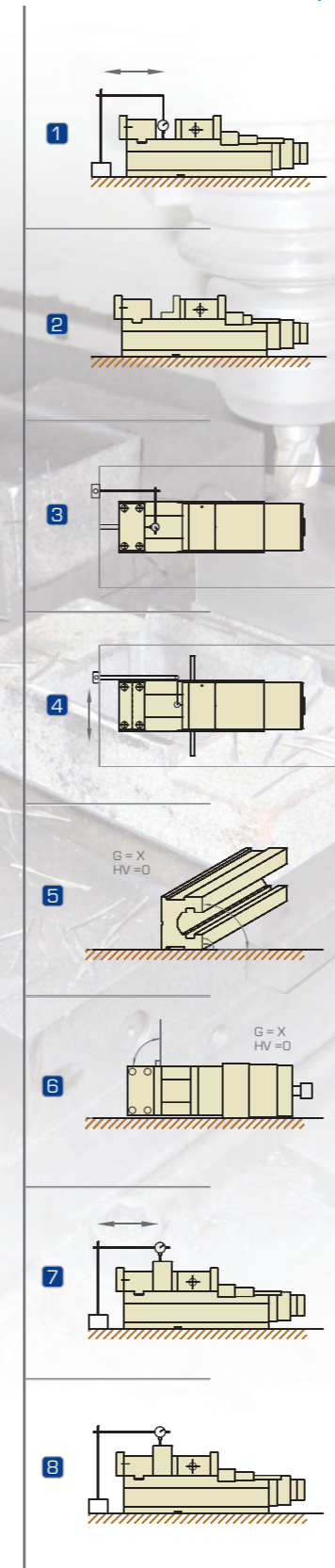
High Clamping Force & Extra Out-jaw Clamping Capacity

MC Power Vises are all in excellent precision and higher than JIS. Class with largest clamping force 50KN. The main feature of Auto Well Power Vise Series to be better than other brands' due to it has 3 patents: Lockwell Anti-Lift Mechanism, Mechanical Booster and Force Adjustable Function.

- Unique Out-jaw design increase the clamping capacity.
- Force Adjustable System (patented) makes the force setting easier and steadier. Clamping force can be freely adjusted with the guidance of graduation lines.
- Lockwell Anti-Lift mechanism (patented) ensures the workpiece does not lift.
- Mechanical Booster (patented) provides a steady clamping force and inside Disc-Spring to against shocks and vibrations while operation.
- The improved chip cover mechanism prevents the rust and extends the lifetime.
- Most suitable for VMC & HMC. Tolerance required within 0.01mm.
- Rigid and tensile ductile iron FCD-60 (80,000PSI) vise body. Slide surface flame hardened to HS65° to maintain the accuracy. S50C jaw-plate has been Carburizing heat treated the hardness to HRC54°.

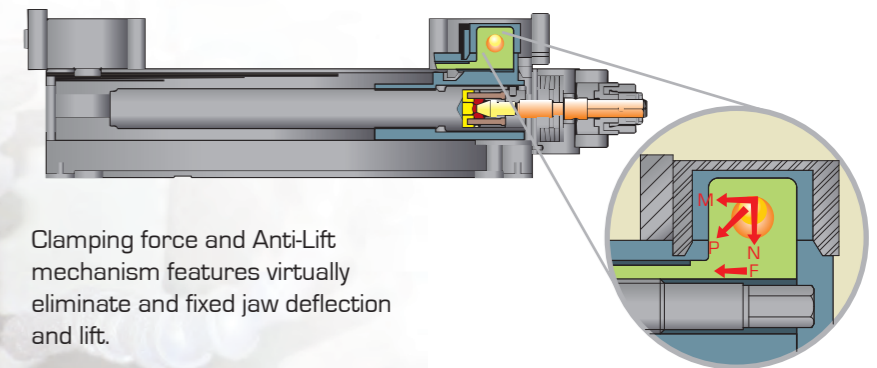


Static Accuracy



Lockwell Anti-Lift Mechanism

Lift can be controlled within **0.01 mm**

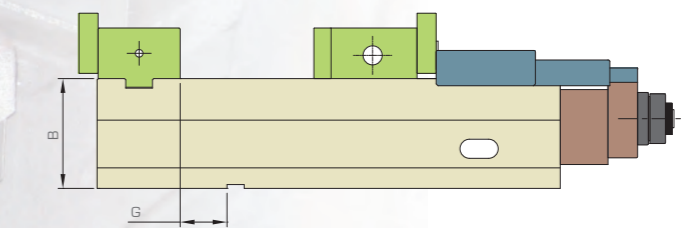


Clamping force and Anti-Lift mechanism features virtually eliminate and fixed jaw deflection and lift.

Dimensions

B-dimension tolerance ± 0.01 mm
G-dimension tolerance ± 0.01 mm

For guide blocks other than standard, consult our Engineering Dept.



| MC POWER VISE system | | | | |
|----------------------|-------------------------------|-------------------------------------------------|----------------|------------|
| NO | Inspection Items (Per 100 mm) | | Allowance (mm) | |
| | | | Auto Well | JIS. Class |
| 1 | Parallelism | running face to bottom of bed | 0.01 | 0.015 |
| 2 | Squareness | between running face and jaw plate | 0.01 | 0.03 |
| 3 | Squareness | keyways on bottom of bed to jaw plate | 0.015 | 0.015 |
| 4 | Parallelism | keyways on bottom of bed to jaw plate | 0.01 | 0.015 |
| 5 | Squareness | both sides to running face | 0.02 | 0.02 |
| 6 | Squareness | both sides to fixed jaw plate | 0.02 | 0.02 |
| 7 | Parallelism | running face of the test block to bottom of bed | 0.015 | 0.02 |
| 8 | Parallelism | Lift can be controled when clamping test | 0.015 | 0.03 |

*Basic on global market, our company start producing MC serious type of vise on 1986 and we keep our vise dimensions as same since then. There is no fitment or alignment problem between our old and new MC vise.

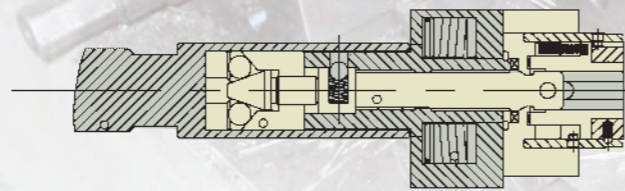
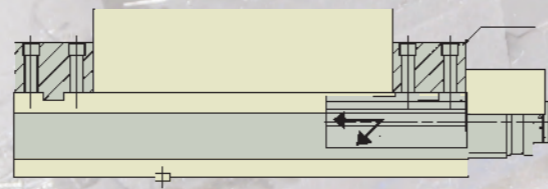
Ultra-low height Mechanical Power Vise

AVK-160, 200

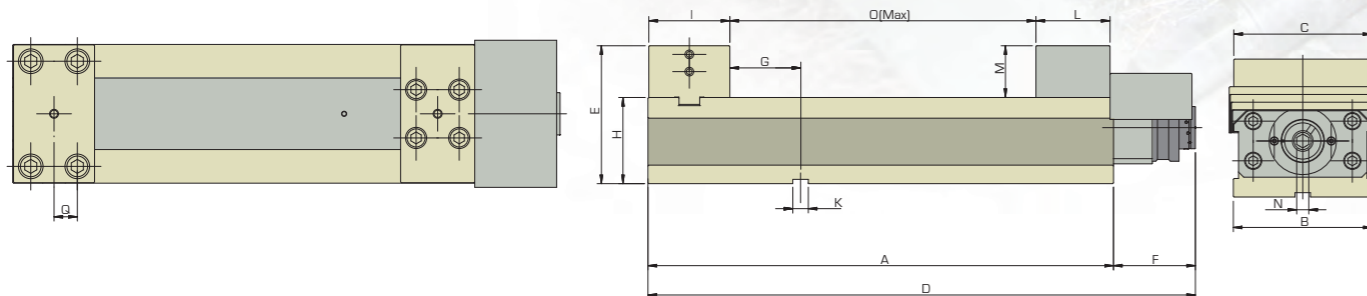
New design with ultra-low vise body and largest opening, besides, it has 3 patents: Lockwell Anti-Lift Mechanism, Mechanical Booster and Force Adjustable Function. Largest opening, high accuracy and strong rigidity for increase the efficiency and productivity.



- Vise with ultra-low bed height & largest opening.
- Force Adjustable System (patented) makes the force setting easier & steadier, moreover, it has constant pressure function & over pressure protection.
- Patented Mechanical Booster is fully sealed against dust, chips and cutting fluid for extended life time.
- Lockwell Anti-Lift mechanism (patented) ensures the workpiece does not deflect and lift.
- Rigid and tensile ductile iron FCD-60 (80,000PSI) vise body. Slide surface flame hardened to HS65° to maintain the accuracy. S50C jaw-plate has been Carburizing heat treated the hardness to HRC54°.
- Unique design facilitates the evacuation of chips.



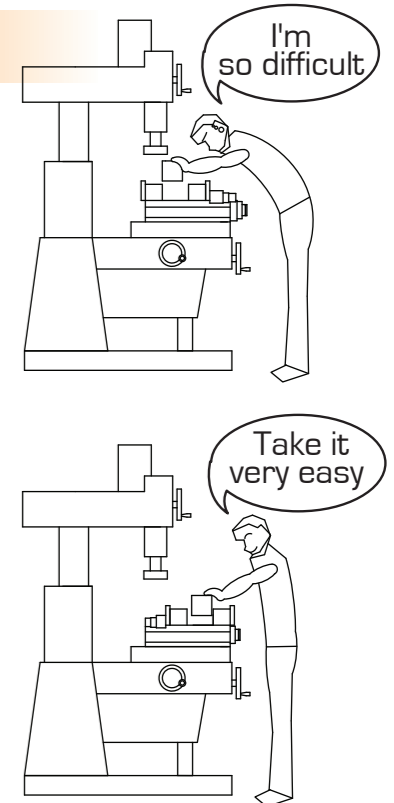
AVK Dimensions



| AVK DIMENSIONS | | | | | | | | | | | | | | | | mm/kg | |
|----------------|-----|-----|-----|-----|-----|----|----|-----|-----|----|----|----|----|-----|----|----------------|--------|
| NO | A | B | C | D | E | F | G | H | I | K | L | M | N | O | Q | Clamping Force | Weight |
| AVK-160 | 540 | 161 | 160 | 635 | 160 | 95 | 82 | 100 | 94 | 18 | 86 | 60 | 14 | 355 | 27 | 45KN | 65kg |
| AVK-200 | 615 | 201 | 200 | 710 | 180 | 95 | 74 | 110 | 102 | 18 | 98 | 70 | 14 | 405 | 30 | 45KN | 105kg |

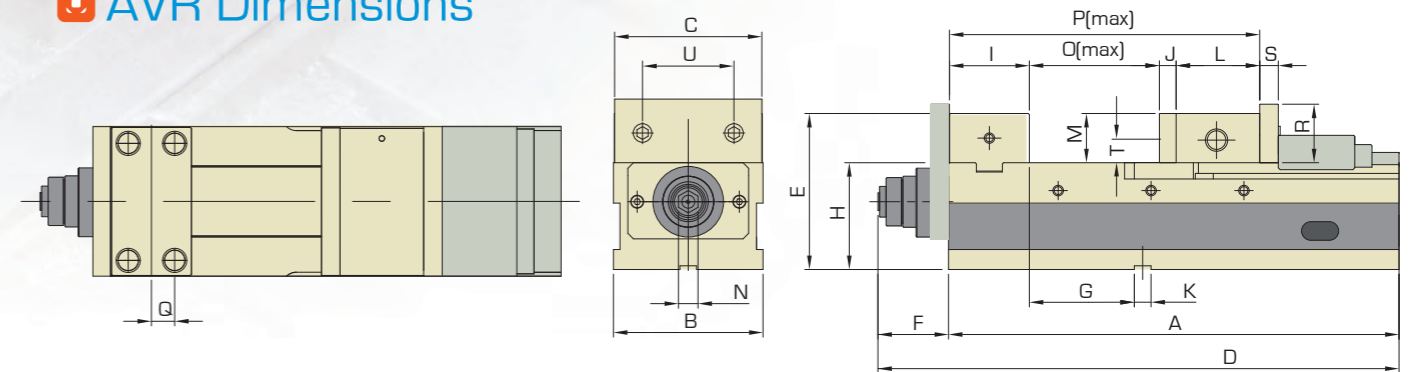
MC Mechanical Reversed Power Vise *Workholding*

AVR-160 G/HV



- Most suitable for VMC & HMC and owns 2 patents.
- Force Adjustable System (patented) makes the force setting easier & steadier, moreover, it has constant pressure function & over pressure protection.
- Patented Mechanical Booster is fully sealed against dust, chips and cutting fluid for extended life time.
- Unique Out-jaw design increase the clamping capacity.
- Rigid and tensile ductile iron FCD-60 (80,000PSI) vise body. Slide surface flame hardened to HS65° to maintain the accuracy. S50C jaw-plate has been Carburizing heat treated the hardness to HRC54°.
- Unique design facilitates the evacuation of chips.

AVR Dimensions



| AVR DIMENSIONS | | | | | | | | | | | | | | | | | | | | mm/kg | | | |
|----------------|-----|-----|-------|-----|-----|----|-----|-----|----|----|----|------|----|----|-----|-------|------|----|----|-------|------|----------------|--------|
| NO | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | Clamping Force | Weight |
| AVR-125G/HV | 390 | 127 | 124.7 | 460 | 153 | 70 | 112 | 100 | 78 | 15 | 18 | 87.5 | 53 | 19 | 173 | 353.5 | 22.5 | 63 | 20 | 26.5 | 60 | 35 KN | 46kg |
| AVR-160G/HV | 515 | 161 | 159.5 | 591 | 168 | 76 | 113 | 115 | 86 | 18 | 18 | 80 | 53 | 19 | 289 | 474 | 25 | 63 | 20 | 26.5 | 98.4 | 45 KN | 76kg |

MC Mechanical Long Power Vise

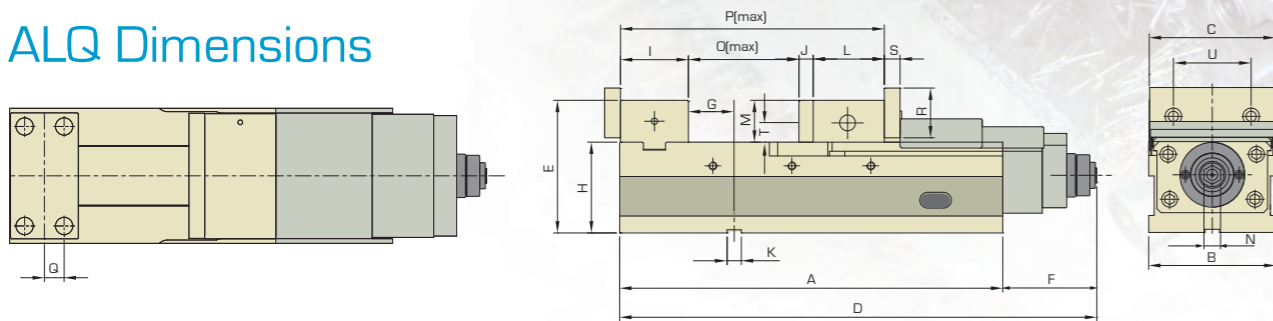
ALQ-160, 200G/HV

Workholding



- MC Mechanical Long Power vise with large opening and Lockwell Anti-Lift Mechanism is most suitable for VMC & HMC. This vise owns 3 patents and has the honor to get TAIWAN EXCELLENCE 2010.
- Force Adjustable System (patented) makes the force setting easier & steadier, moreover, it has constant pressure function & over pressure protection.
- Patented Mechanical Booster is fully sealed against dust, chips and cutting fluid for extended life time.
- Lockwell Anti-Lift mechanism (patented) ensures the workpiece does not deflect and lift.
- Unique Out-jaw design increase the clamping capacity.
- Rigid and tensile ductile iron FCD-60 (80,000PSI) vise body. Slide surface flame hardened to HS65° to maintain the accuracy. S50C jaw-plate has been Carburizing heat treated the hardness to HRC54°.
- Unique design facilitates the evacuation of chips.

ALQ Dimensions



| ALQ DIMENSIONS | | | | | | | | | | | | | | | | | | | | mm/kg | | | |
|----------------|-----|-----|-------|-----|-----|-----|----|-----|-----|----|----|----|----|----|-------|-------|----|----|----|-------|------|----------------|--------|
| NO | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | Clamping Force | Weight |
| ALQ-160G/HV | 515 | 161 | 159.2 | 635 | 168 | 120 | 76 | 115 | 86 | 18 | 18 | 80 | 53 | 19 | 330 | 514 | 25 | 63 | 20 | 26.5 | 98.4 | 45 KN | 76kg |
| ALQ-200G/HV | 585 | 202 | 199.5 | 713 | 178 | 128 | 93 | 120 | 101 | 18 | 18 | 95 | 58 | 19 | 367.5 | 581.5 | 31 | 73 | 20 | 29 | 120 | 50 KN | 108kg |

MC Mechanical Power Vise

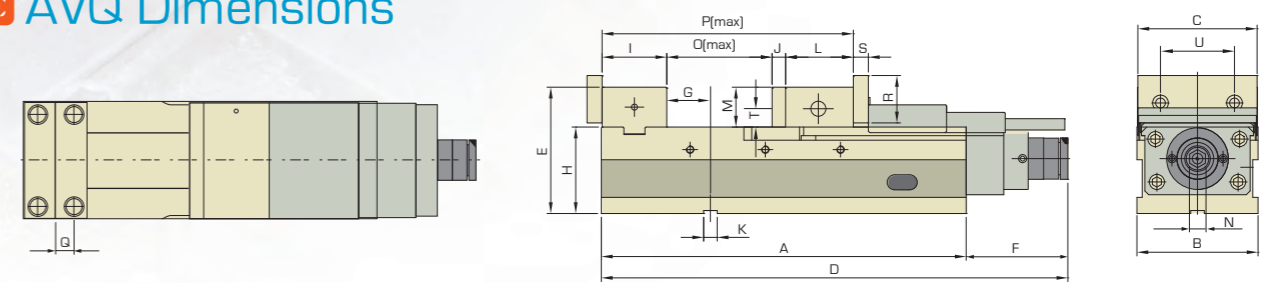
AVQ-100, 125, 160, 200G/HV

Workholding



- MC Mechanical Power Vise is most suitable for VMC & HMC and owns 3 patents.
- Patented Force Adjustable System (patented) makes the force setting easier & steadier, moreover, it has constant pressure function & over pressure protection.
- Patented Mechanical Booster is fully sealed against dust, chips and cutting fluid for extended life time.
- Lockwell Anti-Lift mechanism (patented) ensures the workpiece does not deflect and lift.
- Unique Out-jaw design increase the clamping capacity.
- Rigid and tensile ductile iron FCD-60 (80,000PSI) vise body. Slide surface flame hardened to HS65° to maintain the accuracy. S50C jaw-plate has been Carburizing heat treated the hardness to HRC54°.
- Unique design facilitates the evacuation of chips.

AVQ Dimensions



| AVQ DIMENSIONS | | | | | | | | | | | | | | | | | | | | mm/kg | | | |
|----------------|-----|-----|-------|-----|-----|-----|----|-----|-----|----|----|------|----|----|-----|-------|------|----|----|-------|------|----------------|--------|
| NO | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | Clamping Force | Weight |
| AVQ-100G/HV | 324 | 104 | 102 | 428 | 130 | 104 | 41 | 85 | 73 | 15 | 18 | 86.5 | 45 | 14 | 140 | 314.5 | 20 | 55 | 17 | 22.5 | 58 | 25 KN | 30kg |
| AVQ-125G/HV | 390 | 127 | 124.7 | 495 | 153 | 105 | 66 | 100 | 78 | 15 | 18 | 87.5 | 53 | 14 | 201 | 381.5 | 22.5 | 63 | 20 | 26.5 | 60 | 35 KN | 46kg |
| AVQ-160G/HV | 485 | 161 | 159.5 | 605 | 168 | 120 | 58 | 115 | 86 | 18 | 18 | 80 | 53 | 14 | 295 | 479 | 25 | 63 | 20 | 26.5 | 98.4 | 45 KN | 71kg |
| AVQ-200G/HV | 535 | 202 | 199.5 | 655 | 178 | 128 | 75 | 120 | 101 | 18 | 18 | 95 | 58 | 14 | 320 | 534 | 31 | 73 | 20 | 29 | 120 | 50 KN | 100kg |

Wellock MC Mechanical Power Vise

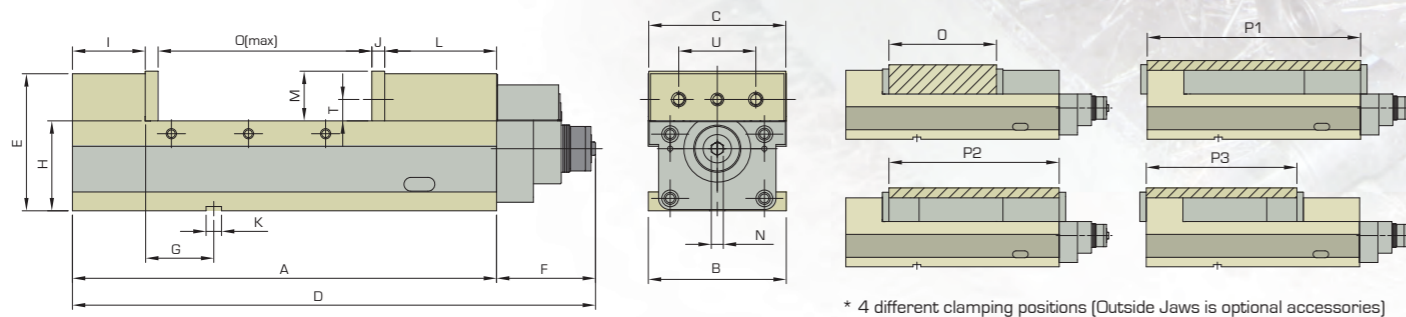
AVM-160, 200G/HV

Workholding



- Wellock MC Mechanical Power Vise is most suitable for VMC & HMC and owns 2 patents.
- Patented Force Adjustable System (patented) makes the force setting easier & steadier, moreover, it has constant pressure function & over pressure protection.
- Patented Mechanical Booster is fully sealed against dust, chips and cutting fluid for extended life time.
- Wellock Semi-spherical segment eliminate deflection and lift.
- Rigid and tensile ductile iron FCD-60 (80,000PSI) vise body. Slide surface flame hardened to HS65° to maintain the accuracy. S50C jaw-plate has been Carburizing heat treated the hardness to HRC54°.
- 4 different clamping positions.
- Unique design facilitates the evacuation of chips.

AVM Dimensions



| AVM DIMENSIONS | | | | | | | | | | | | | | | | | mm/kg | | | | | |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|-----|----|----|-----|---------|---------|---------|----|-----|----------------|--------|
| NO | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P1 | P2 | P3 | T | U | Clamping Force | Weight |
| AVM-100G/HV | 350 | 101 | 100 | 470 | 130 | 110 | 45 | 85 | 65 | 15 | 18 | 105 | 48 | 19 | 150 | 150-330 | 150-240 | 150-200 | 22 | 60 | 25 KN | 24kg |
| AVM-130G/HV | 415 | 131 | 130 | 525 | 147 | 110 | 80 | 95 | 70 | 15 | 18 | 114 | 55 | 19 | 201 | 201-400 | 201-300 | 201-250 | 25 | 90 | 35 KN | 38kg |
| AVM-160G/HV | 495 | 161 | 160 | 610 | 160 | 115 | 80 | 105 | 85 | 15 | 18 | 130 | 58 | 19 | 245 | 250-480 | 250-370 | 250-330 | 25 | 90 | 43 KN | 55kg |
| AVM-165G/HV | 560 | 161 | 160 | 675 | 160 | 115 | 80 | 105 | 85 | 15 | 18 | 130 | 58 | 19 | 310 | 315-545 | 315-435 | 315-395 | 25 | 90 | 43 KN | 64kg |
| AVM-200G/HV | 580 | 201 | 200 | 708 | 170 | 128 | 100 | 110 | 90 | 18 | 18 | 150 | 63 | 19 | 290 | 290-550 | 290-430 | 290-370 | 28 | 120 | 60 KN | 78kg |

Wellock MC Machine Vise

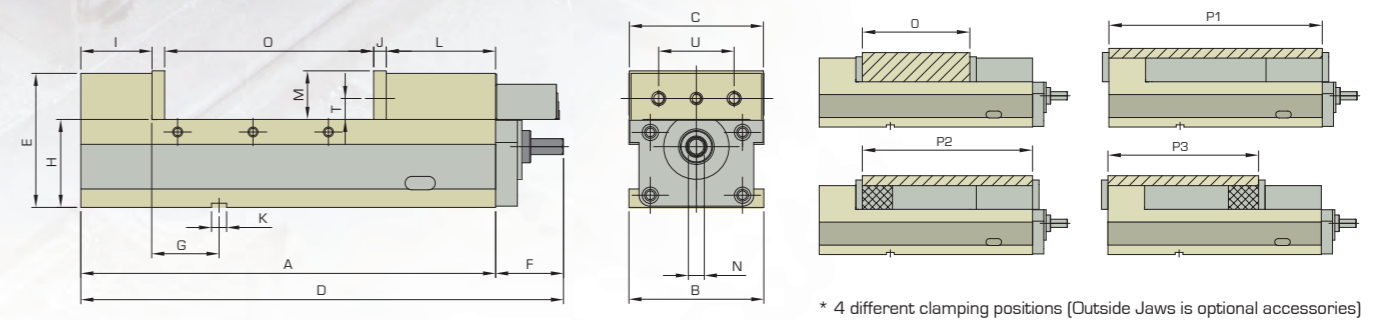
AVC-160, 200G/HV

Workholding



- Wellock MC Machine Vise is most suitable for VMC & HMC.
- Wellock Semi-spherical segment eliminate deflection and lift.
- Rigid and tensile ductile iron FCD-60 (80,000PSI) vise body. Slide surface flame hardened to HS65° to maintain the accuracy. S50C jaw-plate has been Carburizing heat treated the hardness to HRC54°.
- 4 different clamping positions.
- Unique design facilitates the evacuation of chips.

AVC Dimensions



| AVC DIMENSIONS | | | | | | | | | | | | | | | | | mm/kg | | | | | |
|----------------|-----|-----|-----|-----|-----|----|-----|-----|----|----|----|-----|----|----|-----|---------|---------|---------|----|-----|----------------|--------|
| NO | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P1 | P2 | P3 | T | U | Clamping Force | Weight |
| AVC-100G/HV | 350 | 101 | 100 | 430 | 130 | 80 | 45 | 85 | 65 | 15 | 18 | 105 | 48 | 19 | 150 | 150-330 | 150-240 | 150-200 | 22 | 60 | 25 KN | 21kg |
| AVC-130G/HV | 415 | 131 | 130 | 495 | 147 | 80 | 65 | 95 | 70 | 15 | 18 | 115 | 55 | 19 | 201 | 201-400 | 201-300 | 201-250 | 25 | 90 | 35 KN | 35kg |
| AVC-160G/HV | 495 | 161 | 160 | 576 | 160 | 81 | 80 | 105 | 85 | 15 | 18 | 130 | 58 | 19 | 245 | 250-480 | 250-370 | 250-330 | 25 | 90 | 43 KN | 52kg |
| AVC-165G/HV | 560 | 161 | 160 | 641 | 160 | 81 | 80 | 105 | 85 | 15 | 18 | 130 | 58 | 19 | 310 | 315-545 | 315-435 | 315-395 | 25 | 90 | 43 KN | 61kg |
| AVC-200G/HV | 580 | 201 | 200 | 670 | 170 | 90 | 100 | 110 | 90 | 18 | 18 | 150 | 63 | 19 | 290 | 290-550 | 290-430 | 290-370 | 28 | 120 | 60 KN | 75kg |

MC Lockwell Super Vise

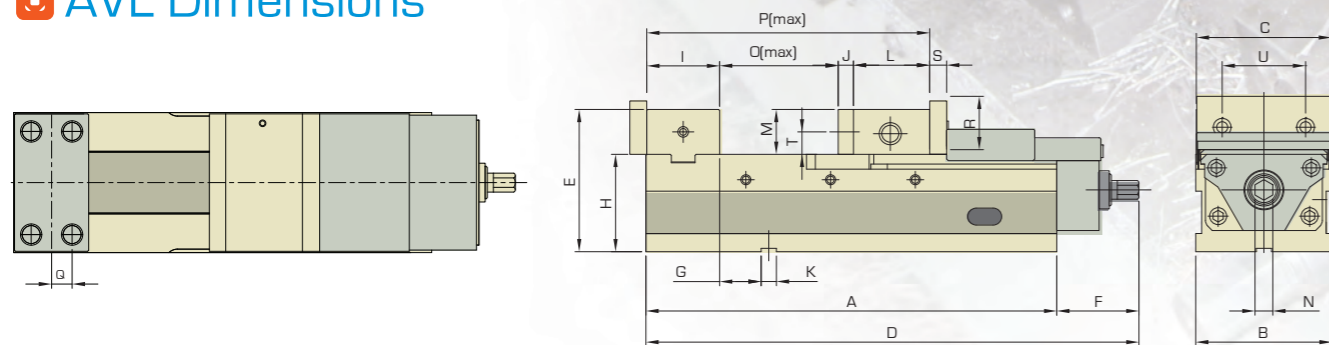
AVL-100, 125, 160, 165
200, 235G/HV

Workholding



- MC Lockwell Super Vise is most suitable for VMC & HMC and got patents.
- Lockwell Anti-Lift Mechanism (patented) ensures the workpiece does not deflect and lift.
- Unique Out-jaw design increase the clamping capacity.
- Rigid and tensile ductile iron FCD-60 (80,000PSI) vise body. Slide surface flame hardened to HS65° to maintain the accuracy. S50C jaw-plate has been Carburizing heat treated the hardness to HRC54°.
- Unique design facilitates the evacuation of chips.

AVL Dimensions

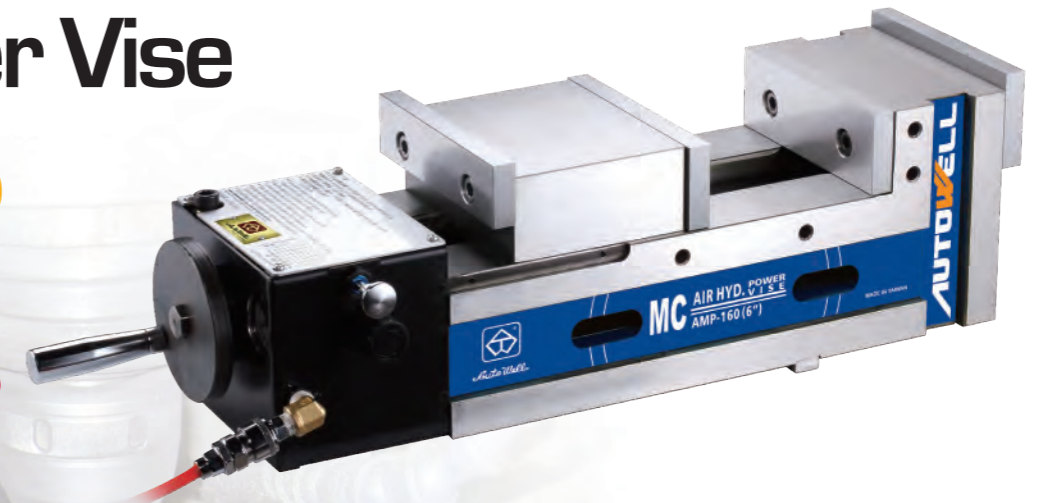


| AVL DIMENSIONS | | | | | | | | | | | | | | | | | | | | mm/kg | | |
|----------------|-----|-----|-------|-----|-----|-----|----|-----|-----|----|----|------|----|----|-------|-------|------|----|----|-------|------|--------|
| NO | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | Weight |
| AVL-100G/HV | 324 | 104 | 102 | 437 | 130 | 104 | 41 | 85 | 73 | 15 | 18 | 86.5 | 45 | 19 | 140 | 314.5 | 20 | 55 | 17 | 22.5 | 58 | 27kg |
| AVL-125G/HV | 390 | 127 | 124.7 | 480 | 153 | 105 | 66 | 100 | 78 | 15 | 18 | 87.5 | 53 | 19 | 201 | 381.5 | 22.5 | 63 | 20 | 26.5 | 60 | 43kg |
| AVL-160G/HV | 485 | 161 | 159.2 | 625 | 168 | 120 | 76 | 115 | 86 | 18 | 18 | 80 | 53 | 21 | 295 | 479 | 25 | 63 | 20 | 26.5 | 98.4 | 71kg |
| AVL-165G/HV | 515 | 161 | 159.2 | 655 | 168 | 120 | 76 | 115 | 86 | 18 | 18 | 80 | 53 | 21 | 330 | 514 | 25 | 63 | 20 | 26.5 | 98.4 | 76kg |
| AVL-200G/HV | 535 | 202 | 199.5 | 660 | 178 | 128 | 93 | 120 | 101 | 18 | 18 | 95 | 58 | 19 | 320 | 534 | 31 | 73 | 20 | 29 | 120 | 98kg |
| AVL-235G/HV | 585 | 202 | 199.5 | 710 | 178 | 128 | 93 | 120 | 101 | 18 | 18 | 95 | 58 | 19 | 367.5 | 581.5 | 31 | 73 | 20 | 29 | 120 | 105kg |

Wellock Air Hydraulic Power Vise

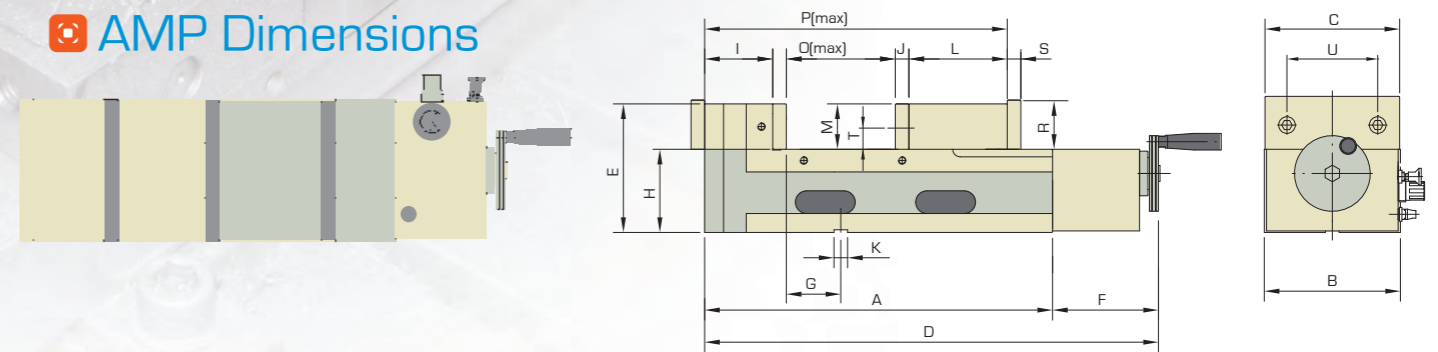
AMP

NEW



- Most suitable for mass production which need quick machining, such as milling HMC & VMC, expert work station.
- This vise is adopting the reciprocating pneumatic motor which R&D by inhouse and that employs an air actuated cylinder. Circuiting progressively to make automation, no need the R.F.L unit to filter the moisture, the sole character is superior than other brand in the market.
- Safety locking mechanism for unexpected termination of air supply. After pneumatic clamping the workpiece will be clamped firmly even without the air supply.
- Humanistic design. Easy ON/OFF switch control for pneumatic operation. The shifting speed is only 1.5 sec. with safety range: 8mm. The optional electric control for automatic and FMS system is available.
- AMP are all match vise, you can set up several of AMP together to operate with only one air source supply. 3 operate positions. Six faces of vise body has been ground and pre-set the holding slot, it can be processed vertically without jig block.
- Even the air source at low pressure 8kg/cm² which can be achieved super hi-clamping force 90KN, and the 0~90KN clamping force can be adjusted freely by regulator.
- Unique Out-jaw design increase the clamping capacity.
- Wellock Semi-spherical segment eliminate deflection and lift.
- Rigid and tensile ductile iron FCD-60 (80,000PSI) vise body. Slide surface flame hardened to HS65° to maintain the accuracy. S50C jaw-plate has been Carburizing heat treated the hardness to HRC54°.

AMP Dimensions



| AMP DIMENSIONS | | | | | | | | | | | | | | | | | | | | mm/kg | | |
|----------------|-----|-----|-----|-----|-----|-----|----|-----|----|----|----|-----|----|---|-----|---------|----|----|----|-------|----------------|--------|
| NO | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | R | S | T | U | Clamping Force | Weight |
| AMP-100(4'') | 320 | 100 | 98 | 435 | 145 | 140 | 45 | 100 | 85 | 15 | 18 | 110 | 45 | - | 100 | 200-300 | 55 | 18 | 22 | 60 | 32KN | 32kg |
| AMP-150(5'') | 380 | 130 | 128 | 520 | 157 | 140 | 45 | 105 | 85 | 15 | 18 | 110 | 52 | - | 150 | 200-380 | 62 | 15 | 25 | 90 | 60KN | 52kg |
| AMP-160(6'') | 400 | 160 | 158 | 540 | 157 | 140 | 45 | 105 | 87 | 15 | 18 | 120 | 52 | - | 160 | 210-400 | 62 | 15 | 25 | 90 | 60KN | 58kg |
| AMP-165(6'') | 490 | 160 | 158 | 630 | 157 | 140 | 45 | 105 | 87 | 15 | 18 | 120 | 55 | - | 250 | 210-490 | 65 | 15 | 25 | 90 | 60KN | 65kg |
| AMP-180(7'') | 460 | 180 | 178 | 600 | 170 | 140 | 72 | 110 | 90 | 18 | 18 | 130 | 60 | - | 200 | 220-460 | 70 | 18 | 28 | 120 | 90KN | 75kg |
| AMP-200(8'') | 470 | 200 | 200 | 610 | 170 | 140 | 72 | 110 | 90 | 18 | 18 | 140 | 60 | - | 200 | 230-470 | 70 | 18 | 28 | 120 | 90KN | 82kg |
| AMP-300(8'') | 570 | 200 | 200 | 710 | 170 | 140 | 72 | 110 | 90 | 18 | 18 | 140 | 60 | - | 300 | 230-570 | 70 | 18 | 28 | 120 | 90KN | 93kg |

Extension MC Mechanical Power Vise

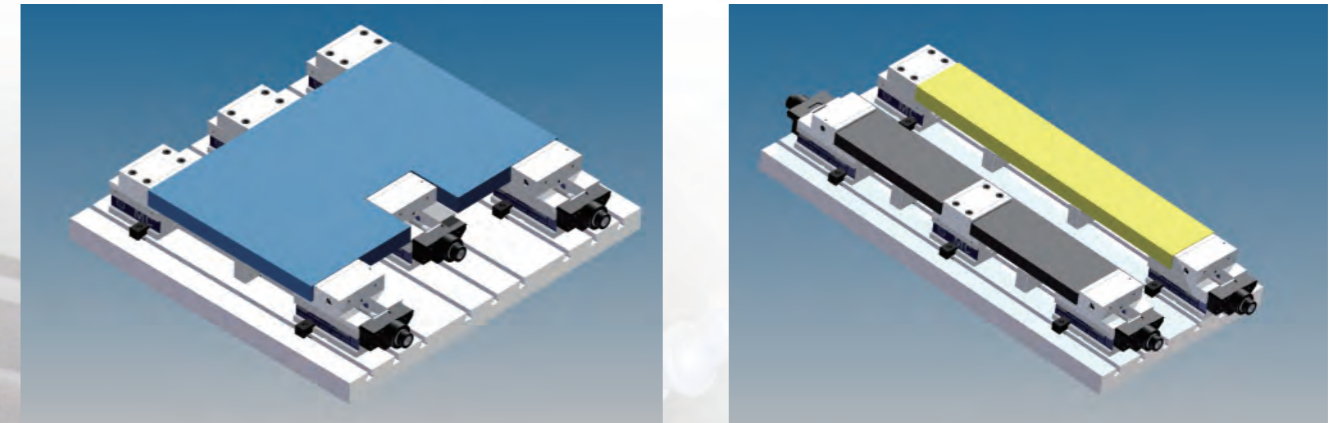
AOM-200

Workholding

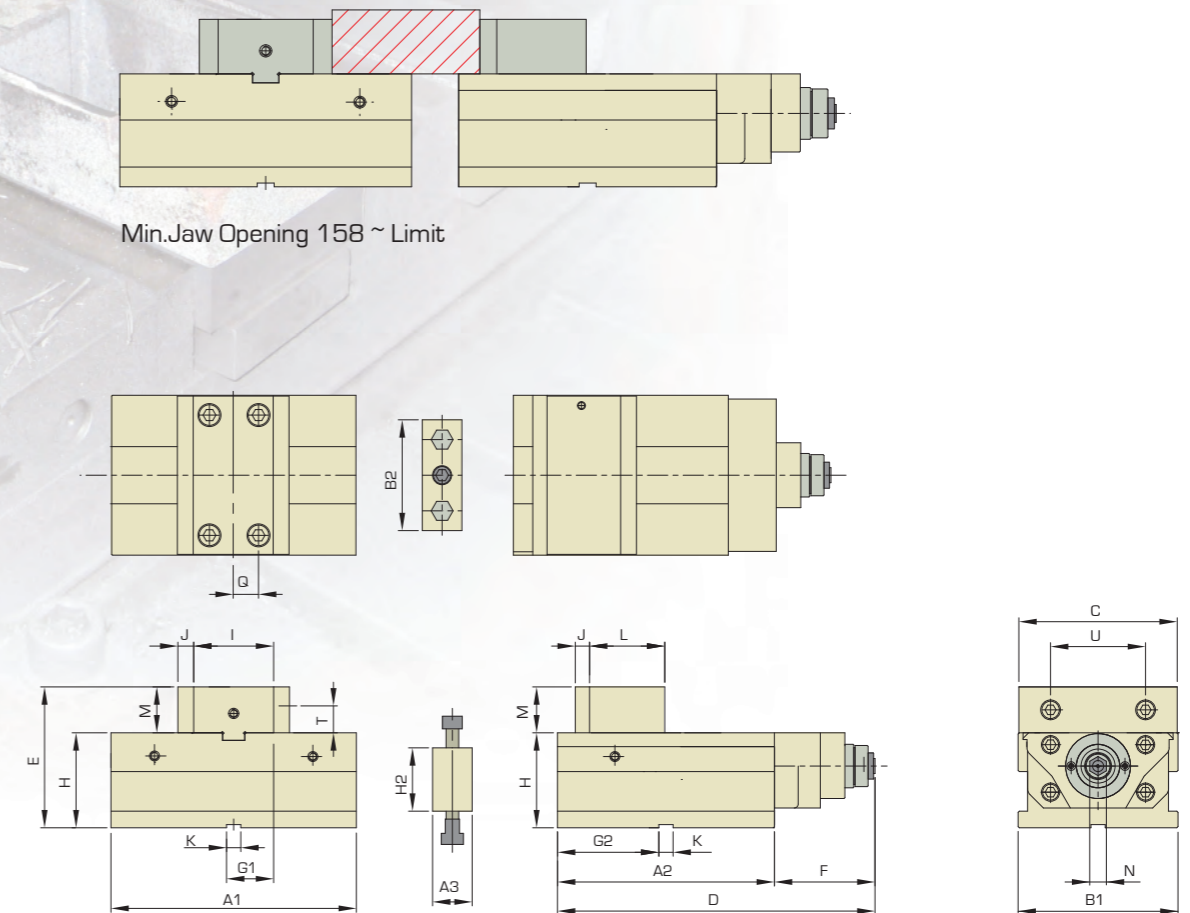
- Extension MC Mechanical Power vise with large opening and Lockwell Anti-Lift Mechanism is most suitable for BMC & VMC & HMC. This vise owns 3 patents.
- Force Adjustable System (patented) makes the force setting easier & steadier, moreover, it has constant pressure function & over pressure protection.
- Mechanical Booster (patented) provides a steady clamping force and inside Disc-Spring to against shocks and vibrations while operation.
- Lockwell Anti-Lift mechanism (patented) ensures the workpiece does not deflect and lift.
- This vise is suitable for huge or extension workpieces and can be matched.
- Rigid and tensile ductile iron FCD-60 (80,000PSI) vise body. Slide surface flame hardened to HS65° to maintain the accuracy. S50C jaw-plate has been Carburizing heat treated the hardness to HRC54°.
- The stationary unit or power unit order is acceptable.



AOM Clamping Examples



AOM Dimensions



| AOM DIMENSIONS | | | | | | | | | | | | | | | | | | | | mm/kg | | | |
|----------------|-----|-----|----|-----|-----|-------|-----|-----|-----|------|-----|-----|-----|----|----|----|----|----|----|-------|-----|----------------|--------|
| NO | A1 | A2 | A3 | B1 | B2 | C | D | E | F | G1 | G2 | H | I | J | K | L | M | N | Q | T | U | Clamping Force | Weight |
| AOM-200 | 210 | 270 | 50 | 202 | 140 | 199.5 | 398 | 178 | 128 | 59.5 | 126 | 120 | 101 | 18 | 18 | 95 | 58 | 19 | 31 | 29 | 120 | 50KN | 95kg |

Lockwell Double Station Vise



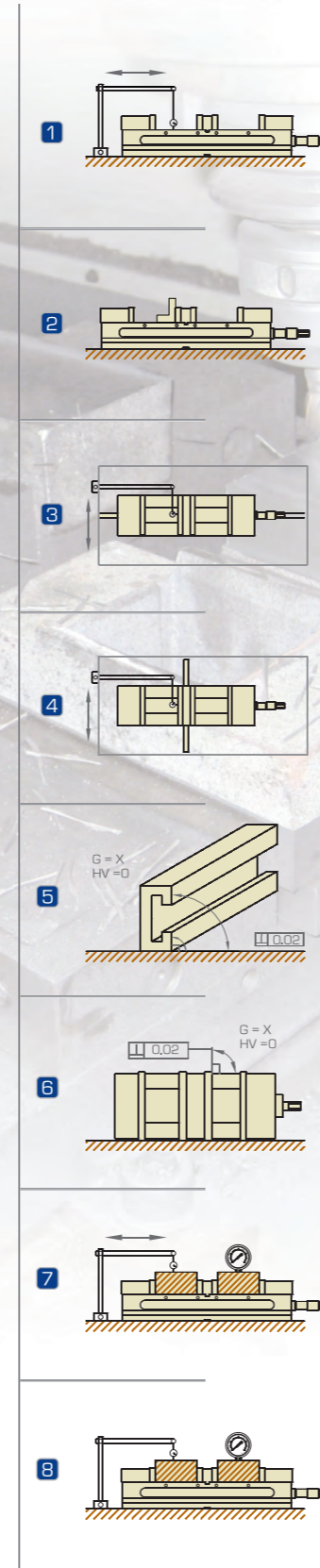
Clamping Force Equalization & Automatically Return Mechanism

Lockwell Double Station Vise increases the efficiency and productivity of CNC machine. Double station could clamp two dissimilar workpieces with same force at a time. For save time, movable jaw designed to automatically return to correct position. One of the movable jaws opened while the other one opened to the position you set. Moreover, double station could be change to single station to meet your enquiry by fixed one movable jaw. 6 different clamping positions. You could change the standard jaws into soft jaws to make your own vise.

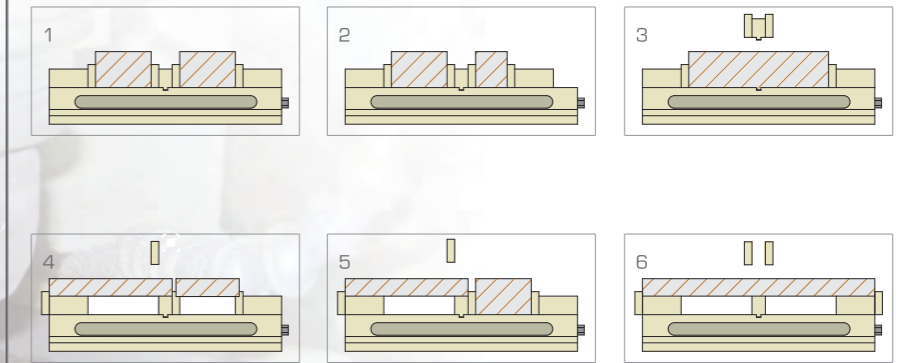
- Double station could clamp two dissimilar workpieces with same force at a time and provides 6 different clamping positions.
- Clamping Force Equalization (patented) ensures same clamping force to clamp two different size/shape workpieces.
- Automatically Return Mechanism (patented) save the work change time.
- Lockwell Anti-Lift Mechanism (patented) ensures the workpiece does not deflect and lift.



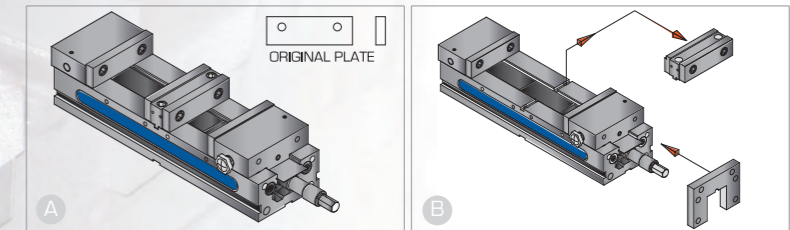
Static Accuracy



6 Different Clamping Positions



Change Sample of Station



Using the current vise opening when the workpiece dimension is between 0-125mm & 0-90mm.

Taking out the fixed jaw and insert a movable plate (tighten by 6pcs screws) when the workpiece dimension is between 125-315mm (4.98"-12.3").

| DOUBLE CLAMP VISE system | | | | |
|--------------------------|-------------------------------|-------------------------------------------------|---------------------------|------------|
| NO | Inspection Items (Per 100 mm) | | Allowance (mm) | |
| | | | Auto Well | JIS. Class |
| 1 | Parallelism | running face to bottom of bed | 0.01 | 0.015 |
| 2 | Squareness | between running face and jaw plate | 0.01 | 0.03 |
| 3 | Squareness | keyways on bottom of bed to jaw plate | 0.015 | 0.02 |
| 4 | Parallelism | keyways on bottom of bed to jaw plate | 0.01 for total jaw height | 0.02 |
| 5 | Squareness | both sides to running face | 0.02 | 0.02 |
| 6 | Squareness | both sides to fixed jaw plate | 0.02 | 0.02 |
| 7 | Parallelism | running face of the test block to bottom of bed | 0.015 | 0.02 |
| 8 | Parallelism | lift can be controled when clamping test | 0.015 | 0.03 |

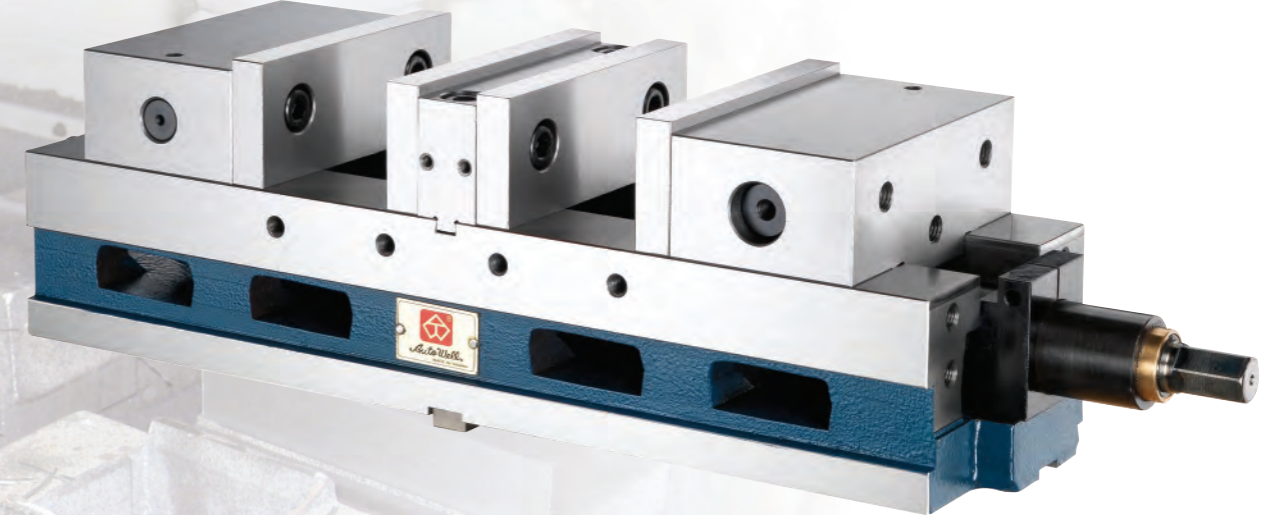
*Basic on global market, our company start producing MC serious type of vise on 1986 and we keep our vise dimensions as same since then. There is no fitment or alignment problem between our old and new MC vise.

NEW Lockwell Double Station Vise

TLD-40, 60G/HV *Workholding*

Lockwell Double Station Vise

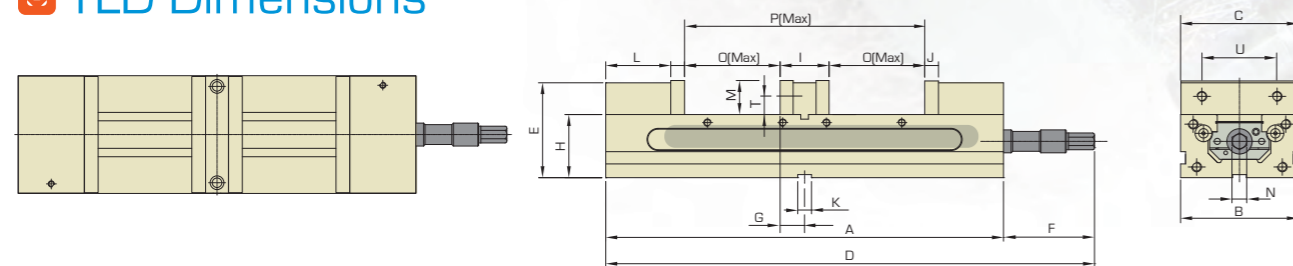
ALD-60G/HV *Workholding*



- Double station could clamp two dissimilar workpieces with same force at a time and provides 6 different clamping positions.
- Clamping Force Equalization (patented) ensures same clamping force to clamp two different size/shape workpieces and avoid deflection and lift.
- Lockwell Anti-Lift Mechanism (patented) & Automatically Return Mechanism (patented) ensures the workpiece does not deflect and lift.
- Rigid and tensile ductile iron FCD-60 (80,000PSI) vise body. Slide surface flame hardened to HS65° to maintain the accuracy. S50C jaw-plate has been Carburizing heat treated the hardness to HRC54°.
- Unique design facilitates the evacuation of chips.
- U.S.A. patented.

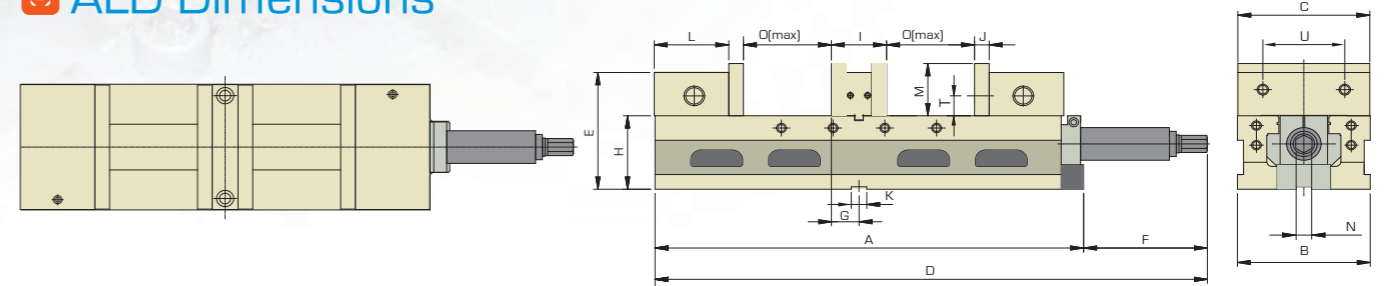
- Double station could clamp two dissimilar workpieces with same force at a time and provides 6 different clamping positions.
- Clamping Force Equalization (patented) ensures same clamping force to clamp two different size/shape workpieces and avoid deflection and lift.
- Lockwell Anti-Lift Mechanism (patented) & Automatically Return Mechanism (patented) ensures the workpiece does not deflect and lift.
- Rigid and tensile ductile iron FCD-60 (80,000PSI) vise body. Slide surface flame hardened to HS65° to maintain the accuracy. S50C jaw-plate has been Carburizing heat treated the hardness to HRC54°.

TLD Dimensions



| TLD DIMENSIONS | | | | | | | | | | | | | | | | | mm/kg | | |
|----------------|-----|-----|-----|-----|--------|----|------|-------|----|----|----|------|------|----|-----|-----|-------|------|--------|
| NO | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | T | U | Weight |
| TLD-40G/HV | 405 | 104 | 102 | 459 | 96.5 | 54 | 27.5 | 63.5 | 55 | 15 | 18 | 69 | 38 | 14 | 90 | 235 | 17.5 | 63.5 | 20kg |
| TLD-60G/HV | 520 | 154 | 152 | 536 | 124.05 | 16 | 33 | 82.55 | 66 | 18 | 18 | 86.5 | 44.5 | 19 | 125 | 316 | 23.8 | 98.4 | 52kg |

ALD Dimensions



| ALD-60 DIMENSIONS | | | | | | | | | | | | | | | | | mm/kg | |
|-------------------|-----|-----|-----|-----|-----|-----|----|----|----|----|----|------|----|----|--------|----|-------|--------|
| NO | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | T | U | Weight |
| ALD-60G/HV | 497 | 154 | 152 | 610 | 143 | 113 | 32 | 90 | 64 | 17 | 18 | 86.5 | 58 | 14 | 34-102 | 32 | 95 | 63.5kg |

Lockwell Double Station Tower Vise

Jig Block

TLR

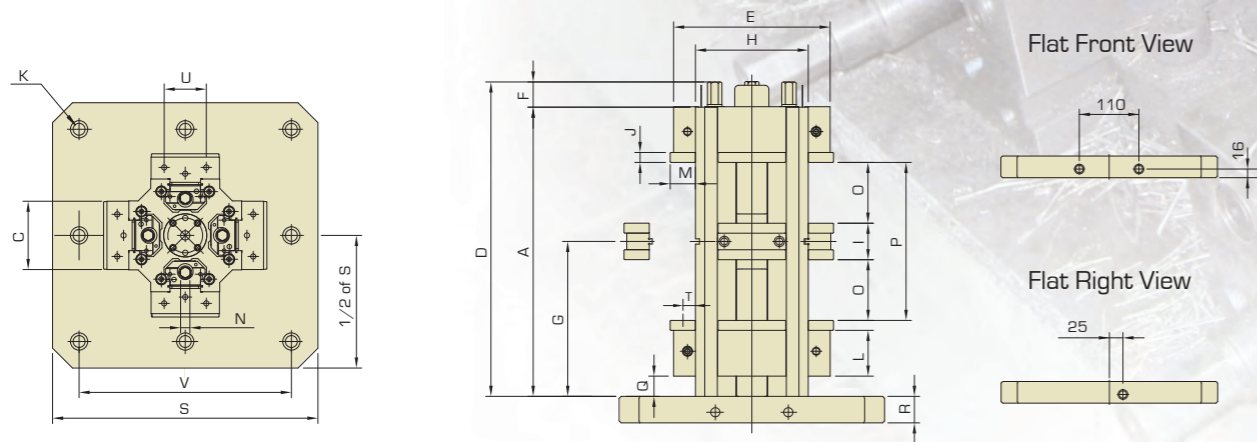
TLR Tower Vises is formed with four Double Station Vises. It provides eight stations and features a cast iron integral vise tower. Towering designed is maximized update utilization and productivity for machining centers.

Workholding

- Rigid and tensile ductile iron FCD-60 (80,000PSI) vise body.
- TLR vise tower incorporate 4 double station vises to clamp 8 dissimilar workpieces. Sub-bases are matched to table with center or edge locators for quick change.
- No timing problem. Designed to automatically return to the position you set.
- The improved chip cover mechanism prevents the rust and extends the lifetime.



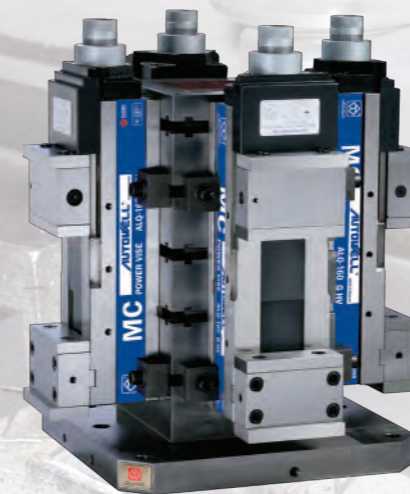
TLR Dimensions



| TLR DIMENSIONS | | | | | | | | | | | | | | | | | | | | mm/kg | | | | | |
|----------------|-----|---|-----|-----|-----|----|-------|-----|----|----|-----|------|------|----|-----|-----|----|----|-----|-------|------|-----|---|---|--------|
| NO | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Weight |
| TLR4400 | 425 | - | 102 | 479 | 256 | 54 | 222.5 | 190 | 55 | 15 | ø18 | 69 | 38 | 14 | 90 | 235 | 20 | 40 | 400 | 17.5 | 63.5 | 320 | - | - | 200kg |
| TLR4500 | 425 | - | 102 | 479 | 256 | 54 | 222.5 | 190 | 55 | 15 | ø18 | 69 | 38 | 14 | 90 | 235 | 20 | 40 | 500 | 17.5 | 63.5 | 400 | - | - | 210kg |
| TLR6400 | 540 | - | 152 | 556 | 313 | 16 | 280 | 230 | 66 | 18 | ø18 | 86.5 | 44.5 | 19 | 125 | 326 | 20 | 40 | 400 | 23.8 | 98.4 | 320 | - | - | 240kg |
| TLR6500 | 540 | - | 152 | 556 | 313 | 16 | 280 | 230 | 66 | 18 | ø18 | 86.5 | 44.5 | 19 | 125 | 326 | 20 | 40 | 500 | 23.8 | 98.4 | 400 | - | - | 250kg |

Several of our vises could be combining with the Jig Block for either HMC or VMC. It is in accordance with overall the dimensions of machining center and the size of workpiece.

Workholding

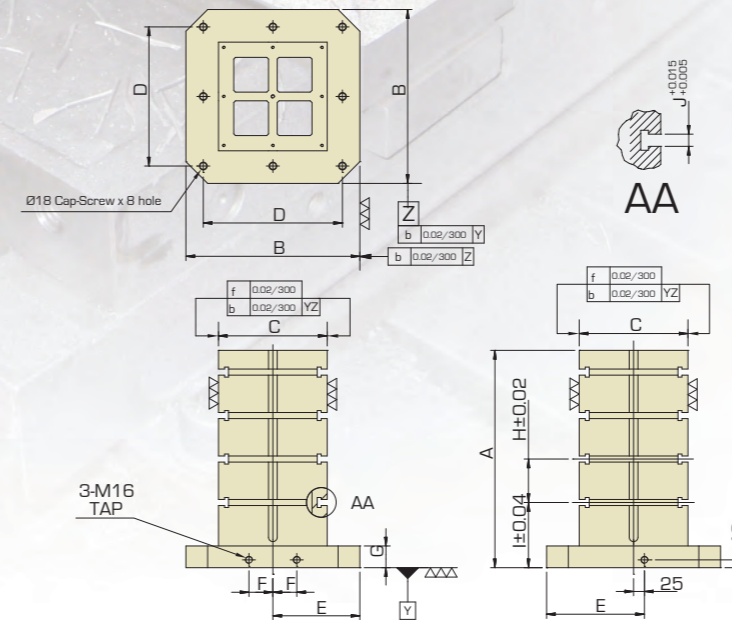


ALQ-160-4B



ABP-09

JIG BLOCK Dimensions



| JIG BLOCK DIMENSIONS | | | | | | | | | | | mm/kg |
|----------------------|-----|-----|-----|-----|-----|-----|----|-----|-----|----|--------|
| NO | A | B | C | D | E | F | G | H | I | J | Weight |
| ABP09-400400-0500-18 | 500 | 400 | 250 | 320 | 200 | 55 | 50 | 100 | 150 | 18 | 165kg |
| ABP09-500500-0600-18 | 600 | 500 | 300 | 400 | 250 | 75 | 50 | 100 | 150 | 18 | 233kg |
| ABP09-630630-0700-18 | 700 | 630 | 350 | 500 | 315 | 100 | 50 | 125 | 150 | 18 | 372kg |
| ABP09-800800-0800-18 | 800 | 800 | 500 | 640 | 400 | 135 | 50 | 150 | 150 | 18 | 700kg |

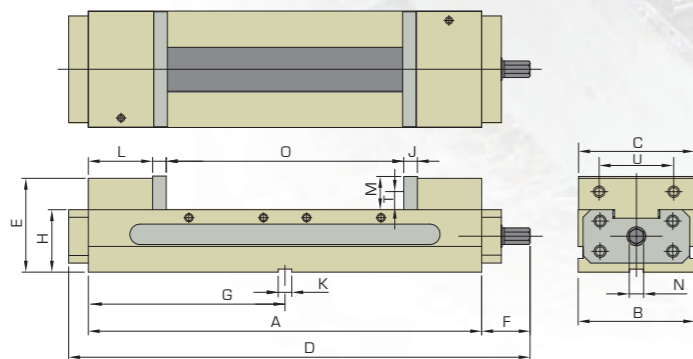
Lockwell Self-centering Machine Vise

HLD-60G/HV



- Lockwell Self-Centering Vise is most suitable for VMC & HMC.
- Tolerance of center of workpiece clamp position and vise body within 0.01mm.
- Lockwell Anti-Lift mechanism (patented) ensures the workpiece does not deflect and lift.
- Rigid and tensile ductile iron FCD-60 (80,000PSI) vise body. Slide surface flame hardened to HS65° to maintain the accuracy. S50C jaw-plate has been Carburizing heat treated the hardness to HRC54°.

HLD Dimensions



| HLD DIMENSIONS | | | | | | | | | | | | | | | | mm/kg | |
|----------------|-----|-----|-----|-----|--------|----|-----|-------|----|----|----|------|----|--------|------|-------|--------|
| NO | A | B | C | D | E | F | G | H | J | K | L | M | N | O | T | U | Weight |
| HLD-60G/HV | 520 | 154 | 152 | 610 | 124.05 | 64 | 260 | 82.55 | 18 | 18 | 85 | 44.5 | 19 | 58-314 | 23.8 | 98.4 | 52kg |

Wellock 5 Axis Machine Vise

ALT Series

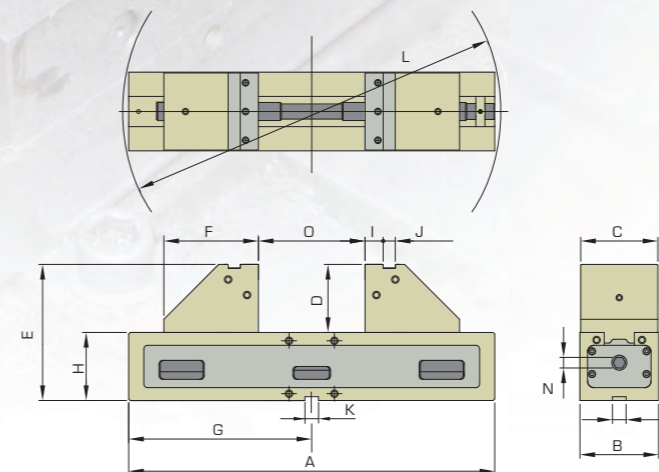
Workholding

ALT is designed for 5 axis machine center. It provides higher structure to dodge interference of spindle. Prevent the workpiece loose from machining vibration. Anti-Lift mechanism ensures workpiece does not lift. Both jaws can move in the same time to shorten the distance.

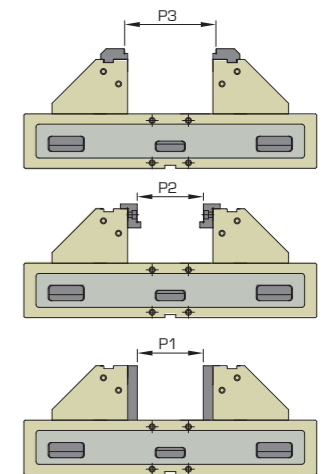


- Semi-spherical segment eliminate lifting while machining.
- Ductile iron FCD-60 rigid and tensile vise body.
- Slide surface flame hardened to maintain the accuracy.
- Tolerance of center of workpiece clamp position and vise body within 0.01mm.

ALT Dimensions



* 3 different clamping positions

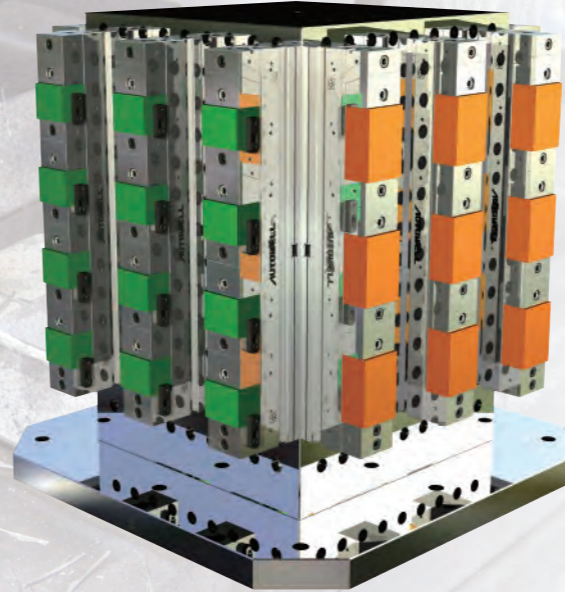
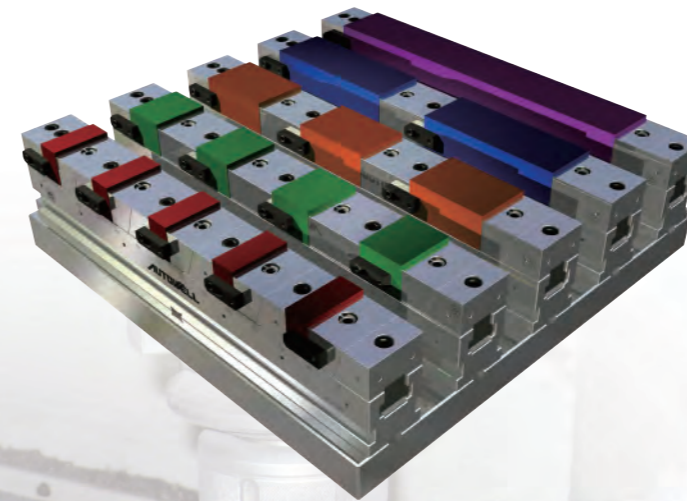


| ALT DIMENSIONS | | | | | | | | | | | | | | | | | | mm/kg | |
|----------------|-----|-----|-----|----|-----|-----|-----|----|----|----|----|-----|----|-----|-----|-----|-----|----------------|--------|
| NO | A | B | C | D | E | F | G | H | I | J | K | L | N | O | P1 | P2 | P3 | Clamping Force | Weight |
| ALT-100S | 280 | 104 | 102 | 90 | 180 | 125 | 140 | 90 | 24 | 16 | 18 | 300 | 14 | 30 | - | - | 40 | 20KN | 17kg |
| ALT-100M | 324 | 104 | 102 | 90 | 180 | 125 | 162 | 90 | 24 | 16 | 18 | 350 | 14 | 74 | 44 | 42 | 84 | 20KN | 20kg |
| ALT-100L | 484 | 104 | 102 | 90 | 180 | 125 | 242 | 90 | 24 | 16 | 18 | 500 | 14 | 184 | 102 | 200 | 240 | 20KN | 30kg |

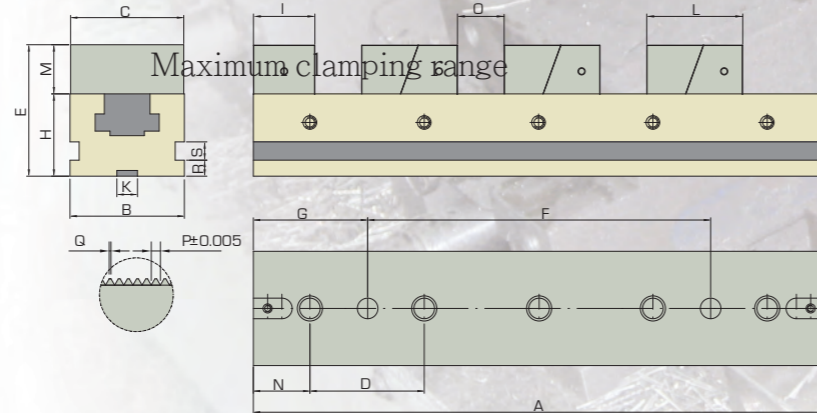
Flexible Well Vise

ALG

Workholding



ALG Dimensions



| ALG DIMENSIONS | | | | | | | | | | | | | | | | | | |
|----------------|-----|-----|----|-----|-----|-----|-----|----|----|----|----|------|----|----|-----|-----|----|----|
| NO | A | B | C | D | E | F | G | H | I | K | L | M | N | O | P | Q | R | S |
| ALG5030 | 300 | 50 | 49 | 100 | 75 | 100 | 100 | 50 | 36 | 18 | 60 | 24.8 | 50 | 30 | 1.5 | 0.5 | 10 | 12 |
| ALG5040 | 400 | 50 | 49 | 100 | 75 | 200 | 100 | 50 | 36 | 18 | 60 | 24.8 | 50 | 33 | 1.5 | 0.5 | 10 | 12 |
| ALG5050 | 500 | 50 | 49 | 100 | 75 | 300 | 100 | 50 | 36 | 18 | 60 | 24.8 | 50 | 35 | 1.5 | 0.5 | 10 | 12 |
| ALG5060 | 600 | 50 | 49 | 100 | 75 | 400 | 100 | 50 | 36 | 18 | 60 | 24.8 | 50 | 36 | 1.5 | 0.5 | 10 | 12 |
| ALG5070 | 700 | 50 | 49 | 100 | 75 | 500 | 100 | 50 | 36 | 18 | 60 | 24.8 | 50 | 37 | 1.5 | 0.5 | 10 | 12 |
| ALG7240 | 400 | 72 | 71 | 100 | 110 | 200 | 100 | 72 | 48 | 18 | 82 | 39.7 | 50 | 38 | 2.0 | 0.7 | 14 | 16 |
| ALG7250 | 500 | 72 | 71 | 100 | 110 | 300 | 100 | 72 | 48 | 18 | 82 | 39.7 | 50 | 33 | 2.0 | 0.7 | 14 | 16 |
| ALG7260 | 600 | 72 | 71 | 100 | 110 | 400 | 100 | 72 | 48 | 18 | 82 | 39.7 | 50 | 31 | 2.0 | 0.7 | 14 | 16 |
| ALG7270 | 700 | 72 | 71 | 100 | 110 | 500 | 100 | 72 | 48 | 18 | 82 | 39.7 | 50 | 29 | 2.0 | 0.7 | 14 | 16 |
| ALG10050 | 500 | 100 | 99 | 100 | 120 | 300 | 100 | 72 | 48 | 18 | 93 | 43.3 | 50 | 25 | 2.5 | 1 | 14 | 16 |
| ALG10060 | 600 | 100 | 99 | 100 | 120 | 400 | 100 | 72 | 48 | 18 | 93 | 43.3 | 50 | 34 | 2.5 | 1 | 14 | 16 |
| ALG10070 | 700 | 100 | 99 | 100 | 120 | 500 | 100 | 72 | 48 | 18 | 93 | 43.3 | 50 | 32 | 2.5 | 1 | 14 | 16 |

| NO | Maximum Clamping Range | | | | | | |
|----------|------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | 1 Workpiece | 2 Workpiece | 3 Workpiece | 4 Workpiece | 5 Workpiece | 6 Workpiece | 7 Workpiece |
| ALG5030 | 206 | 74 | 30 | - | - | - | - |
| ALG5040 | 306 | 124 | 63 | 33 | - | - | - |
| ALG5050 | 406 | 174 | 97 | 58 | 35 | - | - |
| ALG5060 | 506 | 224 | 130 | 83 | 55 | 36 | - |
| ALG5070 | 606 | 274 | 163 | 108 | 75 | 53 | 37 |
| ALG7240 | 272 | 96 | 38 | - | - | - | - |
| ALG7250 | 372 | 146 | 71 | 33 | - | - | - |
| ALG7260 | 472 | 196 | 104 | 58 | 31 | - | - |
| ALG7270 | 572 | 246 | 135 | 83 | 51 | 29 | - |
| ALG10050 | 364 | 138 | 63 | 25 | - | - | - |
| ALG10060 | 464 | 188 | 96 | 50 | 34 | - | - |
| ALG10070 | 564 | 238 | 130 | 75 | 54 | 32 | - |

Aluminum Double Station Vises

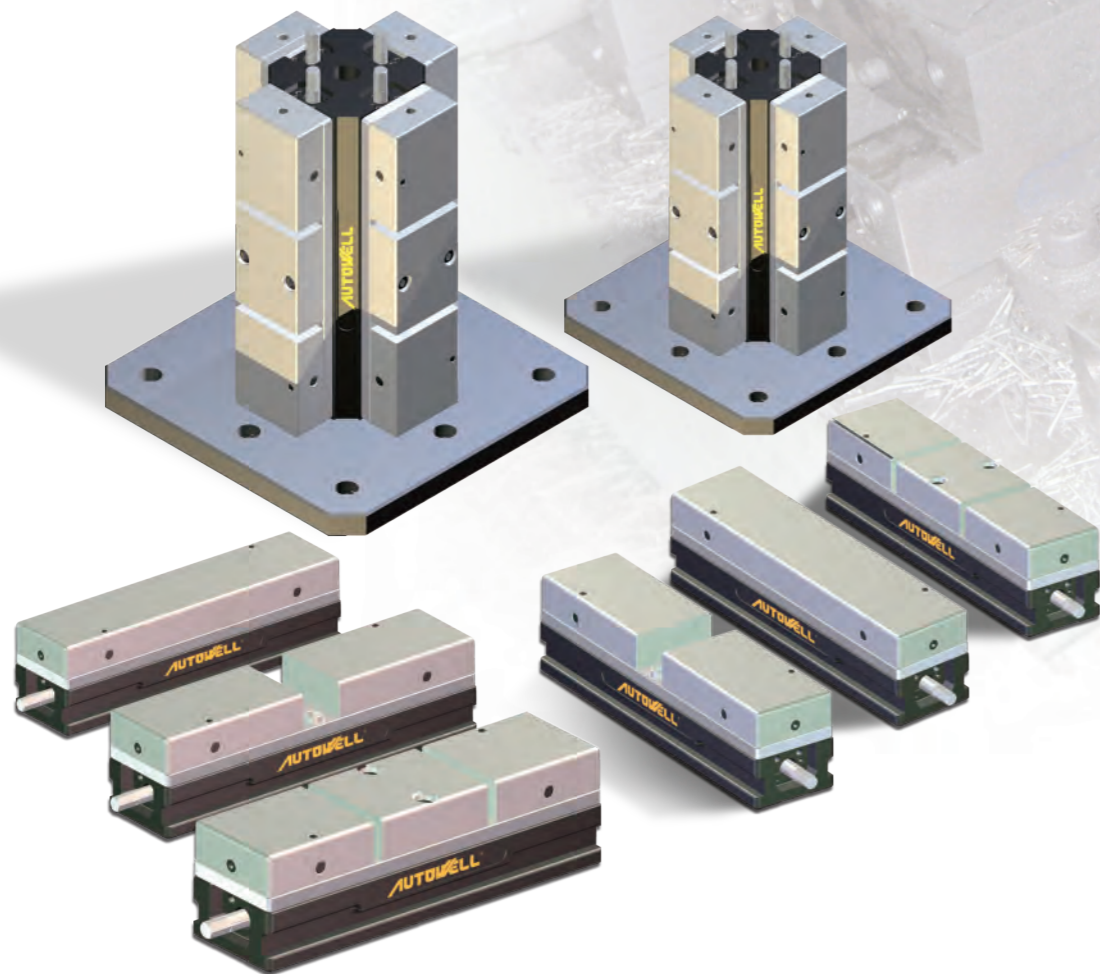
ADS

Workholding

Light, Steady and Flexible

Auto Well has devoted to vises innovation for more efficiency. Aluminum Double Station Vises is made for your vertical or horizontal machining center basic on market requirement. Lighter weight and user friendly compare to other design. The three soft-jaws are shapable to meet your need and takes full advantages.

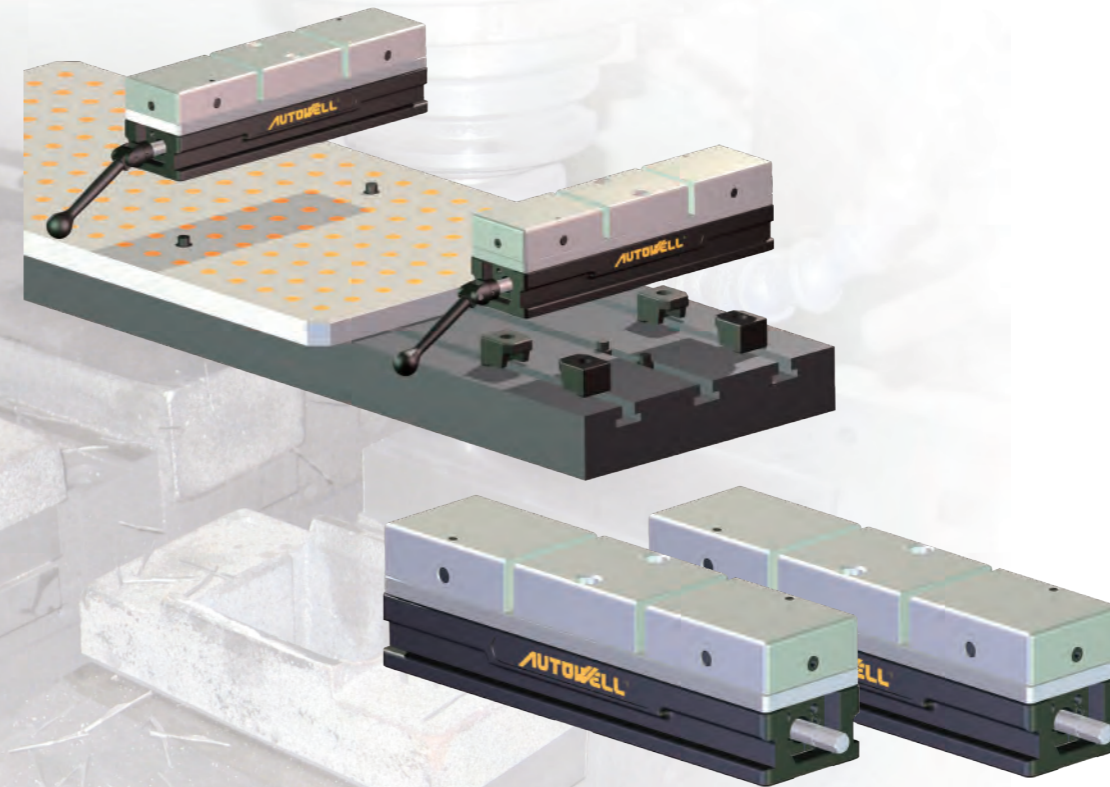
- High-grade aluminum body combines with an alloy steel cover plate enhances base strength and absorbs any machining vibrations.
- Quick changed soft-jaws for multiple machining jobs.
- Clamping force equalization ensures same force while machining two different size workpieces.
- Adjustable Automatically Return Mechanism reduce set-up times through set the off-set distance of movable jaw automatic or manual.



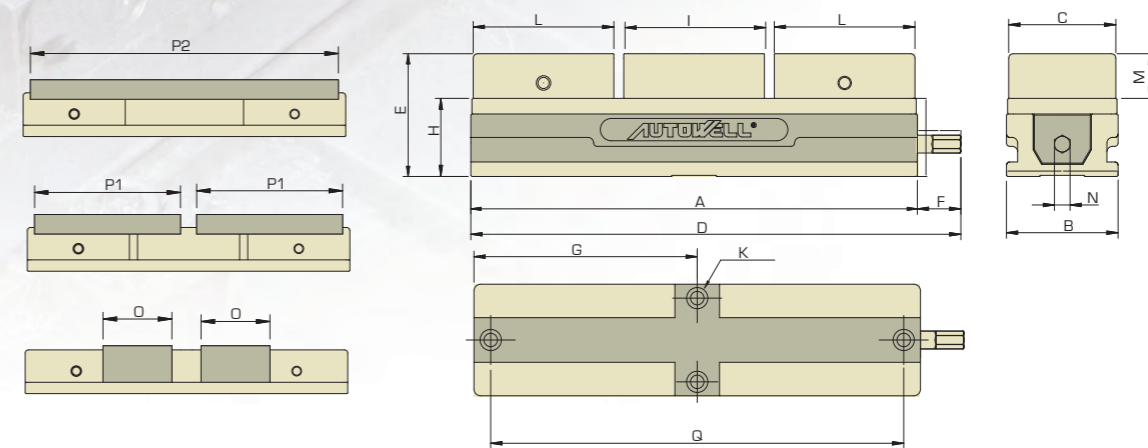
Lockwell Aluminum Vises

ADS-1040, 1250

Workholding



ADS Dimensions



| NO | ADS DIMENSIONS | | | | | | | | | | | | | | | | mm/kg | |
|----------|----------------|-----|-----|-----|-----|----|-----|----|-------|-----|-------|----|----|-----|-----|-----|-------|--|
| | A | B | C | D | E | F | G | H | I | K | L | M | N | O | P1 | P2 | Q | |
| ADS-1040 | 400 | 100 | 96 | 439 | 110 | 39 | 200 | 70 | 126 | ø20 | 126 | 40 | 13 | 85 | 180 | 380 | 370 | |
| ADS-1250 | 500 | 125 | 121 | 539 | 134 | 39 | 250 | 84 | 157.6 | ø20 | 157.5 | 50 | 13 | 112 | 225 | 480 | 460 | |

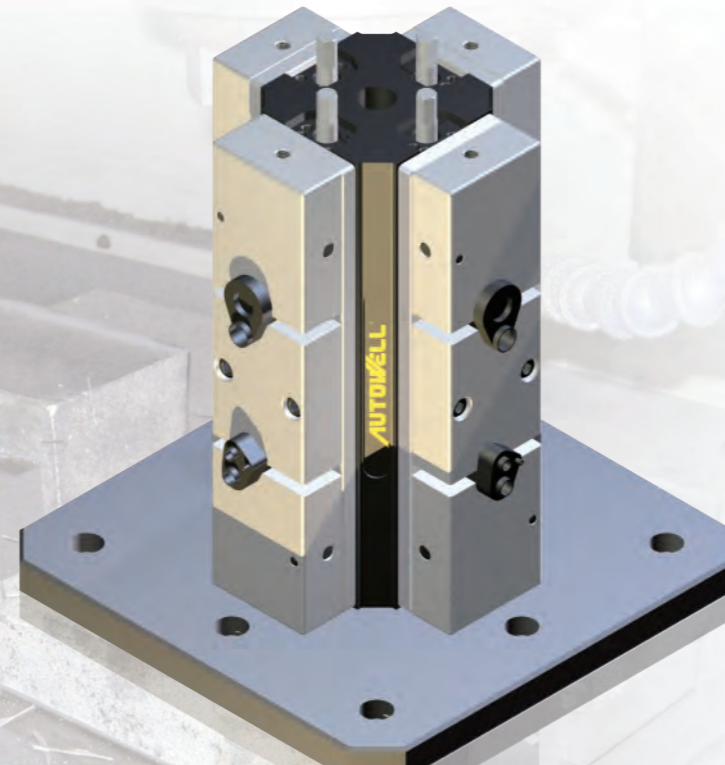
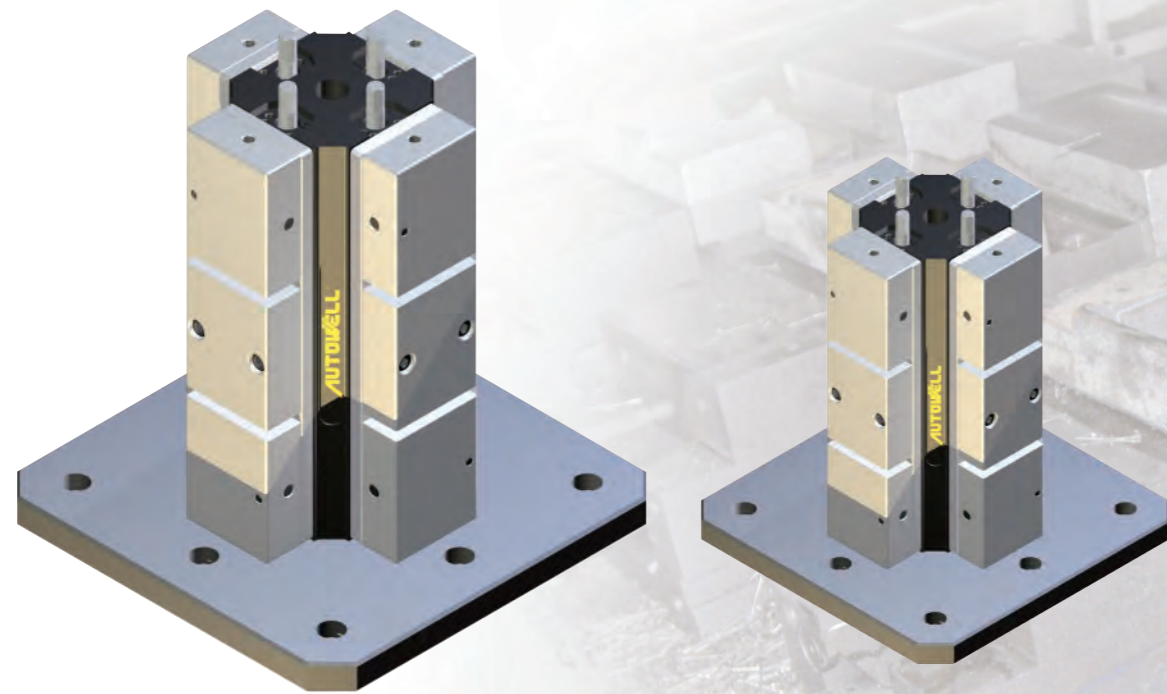
Tombstone Aluminum Vises

ADS-1040, 1250-4B

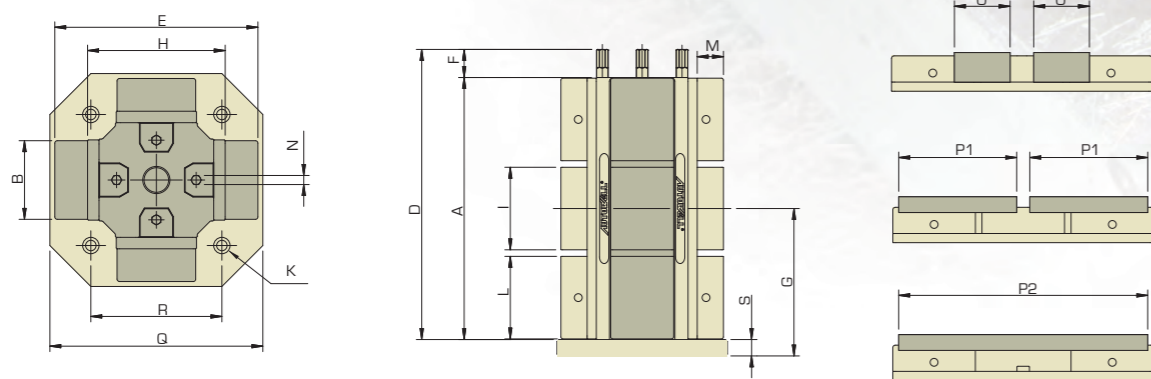
Clamping Examples

VMC, HMC

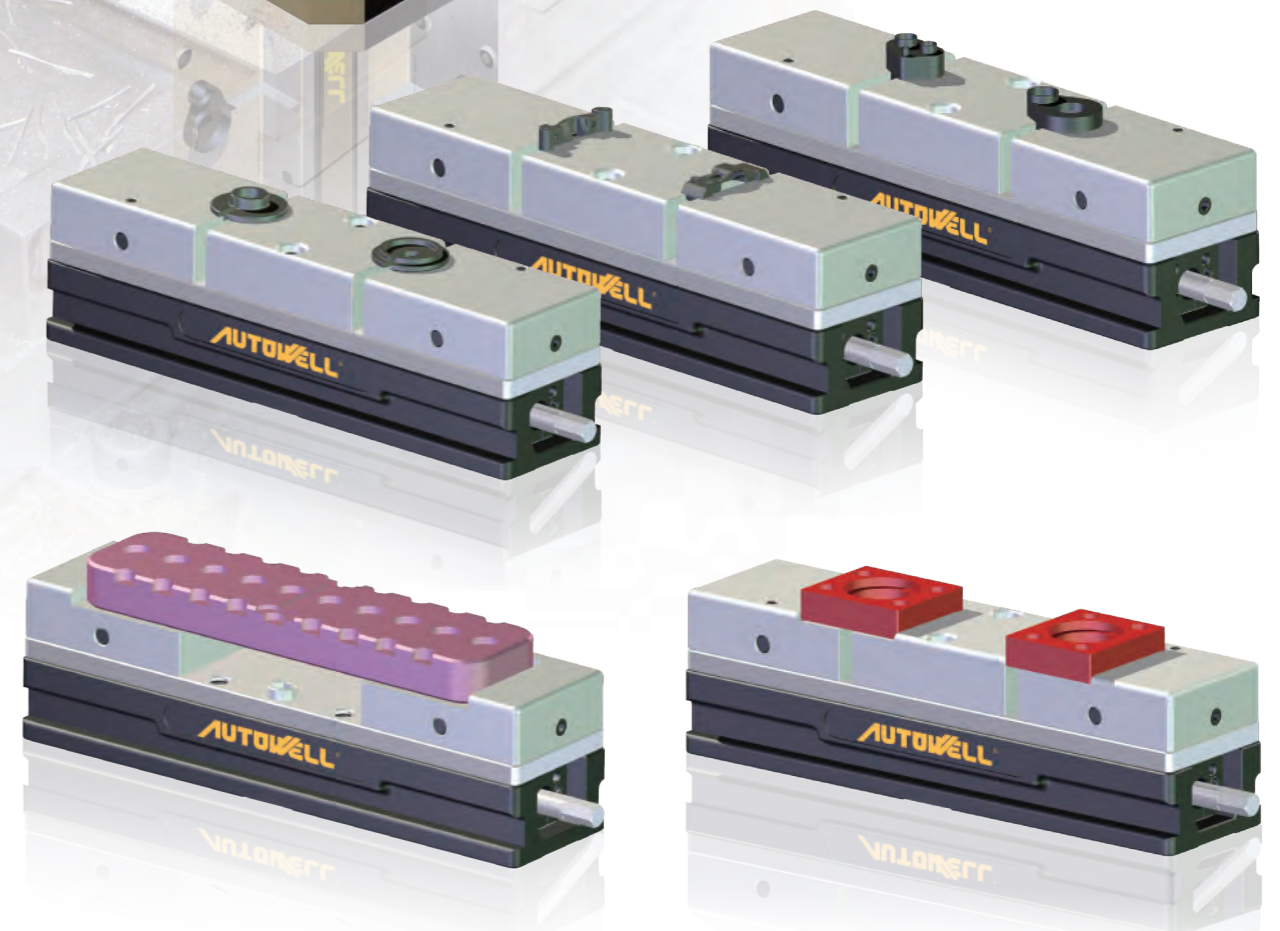
Workholding



ADS-4B Dimensions



| ADS DIMENSIONS | | | | | | | | | | | | | | | | | mm/kg | | |
|----------------|-----|-----|---|-----|-----|----|-----|-----|-------|-----|-------|----|----|-----|-----|-----|-------|-----|----|
| NO | A | B | C | D | E | F | G | H | I | K | L | M | N | O | P1 | P2 | Q | R | S |
| ADS-1040-4B | 400 | 100 | - | 439 | 248 | 39 | 225 | 168 | 126 | ø18 | 126 | 40 | 13 | 85 | 180 | 380 | 260 | 160 | 25 |
| ADS-1250-4B | 500 | 125 | - | 539 | 310 | 39 | 280 | 210 | 157.5 | ø18 | 157.5 | 50 | 13 | 112 | 225 | 480 | 320 | 240 | 25 |



Wellock Large Opening Vise



World Famous & High Accuracy & Best Quality & Large Opening

ATW Vise offers the high quality as same as the world famous brands. Improving on industry standards, the vises are ultra-precision in datum, flatness, parallelism and verticality.

- Wellock Semi-spherical segment eliminate deflection and lift.
- Rigid and tensile ductile iron FCD-60 (80,000PSI) vise body. Slide surface flame hardened to HS65° to maintain the accuracy. S50C jaw-plate has been Carburizing heat treated the hardness to HRC54°.
- 4 different clamping positions.
- Bearing system has sealed and special treated to reduce damage for extend the lifetime.
- 8,200lbs high clamping force.

8,200lbs Clamping Force

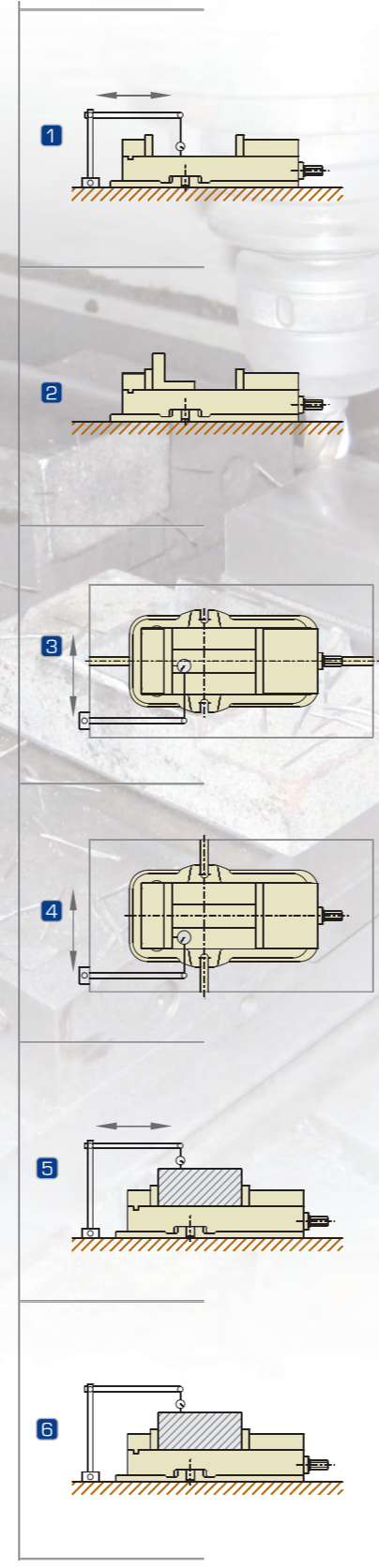
Wellock Anti-Lift Mechanism

Sealed Bearing System

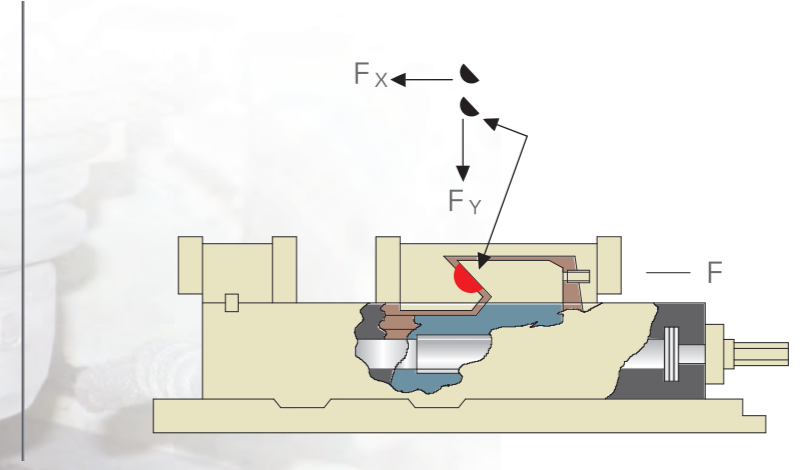


Ductile Iron Body

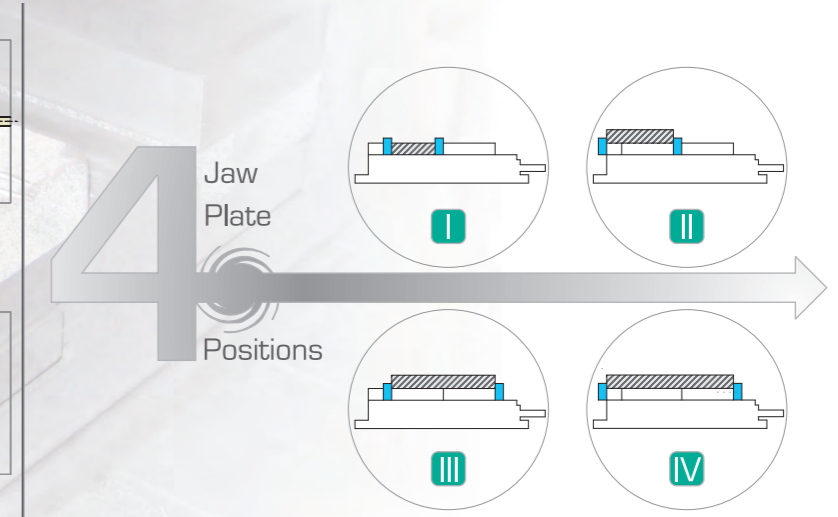
Static Accuracy



Wellock Anti-Lift Mechanism



4 Jaw-plate Positions



| Wellock VISE System | | | | |
|---------------------|-------------------------------|---------------------------------------|----------------|------------|
| NO | Inspection Items (Per 100 mm) | | Allowance [mm] | |
| | | | Auto Well | JIS, Class |
| 1 | Parallelism | running face to bottom of bed | 0.01 | 0.015 |
| 2 | Squareness | between running face and jaw plate | 0.01 | 0.03 |
| 3 | Squareness | keyways on bottom of bed to jaw plate | 0.015 | 0.015 |
| 4 | Parallelism | keyways on bottom of bed to jaw plate | 0.01 | 0.015 |
| 5 | Squareness | both sides to running face | 0.015 | 0.02 |
| 6 | Squareness | both sides to fixed jaw plate | 0.015 | 0.03 |

*Basic on global market, our company start producing MC serious type of vise on 1986 and we keep our vise dimensions as same since then. There is no fitment or alignment problem between our old and new MC vise.

Wellock Large Opening Vise

ATW-689/810
ATM-689/810

Workholding



ATW-689, ATM-689

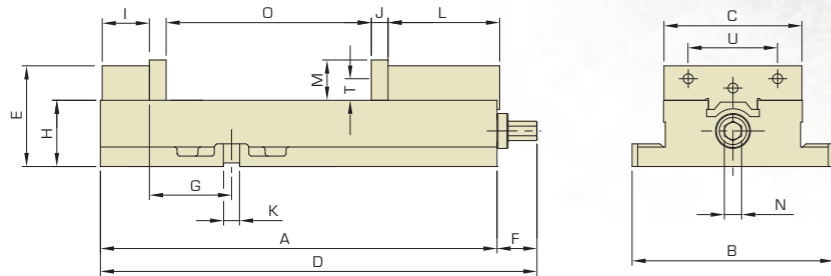
- 8.9" large opening.
- Spindle nut does not protrude past the end of body.
- Same distance from keyway to stationary jaw with AT-675.
- Bed height 73.025±0.012mm (2.875±0.001").
- Material of ATM: FC-30.



ATW-810, ATM-810

- Updated body from AT-80, it provides 10" large opening and steadier vise body.
- Bed height 84.074±0.012mm (3.26±0.001").
- 11,600lbs clamping force.
- Material of ATM: FC-30.

ATW-689/ 810, ATM-689/ 810, Dimensions



| ATW/ATM DIMENSIONS | | | | | | | | | | | | | | | | | mm/kg | |
|--------------------|-----|-----|-----|-----|---------|----|-------|--------|----|------|------------|-----|------|----|-----|------|-------|--------|
| NO | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | T | U | Weight |
| ATW-689 ATM-689 | 437 | 222 | 151 | 481 | 111.025 | 44 | 90.5 | 73.025 | 52 | 18 | 17.48 / 18 | 123 | 44.5 | 19 | 226 | 23.8 | 98.4 | 36.3kg |
| ATW-810 ATM-810 | 555 | 295 | 206 | 585 | 134.074 | 30 | 125.7 | 84.074 | 58 | 24.2 | 20.65 / 18 | 157 | 56 | 19 | 265 | 32 | 120 | 68.2kg |

Wellock Vise

ATW-675/50/40
ATM-675
ATD-460/570

Workholding



ATD-460/570



ATW-40/50

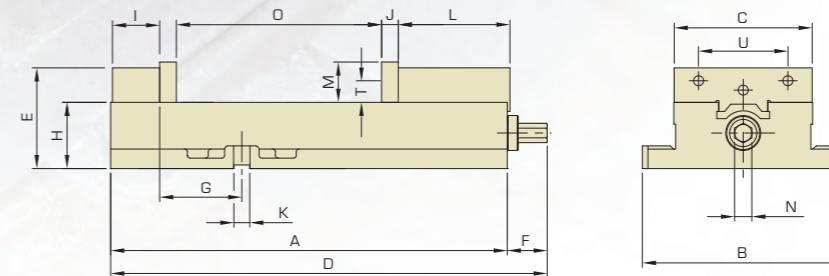


675

ATW-675, ATM-675

- 7.5" opening.
- Bed height 73.025±0.012mm (2.875±0.001").
- Material of ATM: FC-30.

ATW-675/50/40, ATM-675, ATD-460/570 Dimensions



| ATW/ATD DIMENSIONS | | | | | | | | | | | | | | | | | mm/kg | |
|--------------------|-------|-----|-----|-------|---------|----|-----|--------|------|----|------------|-----|------|----|-------|------|-------|--------|
| NO | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | T | U | Weight |
| ATW-40 | 312.5 | 166 | 106 | 352.5 | 85.65 | 40 | 71 | 57.15 | 35.1 | 15 | 12 | 102 | 35 | 14 | 103.9 | 17.5 | 63.5 | 18kg |
| ATD-460 | 321 | 160 | 106 | 361 | 85.65 | 40 | 71 | 57.15 | 35.1 | 15 | 12 | 102 | 35 | 14 | 153 | 17.5 | 63.5 | 14kg |
| ATW-50 | 368 | 194 | 126 | 415 | 97 | 47 | 85 | 63.5 | 40.5 | 17 | 16 | 120 | 38.1 | 16 | 127 | 20.6 | 79.4 | 25kg |
| ATD-570 | 368 | 194 | 126 | 415 | 97 | 47 | 85 | 63.5 | 40.5 | 17 | 16 | 120 | 38.1 | 16 | 178 | 20.6 | 79.4 | 21kg |
| ATW-675 ATM-675 | 432 | 235 | 151 | 476 | 111.025 | 44 | 108 | 73.025 | 52 | 18 | 17.48 / 18 | 123 | 44.5 | 19 | 192 | 23.8 | 98.4 | 36kg |

Lockwell Machine Vise AMC-40, 50, 60G/HV

- 2 operate positions for VMC: Upright and Lay down
- Bed height $73 \pm 0.012\text{mm}$ ($2.874 \pm 0.005''$).

Workholding



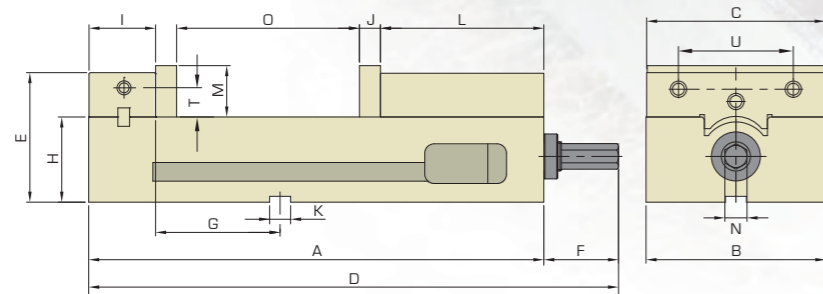
Wellock Versatile Vise MG, MGR-40, 60G/HV

- Vise for basic single station CNC. Features on prevents lift of workpiece and high accuracy.
- 2 operate positions for VMC: Upright and Lay down.
1 operate position for HMC: Horizontal.
- Bed height $81 \pm 0.012\text{mm}$ ($3.189 \pm 0.005''$).

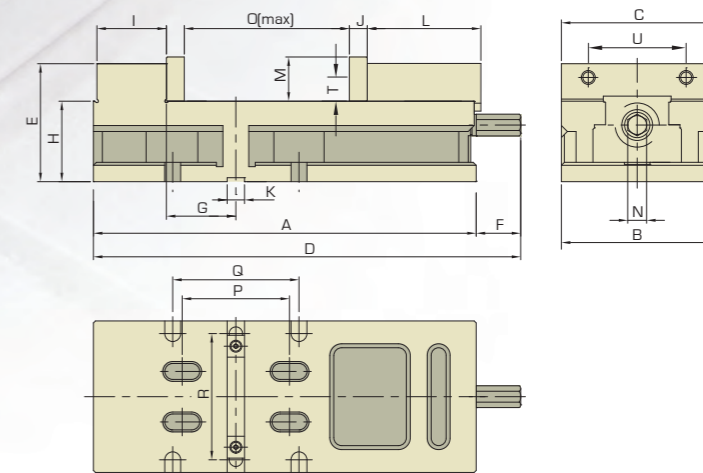
Workholding



AMC Dimensions



MG Dimensions



| NO | AMC DIMENSIONS | | | | | | | | | | | | | | | Weight | | |
|------------|----------------|-----|-----|-----|-------|----|------|----|------|----|----|-----|------|----|-----|--------|------|--------|
| | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | | T | U |
| AMC-40G/HV | 330 | 105 | 102 | 372 | 100 | 42 | 82.6 | 68 | 46.8 | 21 | 18 | 106 | 40 | 14 | 125 | 17.5 | 63.5 | 21kg |
| AMC-50G/HV | 360 | 128 | 126 | 410 | 103.5 | 50 | 73 | 70 | 45 | 17 | 18 | 117 | 38 | 19 | 158 | 20.6 | 79.4 | 26kg |
| AMC-60G/HV | 390 | 154 | 151 | 455 | 111 | 65 | 123 | 73 | 57 | 18 | 18 | 140 | 44.5 | 19 | 148 | 23.8 | 98.4 | 36.5kg |

| NO | MG DIMENSIONS | | | | | | | | | | | | | | | Weight | | | | | |
|----------------|---------------|--------|-----|-------|-------|------|-------|------|------|----|------|-------|------|----|-----|--------|-------|-----|------|------|------|
| | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | | P | Q | R | T | U |
| MG, MGR-40G/HV | 316 | 104 | 102 | 344 | 91.5 | 28 | 63.5 | 63.5 | 50.8 | 15 | 12.7 | 100 | 35 | 14 | 130 | 85 | 101.6 | 80 | 17.5 | 63.5 | 20kg |
| MG, MGR-60G/HV | 385 | 152.45 | 151 | 431.8 | 118.7 | 46.8 | 69.84 | 81 | 69.9 | 18 | 18 | 114.3 | 44.5 | 19 | 163 | 107.95 | 127 | 127 | 23.8 | 98.4 | 31kg |

Mechanical Power Machine Vise

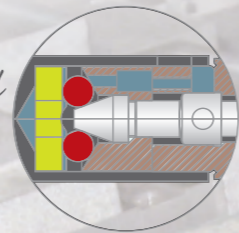
MP-50, 60, 80

Workholding

Unique Ball design structure provides powerful clamping forces. Inside Disc-Spring to against shocks and vibrations while operation. High accuracy of tolerance ensures reliability and long durability.

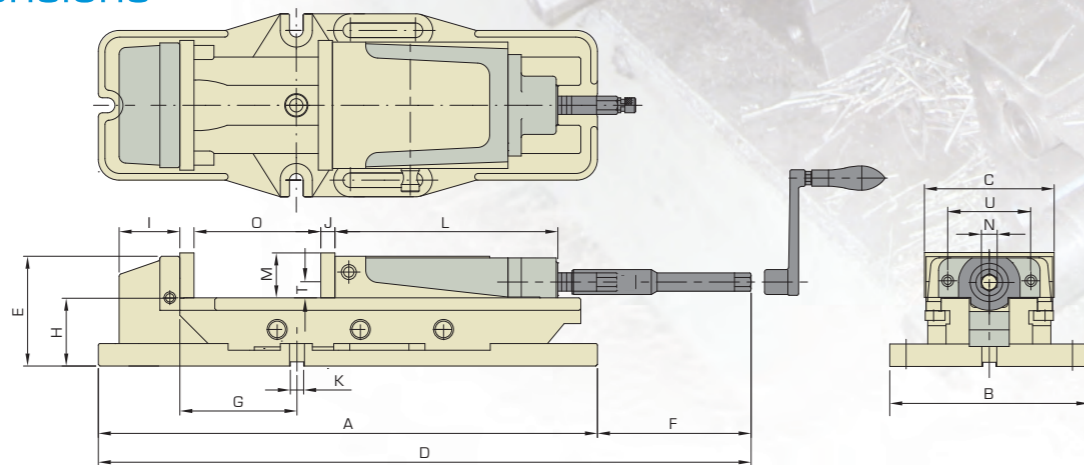


Mechanical Booster



- Rigid constructed suitable for machining such as mill, grind, drill and shape.
- Easy operation could bring different clamping force.
- Rigid and tensile vise body. Accuracy beyond others in the market.
- Securely grips rectangular and irregularly shaped workpieces, minimizing setup time and lowering production costs.

MP Dimensions



| MP DIMENSIONS | | | | | | | | | | | | | | | | | | mm/kg | | |
|---------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|-----|----|----|-----|-----|------|-------|----------------|--------|
| NO | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | T | U | Clamping force | Weight |
| MP-50 | 538 | 203 | 130 | 670 | 117 | 132 | 82 | 72 | 82 | 15 | 16 | 175 | 46 | 19 | 220 | 60 | 16 | 85 | 40KN | 37kg |
| MP-60 | 608 | 220 | 154 | 800 | 132 | 180 | 140 | 82 | 74 | 17 | 16 | 208 | 54 | 19 | 300 | 80 | 18 | 100 | 50KN | 57.5kg |
| MP-80 | 700 | 285 | 206 | 900 | 160 | 200 | 118 | 100 | 113 | 21 | 18 | 245 | 62 | 19 | 300 | 100 | 24.5 | 120 | 60KN | 104kg |

Hydraulic Power Machine Vise

HP-40, 50, 60, 80

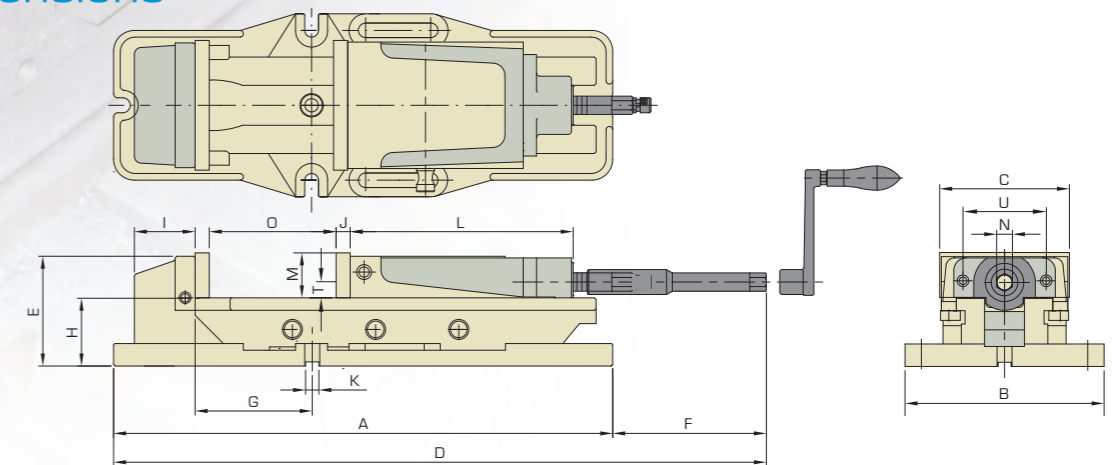
Workholding

HP Vise is the first Hydraulic Power Vise in Taiwan. The hydraulic booster provides a steady clamping force against shocks and vibrations during the operations, since it fastens the work-piece securely with the aid of the Disc-spring mounted inside. Clamping force will never loose except to be done manually.



- Suitable for every machine center. Can be change to non-Booster system.
- Special design ensures the workpiece does not deflect and lift.
- Rigid and tensile vise body. Accuracy beyond others in the market.
- Securely grips rectangular and irregularly shaped workpieces, minimizing setup time and lowering production costs.

HP Dimensions



| HP DIMENSIONS | | | | | | | | | | | | | | | | | | mm/kg | |
|---------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|-----|----|----|-----|------|-----|----------------|--------|
| NO | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | T | U | Clamping force | Weight |
| HP-40 | 435 | 165 | 104 | 525 | 93 | 90 | 63 | 58 | 68 | 11 | 16 | 153 | 36 | 14 | 170 | 10 | 70 | 25KN | 24kg |
| HP-50 | 538 | 203 | 130 | 670 | 117 | 132 | 82 | 72 | 82 | 15 | 16 | 175 | 46 | 19 | 220 | 16 | 85 | 35KN | 37kg |
| HP-60 | 608 | 220 | 154 | 800 | 132 | 180 | 140 | 82 | 74 | 17 | 16 | 208 | 54 | 19 | 300 | 18 | 100 | 44KN | 57.5kg |
| HP-80 | 700 | 285 | 206 | 900 | 160 | 200 | 118 | 100 | 113 | 21 | 18 | 245 | 62 | 19 | 300 | 24.5 | 120 | 55KN | 104kg |

Hydraulic Power Angle Vise

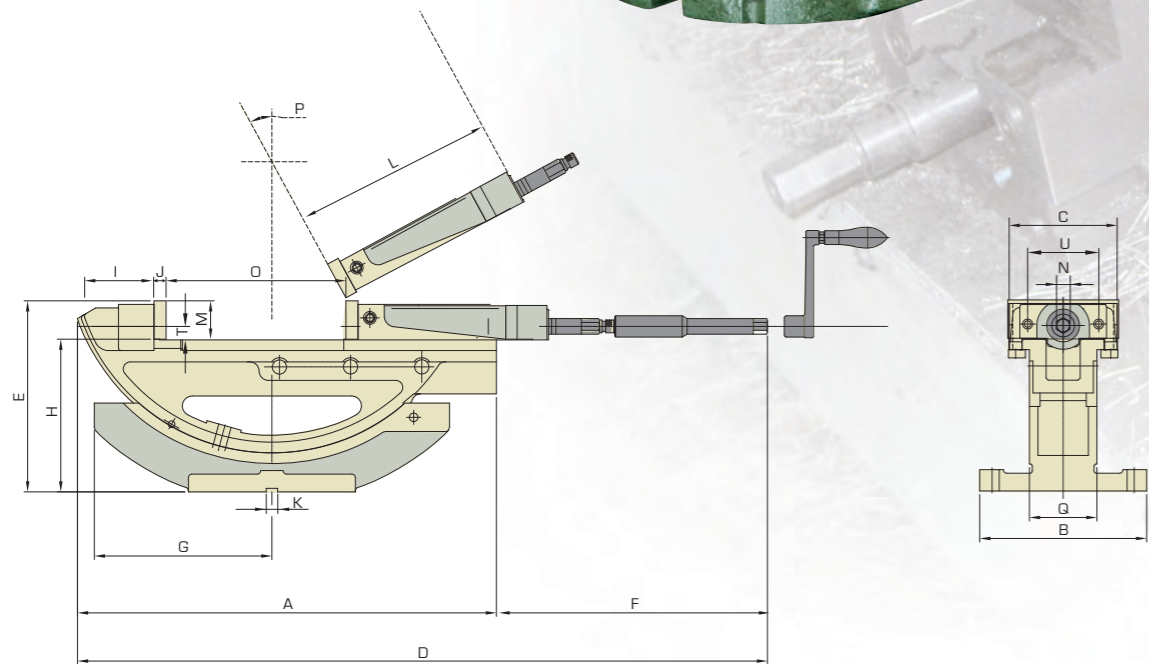
HPT-40, 60

Workholding

HPT Series is different from other conventional milling vise. It not only follows the functions of HP Series but also makes angular setting in directions possible. The vertical angle can be setting from 0-50° of your need. Precise angular setting in plane can be read from the mounted scale.



HPT Dimensions



| HPT DIMENSIONS | | | | | | | | | | | | | | | | | | | | mm/kg | |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|-----|----|----|-----|-----|------|----|-----|----------------|--------|
| NO | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | T | U | Clamping force | Weight |
| HPT-40 | 330 | 160 | 104 | 525 | 177 | 195 | 172 | 141 | 65 | 11 | 16 | 153 | 36 | 14 | 170 | 50° | 65 | 10 | 70 | 25 KN | 28kg |
| HPT-60 | 590 | 235 | 152 | 812 | 264 | 222 | 250 | 210 | 97 | 15 | 16 | 175 | 54 | 19 | 300 | 50° | 94.5 | 18 | 100 | 44 KN | 75kg |

Auto Well Enter. Co., Ltd. was founded in 1980 and started from the production of the Hydraulic Power Machine Vise. The promoter, Philip Lin, is devoted to developing the Machinery Industry and abides by principles of Honor, Quality, Service, and Creation. The most valuable intangible asset which Auto Well possesses is an accumulation of elite and excellent techniques gathered during these 30 years of operation. We have passed the ISO 9001 Certification. We satisfy the customers by continuous innovation, develop high quality products, and flawless service. We are the earliest and most professional precise jig vise manufacturer in Taiwan today.

The quality guarantee of Auto Well extends from our excellent manufacturing ability. Internally, we practice the quality policy: "Do the right thing, do the thing right." The product policy of Auto Well is "primary quality and secondly cost." There are several CNC and surface grinding machines in our company, so that we can control and process the quality of precision. We utilize ERP and ISO-9001 quality security systems as our core of management. Externally, we adhere to "internationalization and liberalization" in leading our marketing division to provide the customers the best and latest service globally. The development of Administration, Research, Design, and Production cooperates closely with each other to form a complete management system. We aim to make the precision vise of Auto Well reach the highest international standards.

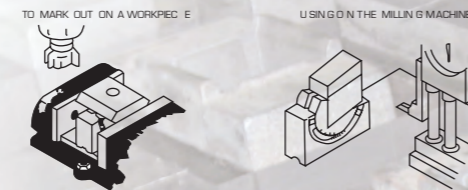
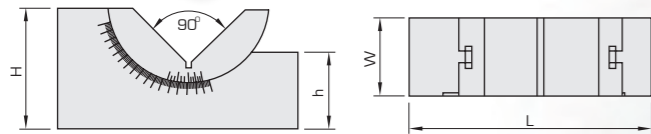
We are the pioneer of precise jig vise manufacturing that passed the SGS ISO9001 international quality certification in Taiwan. You can find our products in Canada, UK, Germany, Holland, Italy, Australia, Japan, Korea, China, Singapore, Malaysia, Thailand, South Africa, etc. We believe that good and jigs are necessary in the producing chain, therefore, improving the tool modular would be our main feature in the future. In the great environment of the international market nowadays, we maintain improvements of existing products. Furthermore, our R&D department develops new products in order to satisfy different customers and different demands. We have obtained various kinds of domestic and international rewards, authentication and patent registrations. All of these are duties of Auto Well in taking on responsibility for the precise jig vise manufacturing in Taiwan.

Primary Quality & Secondly Cost. for CNC machining centers and milling machines **VARIOUS PRECISION VISES**

GAP-25, 30, 46 Adjustable Angle Plates



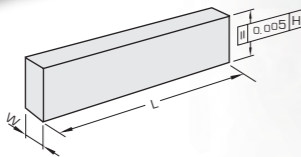
| GAP DIMENSIONS | | | | | |
|----------------|-----|----|----|----|-------|
| NO | L | W | H | h | N.W. |
| GAP-25 | 75 | 25 | 36 | 25 | 0.5kg |
| GAP-30 | 102 | 30 | 49 | 30 | 1.0kg |
| GAP-46 | 102 | 46 | 49 | 30 | 1.5kg |



AGP-85 Precision Parallels Set



- Hardness: HRC50°-55°
- Accuracy: 0.01m/m

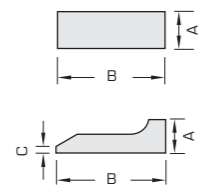


| AGP-85 DIMENSIONS | | | | | |
|-------------------|-----|-----|-----|-----|-------|
| Order NO | W | H | L | PCS | N.W. |
| AGP-85 | 8.5 | 14 | 150 | 2 | 5.5kg |
| | 8.5 | 16 | 150 | 2 | |
| | 8.5 | 20 | 150 | 2 | |
| | 8.5 | 24 | 150 | 2 | |
| | 8.5 | 30 | 150 | 2 | |
| | 8.5 | 32 | 150 | 2 | |
| | 8.5 | 36 | 150 | 2 | |
| | 8.5 | 40 | 150 | 2 | |
| 8.5 | 44 | 150 | 2 | | |

AGP-100 Precision Parallels Set



- Hardness: HRC50°-55°
- Accuracy: 0.01m/m
- Process: Four-side grinding
- 1 set includes 18 pcs
- Packed by plastic case



| AGP-100 DIMENSIONS | | | | | |
|--------------------|----|----|-----|-----|------|
| Order NO | A | B | L | PCS | N.W. |
| AGP-100 | 5 | 16 | 100 | 2 | 11kg |
| | 6 | 18 | 100 | 2 | |
| | 8 | 24 | 100 | 2 | |
| | 10 | 30 | 100 | 2 | |
| | 12 | 36 | 150 | 2 | |
| | 14 | 48 | 150 | 2 | |
| | 18 | 60 | 150 | 2 | |
| | 22 | 62 | 150 | 2 | |
| Clamp Size | A | B | C | L | PCS |
| | 15 | 31 | 2.5 | 200 | 2 |

GVL-100 Tool Maker Vise (Stainless steel)

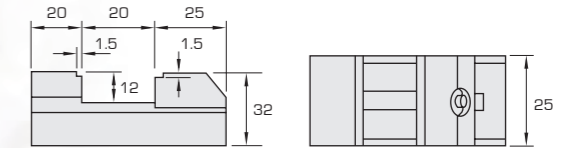
N.W. 0.3kg

Tool Maker Vise (Stainless steel)

GVL-100 mini tool maker vise can be applied for precise process on bigger vises, and it can be used on EDMS and grinding machines.



- High Precision Tool Makers Vise
- Hardness: HRC50°-55°
- Squareness: within 0.003m/m

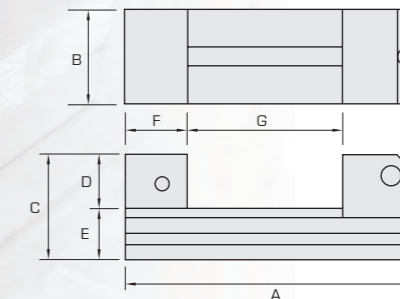


GVL-200, 300 Tool Maker Vise (Stainless steel)

Super Cold treating the stainless steel material after heat treatment, makes the rustless tools easy to maintain and preserve lasting precision.



- Material: SUS440
- Parallelism: within 0.003mm/100mm
- Squareness: within 0.003mm/100mm
- Harden treatment up to HRC50°~55°

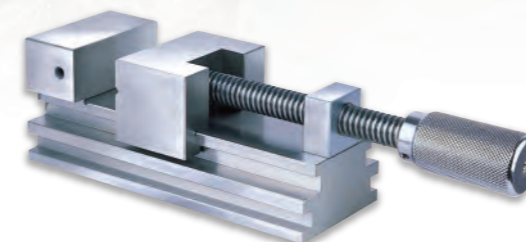


| GVL-200, 300 DIMENSIONS | | | | | | | | |
|-------------------------|-----|----|----|----|----|----|----------|-------|
| NO | A | B | C | D | E | F | G | N.W. |
| GVL-200 | 140 | 50 | 53 | 25 | 28 | 25 | 0.75m/m | 1.8kg |
| GVL-300 | 180 | 72 | 62 | 30 | 32 | 35 | 0.100m/m | 3.8kg |

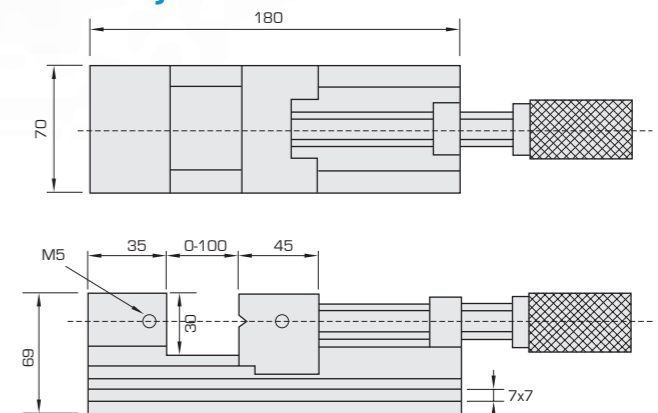
VSU-300 Tool Maker Vise (Stainless steel)

N.W. 5kg

Tool Maker Vise (Stainless steel)



- Material: SUS440
- Parallelism: within 0.003mm/100mm
- Squareness: within 0.005mm/100mm
- Harden treatment up to HRC50°~55°



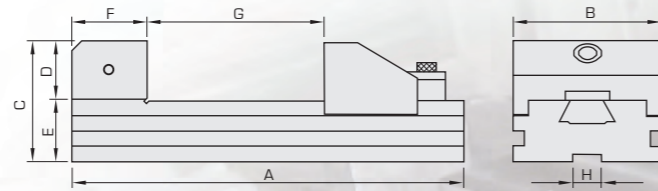
GLK-60, 80, 100

GLK Tool Maker Vise

GLK Tool Maker Vise adopts new construct and high strength design, can enable to clamp strong and powerful workpieces.



- Material: YK30
- Hardness: HRC56°~60°

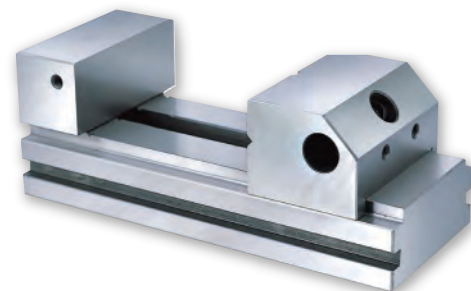
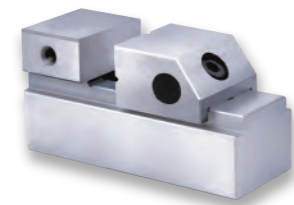


| GLK-60~100 DIMENSIONS | | | | | | | | | |
|-----------------------|-----|----|----|----|----|----|-------|----|------|
| NO | A | B | C | D | E | F | G | H | N.W. |
| GLK-60 | 180 | 60 | 53 | 25 | 28 | 35 | 0-80 | 14 | 3kg |
| GLK-80 | 205 | 80 | 63 | 30 | 33 | 40 | 0-100 | 14 | 5kg |
| GLK-100 | 250 | 96 | 80 | 38 | 42 | 45 | 0-125 | 14 | 10kg |

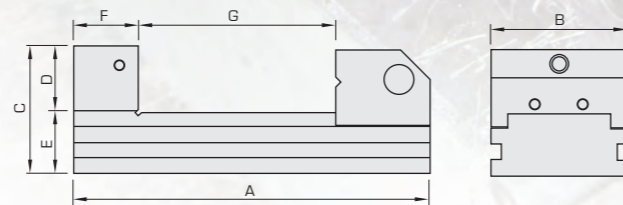
VSB-15, 20, 25, 30, 40

VSB Tool Maker Vise

VSB Tool Maker Vise is a mechanics of new type, can enable to easily adjust the size of workpieces being held.



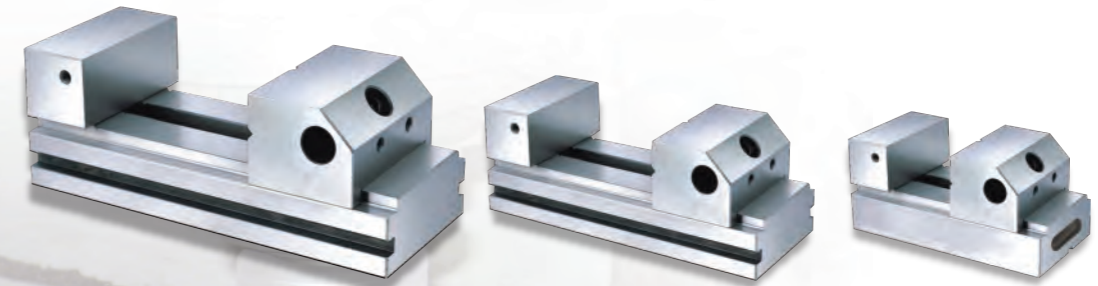
- YK30 material can pledge the rigidity and precision.
- Hardness HRC56°~60°



| VSB-15~40 DIMENSIONS | | | | | | | | | |
|----------------------|-----|----|----|----|----|----|-------|-------|--|
| NO | A | B | C | D | E | F | G | N.W. | |
| VSB-15 | 105 | 36 | 48 | 20 | 28 | 20 | 0-45 | 1kg | |
| VSB-20 | 150 | 48 | 53 | 25 | 28 | 25 | 0-75 | 2kg | |
| VSB-25 | 176 | 63 | 59 | 30 | 29 | 30 | 0-95 | 3.3kg | |
| VSB-30 | 190 | 73 | 68 | 35 | 33 | 35 | 0-105 | 4.3kg | |
| VSB-40 | 245 | 98 | 90 | 45 | 45 | 45 | 0-135 | 10kg | |

GSV-34, 45, 70, 90, 120

Super Precision Tool Maker Vise

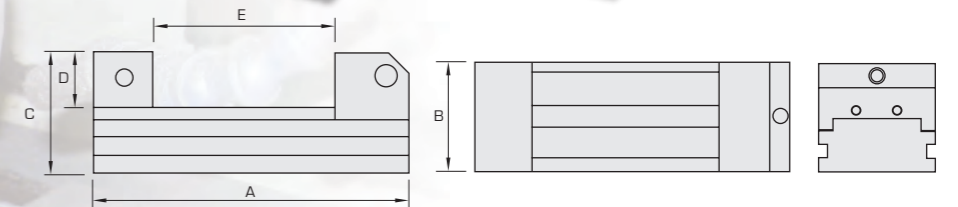


"GSV" type super precision tool maker vise, made of quality alloy steel. The best kind of tool maker vise whatever in design and accuracy.

Quality and precision are stability. Achieving Europe and Japan quality test qualification.

Single side oblique angle design, can be mended the quantity of essence deformed automatically.

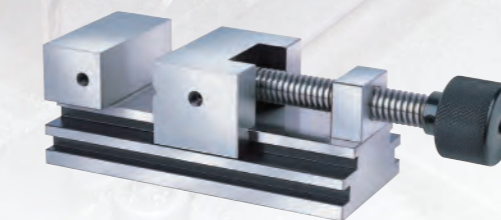
- Material SKS3
- Parallelism within 0.002mm/100mm
- Squareness within 0.003mm/100mm
- Cooling treatment: minus 185°C
- Harden treatment up to HRC58°~62°



| GSV-34~120 DIMENSIONS | | | | | | |
|-----------------------|-----|-----|----|----|-------|--------|
| NO | A | B | C | D | E | N.W. |
| GSV-34 | 75 | 34 | 35 | 15 | 0-25 | 0.38kg |
| GSV-45 | 110 | 45 | 45 | 20 | 0-50 | 1.0kg |
| GSV-70 | 160 | 70 | 62 | 30 | 0-80 | 3.3kg |
| GSV-90 | 210 | 90 | 80 | 40 | 0-120 | 6.7kg |
| GSV-120 | 286 | 120 | 90 | 40 | 0-150 | 16.8kg |

GAA-20, 25, 30, 40

Super Precision Tool Maker Vise



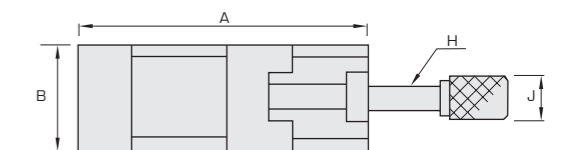
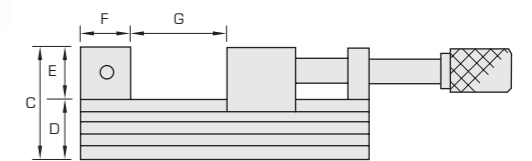
"GAA" type super precision tool maker vise, complete size, handle designed, can be arbitrarily rotated the handle to adjust clamping size.

Inside of the handle is hexagonal hole designed, for hexagonal spanner to pressurize and lock.

Precision spiral shaft match up with nut, and effective to ensure the lasting. The quality and accurate are guaranteed.

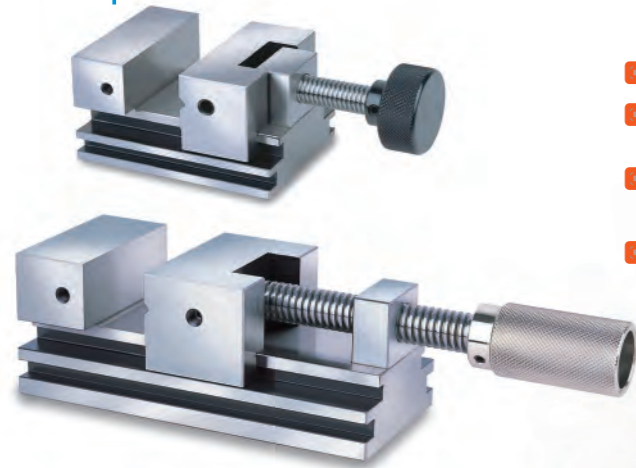
Single side oblique angle design, can be mended the quantity of essence deformed automatically.

- Material SK2
- Parallelism within 0.003mm/100mm
- Squareness within 0.004mm/100mm
- Harden treatment up to HRC56°~58°

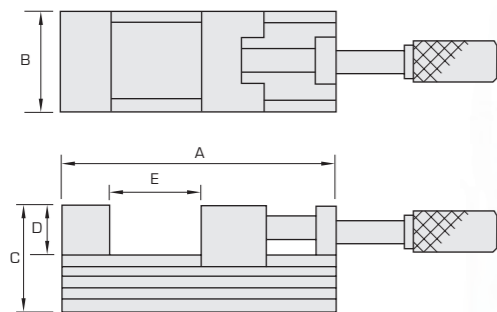


GAS-60,70,90

Super Precision Tool Maker Vise



- "GAS" type super precision tool maker vise, made of quality alloy steel.
 - Quality and precision are stability. Achieving Europe and Japan quality test qualification.
 - Single side oblique angle design, can be mended the quantity of essence deformed automatically.
 - Material SKS3
- | | |
|-----------------------------------|----------------------|
| Parallelism | within 0.002mm/100mm |
| Squareness | within 0.003mm/100mm |
| Harden treatment up to HRC56°~58° | |
| Cooling treatment: minus 185°C | |



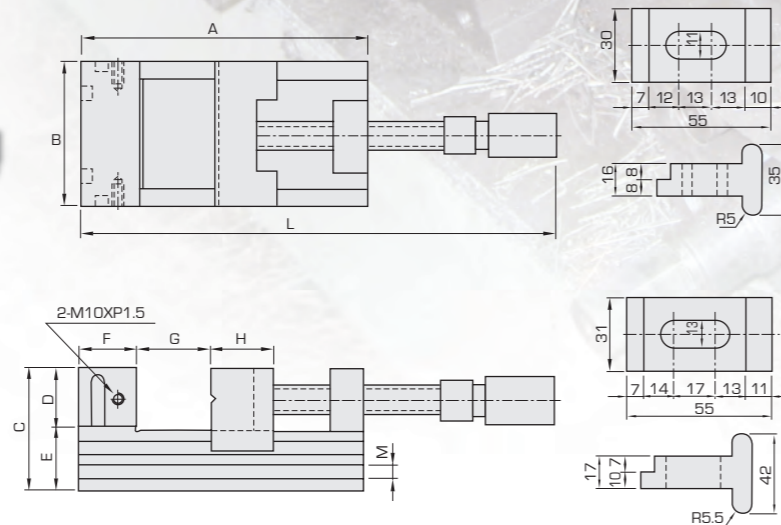
| GAS-60, 70, 90 DIMENSIONS | | | | | | | |
|---------------------------|-----|----|----|----|-------|-------|--|
| NO | A | B | C | D | E | N.W. | |
| GAS-60 | 90 | 60 | 50 | 25 | 0-35 | 1.6kg | |
| GAS-70 | 160 | 70 | 62 | 30 | 0-80 | 4.3kg | |
| GAS-90 | 210 | 90 | 80 | 40 | 0-120 | 8.4kg | |

PGV-100,125

Precision Hydraulic Vise



- Precision hydraulic vise, made of quality alloy steel, possesses good accuracy.
 - Hand-in hydraulic structure designed, turning the power of light, can to play strong clamping force.
 - Quality and precision are stability. Achieving Europe and Japan quality test qualification.
 - Material SKS3
- | | |
|-----------------------------------|----------------------|
| Parallelism | within 0.003mm/100mm |
| Squareness | within 0.005mm/100mm |
| Harden treatment up to HRC60°~62° | |
| Cooling treatment: minus 185°C | |
| Max. Clamping forces: 1500kgf | |

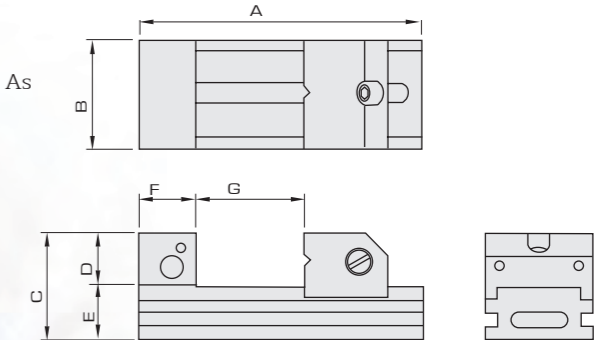


| PGV DIMENSIONS | | | | | | | | | | | | |
|----------------|-----|-----|----|----|----|----|-----|----|---------|---------|------|--------|
| NO | A | B | C | D | E | F | G | H | L | | M | N.W. |
| | | | | | | | | | Minimum | Maximum | | |
| PGV-100 | 220 | 100 | 80 | 40 | 40 | 40 | 110 | 50 | 355 | 470 | 9X7 | 10kg |
| PGV-125 | 300 | 125 | 90 | 40 | 50 | 60 | 165 | 70 | 420 | 590 | 10X7 | 19.5kg |

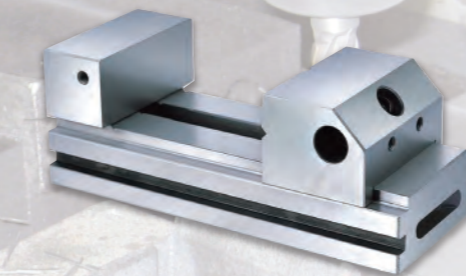
AVV-30, 40, 50, 60

Super Precision Tool Maker Vise

- "AVV" Tool maker Vise is made of high quality alloy tool steel.
 - It has a special feature to prevent disstortion during clamping. As such, it is able to ensure work with good accuracy.
 - With a quick adjusting spring action to allow fast and easy size adjustmen of the clamping jaw.
 - Material SKS3
- | | |
|-----------------------------------|----------------------|
| Parallelism | within 0.003mm/100mm |
| Squareness | within 0.004mm/100mm |
| Harden treatment up to HRC58°~62° | |
| Cooling treatment: minus 185°C | |



| AVV DIMENSIONS | | | | | | | | |
|----------------|-----|-----|-----|----|----|----|-------|--------|
| NO | A | B | C | D | E | F | G | N.W. |
| AVV-30 | 190 | 73 | 70 | 35 | 35 | 38 | 0-100 | 4.6kg |
| AVV-40 | 230 | 98 | 80 | 40 | 40 | 46 | 0-125 | 11.4kg |
| AVV-50 | 300 | 125 | 98 | 48 | 50 | 60 | 0-160 | 18.5kg |
| AVV-60 | 350 | 150 | 100 | 50 | 50 | 60 | 0-210 | 24.9kg |



SUPER PRECISION TOOL MAKER VISE

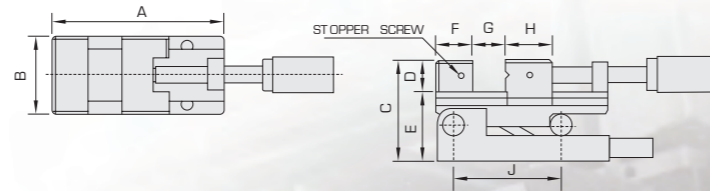
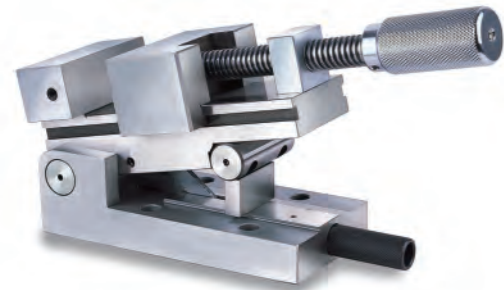
- The principle of antidistortion
-
- All forces acting on the inner block
- Upward thrust.
- New improved AVV30 Tool Maker Vise before clamping
 - When the AVV30 Tool Maker Vise is clamping work piece, reaction force will act on the inner block. As such, the vise will not twist or distort. It can maintain a very high accuracy.
 - When tightening the moving block of the vise, the spring action will act on the tightening pin. This creates a twisting force which acts on the inner block and counter balance the action force.

GENERAL TOOL MAKER VISE

-
- V30 Tool Maker Vise before clamping
 - When the V30 Tool Maker Vise clamping work piece, reaction force will act on the body of the vise, As such, the vise may twisted or distorted. It can affect the accuracy of the work.
 - When loosening the V30 Tool Maker Vise, the screw will move downward due to gravity force. Workers need to fix it back to position by hand.

AGV-100 Precision Sine Vise

Work for getting right angle can be done while clamping a workpiece and lay down 90°



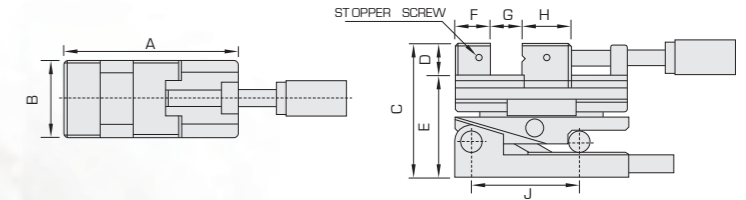
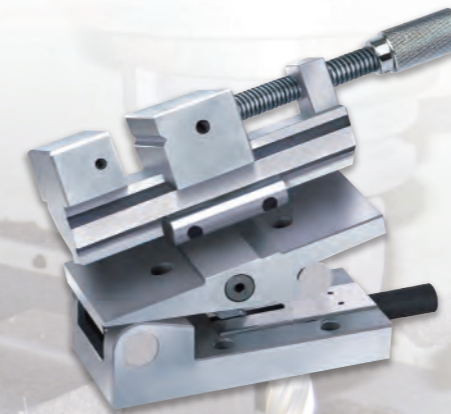
- Material SKS
- Parallelism within 0.003mm/100mm
- Squareness within 0.005mm/100mm
- Harden treatment up to HRC58°~62°
- Angle tol. within 15sec within 20sec

The precision sine vise is developed for processing at various angles. It is used for grinding cuttion making hole marking and measuring.

| AGV-100 DIMENSIONS | | | | | | | | | | | | |
|--------------------|-----|----|----|----|----|----|----|----|----|-----|-----------|-------|
| NO | A | B | C | D | E | F | G | H | I | J | Max.angle | N.W. |
| AGV-100 | 160 | 73 | 93 | 30 | 63 | 33 | 80 | 45 | M6 | 100 | 46° | 6.8kg |

CSV-100 Precision Compound Sine Vise

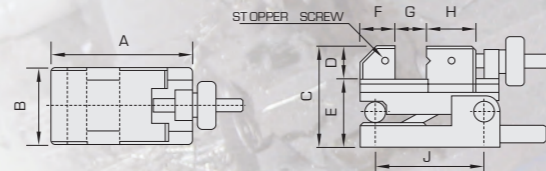
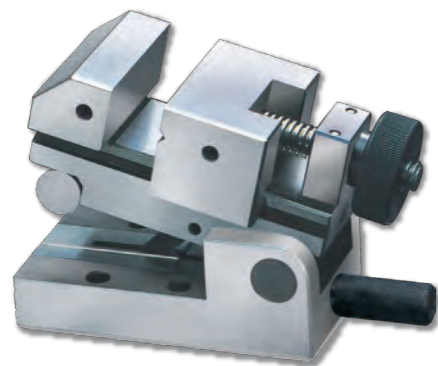
It can process at the second angle without removing a workpiece



| CSV-100 DIMENSIONS | | | | | | | | | | | | |
|--------------------|-----|----|-----|----|----|----|----|----|----|-----|-----------|-------|
| NO | A | B | C | D | E | F | G | H | I | J | Max.angle | N.W. |
| CSV-100 | 160 | 73 | 124 | 30 | 94 | 33 | 80 | 45 | M5 | 100 | 46° | 8.8kg |

GVC-100 Precision Sine Vise

The clamp handle is placed under workpiece

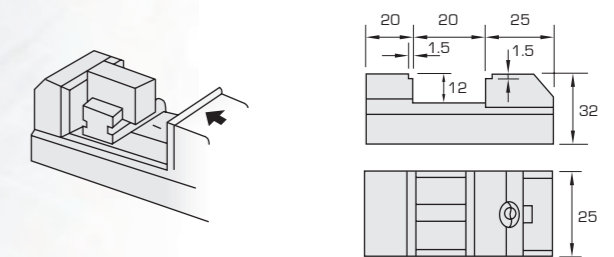


| GVC-100 DIMENSIONS | | | | | | | | | | | | |
|--------------------|-----|----|----|----|----|----|----|----|----|-----|-----------|------|
| NO | A | B | C | D | E | F | G | H | I | J | Max.angle | N.W. |
| GVC-100 | 130 | 73 | 93 | 30 | 63 | 33 | 45 | 45 | M5 | 100 | 46° | 6kg |

AVS-100 Tool Maker Vise(Small)

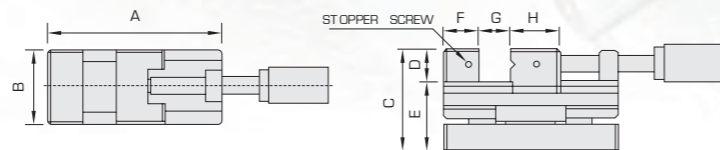
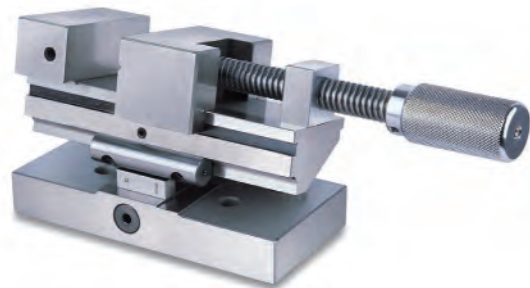
N.W.0.3kg

Tool makers vise of mini type can be put in a bigger vise to process the small and precise workpiece. Also it can be used in an E.D.M. Machine and grinding machine. Squareness and parallelism:within0.003m/m.



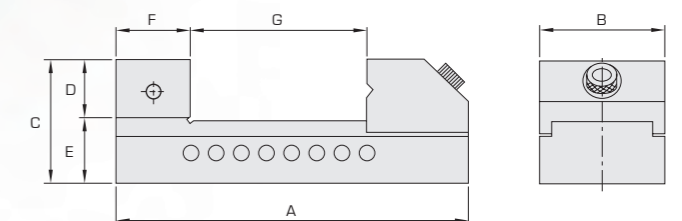
AGL-50 Precision Sine Vise

It can set horizontal angles



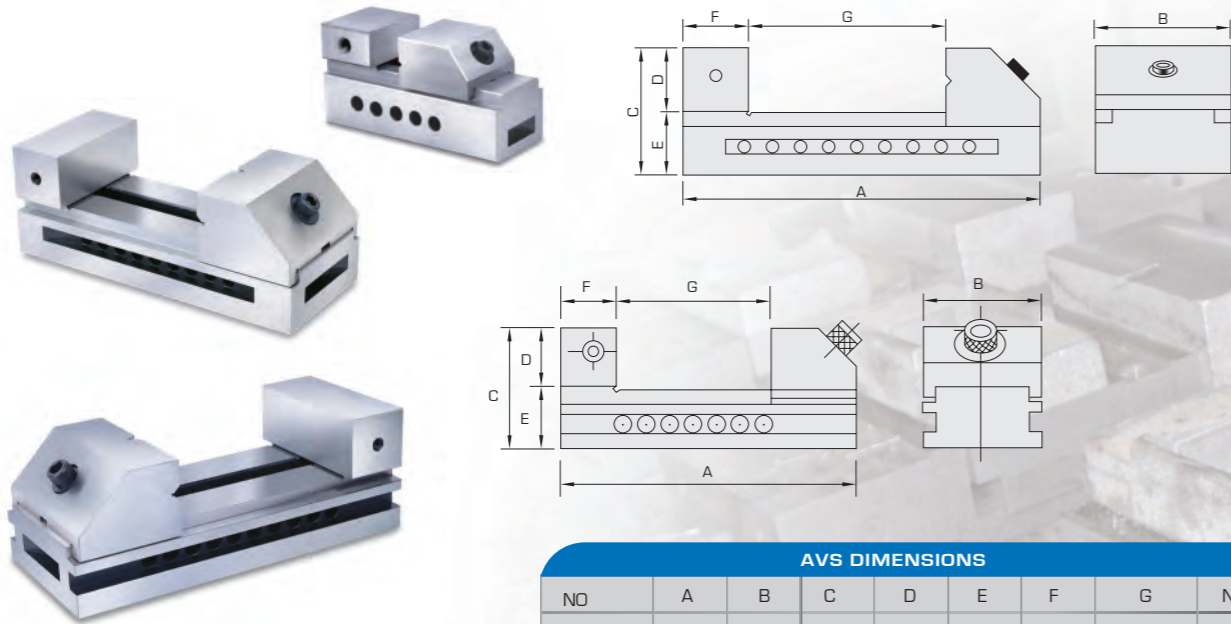
| AGL-50 DIMENSIONS | | | | | | | | | | | | |
|-------------------|-----|----|----|----|----|----|----|----|----|-----------|-------|--|
| NO | A | B | C | D | E | F | G | H | I | Max.angle | N.W. | |
| AGL-50 | 160 | 73 | 93 | 30 | 63 | 33 | 80 | 45 | M5 | 46° | 6.5kg | |

AVB-15, 20, 25, 30, 35, 40, 50 Tool Maker Vise



| AVB DIMENSIONS | | | | | | | | |
|----------------|-----|-----|-----|----|----|----|-------|-------|
| NO | A | B | C | D | E | F | G | N.W. |
| AVB-15 | 100 | 36 | 48 | 20 | 28 | 25 | 0-40 | 1kg |
| AVB-20 | 150 | 50 | 53 | 25 | 28 | 30 | 0-80 | 1.8kg |
| AVB-25 | 175 | 63 | 63 | 32 | 31 | 35 | 0-90 | 3.3kg |
| AVB-30 | 190 | 73 | 70 | 35 | 35 | 35 | 0-100 | 4.3kg |
| AVB-35 | 235 | 88 | 80 | 40 | 40 | 40 | 0-130 | 7.5kg |
| AVB-40 | 245 | 100 | 90 | 45 | 45 | 45 | 0-130 | 10kg |
| AVB-50 | 285 | 125 | 100 | 50 | 50 | 45 | 0-160 | 15kg |

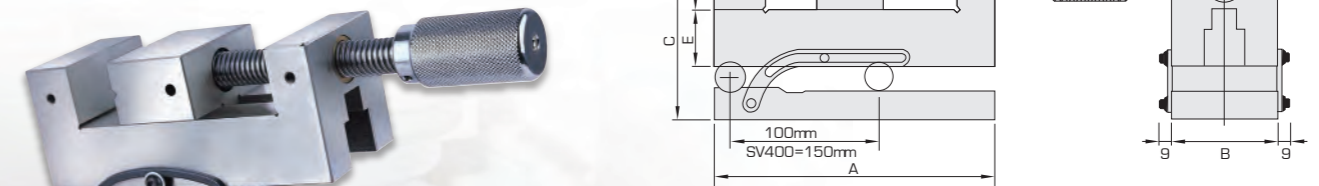
AVS-15, 20, 25, 30, 35, 40, 50, 60 Tool Maker Sine Vise



| AVS DIMENSIONS | | | | | | | | | mm |
|----------------|-----|-----|-----|----|----|----|-------|-------|----|
| NO | A | B | C | D | E | F | G | N.W. | |
| AVS-15 | 100 | 36 | 48 | 20 | 28 | 25 | 0-40 | 1kg | |
| AVS-20 | 150 | 50 | 53 | 25 | 28 | 30 | 0-80 | 1.8kg | |
| AVS-25 | 175 | 63 | 63 | 32 | 31 | 35 | 0-90 | 3.3kg | |
| AVS-30 | 190 | 73 | 70 | 35 | 35 | 35 | 0-100 | 4.3kg | |
| AVS-35 | 235 | 88 | 80 | 40 | 40 | 40 | 0-130 | 7.5kg | |
| AVS-40 | 245 | 100 | 90 | 45 | 45 | 45 | 0-130 | 10kg | |
| AVS-50 | 285 | 125 | 100 | 50 | 50 | 45 | 0-160 | 15kg | |
| AVS-60 | 330 | 150 | 100 | 50 | 50 | 50 | 0-180 | 20kg | |

- Material SK2
- Parallelism within 0.003mm/100mm
- Squareness within 0.005mm/100mm
- Harden treatment up to HRC56°~60°

ASV-200, 250, 300, 400 Tool Maker Sine Vise

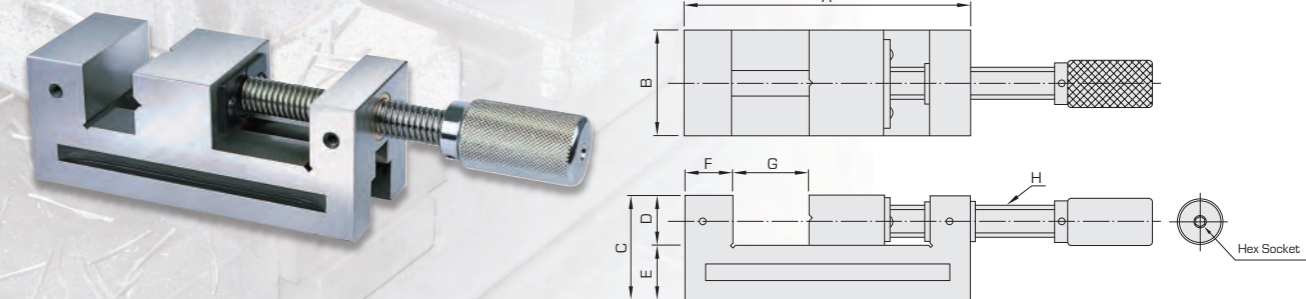


| ASV DIMENSIONS | | | | | | | | | mm |
|----------------|-----|----|-----|----|----|----|-------|-------|----|
| NO | A | B | C | D | E | F | G | N.W. | |
| ASV-200 | 156 | 48 | 89 | 25 | 27 | 25 | 0-65 | 4.4kg | |
| ASV-250 | 176 | 63 | 99 | 30 | 33 | 30 | 0-75 | 7kg | |
| ASV-300 | 190 | 73 | 110 | 35 | 38 | 35 | 0-79 | 9kg | |
| ASV-400 | 255 | 98 | 121 | 40 | 42 | 40 | 0-124 | 16kg | |

- Harden treatment up to HRC:56°~60°

VSD-20, 25, 30, 40 Tool Maker Vise

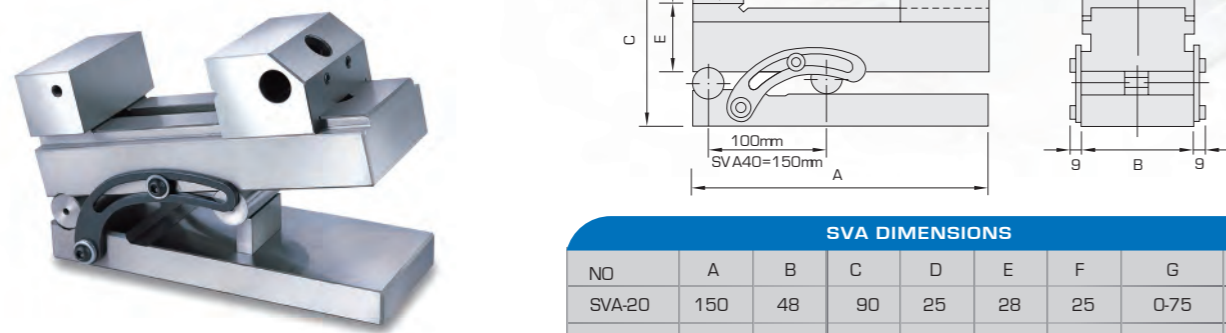
Tool Maker Vise makes it's clearance smallest. Hand wheel with Hex nut can be tighten by hex spanner. It is simple to dismantle the screw pole after abraded.



| VSD DIMENSIONS | | | | | | | | | mm |
|----------------|-----|----|----|----|----|----|-------|-------|----|
| NO | A | B | C | D | E | F | G | N.W. | |
| VSD-20 | 156 | 48 | 52 | 25 | 27 | 25 | 0-65 | 2.5kg | |
| VSD-25 | 176 | 63 | 63 | 30 | 33 | 30 | 0-75 | 4.5kg | |
| VSD-30 | 190 | 73 | 73 | 35 | 38 | 35 | 0-79 | 6kg | |
| VSD-40 | 255 | 98 | 82 | 40 | 42 | 40 | 0-124 | 12kg | |

- Material SK2
- Parallelism within 0.003mm/100mm
- Squareness within 0.005mm/100mm
- Harden treatment up to HRC56°~60°

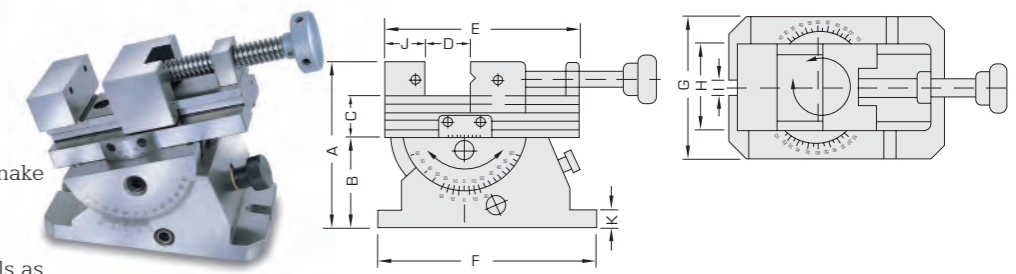
SVA-20, 25, 30, 40 Tool Maker Sine Vise



| SVA DIMENSIONS | | | | | | | | | mm |
|----------------|-----|----|-----|----|----|----|-------|--------|----|
| NO | A | B | C | D | E | F | G | N.W. | |
| SVA-20 | 150 | 48 | 90 | 25 | 28 | 25 | 0-75 | 2.6kg | |
| SVA-25 | 176 | 63 | 96 | 30 | 29 | 30 | 0-85 | 4.8kg | |
| SVA-30 | 190 | 73 | 105 | 35 | 33 | 35 | 0-95 | 7kg | |
| SVA-40 | 245 | 98 | 129 | 45 | 45 | 45 | 0-125 | 15.5kg | |

CHM-80 Precision Universal Vise

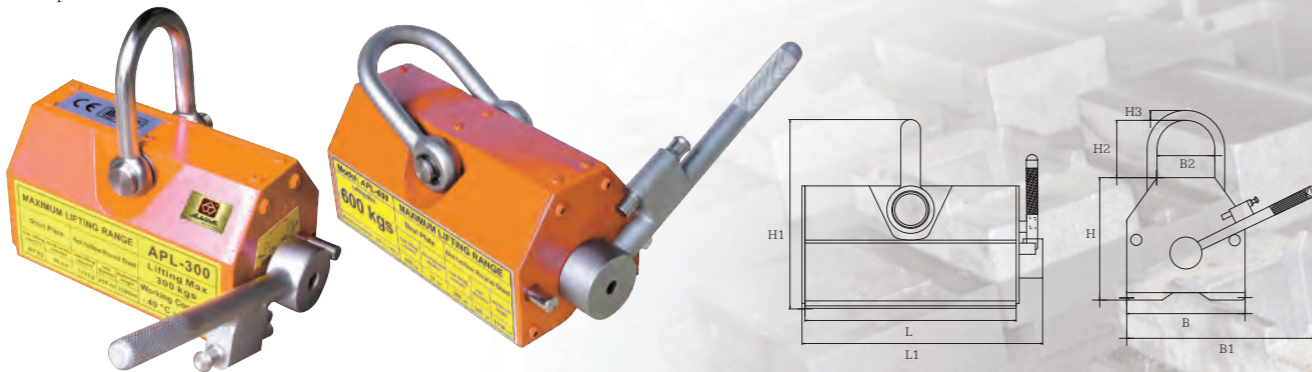
- Precision graduation for accurate reading.
- Horizontal swivel through 360°.
- The unit tilts 45° vertically.
- Its swivelling and tilting features make this unit well suited for straight or inclined surface, angular drilling machining on various machine tools as precision grinding machine, boring and milling machine, electrical discharge machine etc.



| CHM-80 DIMENSIONS | | | | | | | | | | | mm | |
|-------------------|-----|----|----|----|-----|-----|-----|----|------|----|----|------|
| NO | A | B | C | D | E | F | G | H | I | J | K | N.W. |
| CHM-80 | 137 | 75 | 32 | 80 | 160 | 180 | 110 | 70 | 12.5 | 32 | 15 | 14kg |

ON/OFF Type Permanent Lifting Magnetic Chuck

- Before lifting a workpiece, please check if any foreign-material or iron chip exists between the lifter and workpiece, please clean up the surface of the lifter and workpiece.
- Checks the switch position to make sure it is set correctly, and also checks the held workpiece if it is being held completed and balanced before lifting.
- Please do not switch the handle "on" if it is not being used to avoid any damage caused.
- Please do not use the product if the working piece surface temperature is higher than 80°C degree.
- Suitable for carrying various Iron material workpiece.
- Very easy operation with the special design of ON/OFF switch. Easy-Locked function, provides you switch on and lock the handle at the same time.
- Workingpiece surface will not be damaged during the working.
- High holding magnetic power, this lifter can be used successive. Electro power is no necessary for the lifter to avoid power failure problem.



| APL DIMENSIONS | | | | | | | | | | | | | | | | | |
|----------------|---------------|----------------|-----|------------|-----|-----|-----|-----|-----|----|--------------------------|----------------------------|--------------------------|-------------------|--------------------|-------------|-----|
| NO | Capacity (KG) | Chuckling face | | Dimensions | | | | | | | Max Lifting Range | | | | Safety coefficient | Weight (KG) | |
| | | B | L | H | B1 | L1 | H1 | B2 | H2 | H3 | Steel Plate | Not Hollow Round Steel | | | | | |
| | | | | | | | | | | | max lifting capacity(kg) | min thickness required(mm) | max lifting capacity(kg) | max. diameter(mm) | maximum Length(mm) | | |
| APL-100 | 100 | 63 | 92 | 71 | 164 | 110 | 122 | 32 | 43 | 8 | 100 | 15 | 45 | 150 | 1000 | x 3.5 | 2.5 |
| APL-300 | 300 | 93 | 165 | 96 | 210 | 185 | 170 | 45 | 62 | 13 | 300 | 25 | 135 | 250 | 1500 | x 3.5 | 8 |
| APL-600 | 600 | 122 | 236 | 120 | 303 | 265 | 227 | 59 | 92 | 15 | 600 | 30 | 270 | 350 | 2000 | x 3.5 | 22 |
| APL-1000 | 1000 | 171 | 263 | 164 | 413 | 298 | 302 | 95 | 116 | 20 | 1000 | 40 | 450 | 450 | 2500 | x 3.5 | 51 |
| APL-2000 | 2000 | 232 | 378 | 215 | 576 | 415 | 390 | 119 | 148 | 28 | 2000 | 55 | 870 | 550 | 3000 | x 3.5 | 131 |
| APL-3000 | 3000 | 300 | 454 | 265 | 717 | 490 | 500 | 156 | 213 | 32 | 3000 | 60 | 1320 | 650 | 3500 | x 3.5 | 250 |

The specifications and dimensions of products in the catalogs are for reference only. Subject to be changed without any notice.

Load of Holding Power

The load of holding power will changes depending on the thickness, attractive face roughness and quality of material and clearance between the workiece with magnet. (See the graphs as below)

| Chart of difference in holding power by thickness | | | | | | | | |
|---------------------------------------------------|-----------|----------|--------------------------------|----------|----------|---------|---------|---------|
| NO | Thickness | | Percentage of lifting capacity | | | | | |
| | mm | Inch | APL-3000 | APL-2000 | APL-1000 | APL-600 | APL-300 | APL-100 |
| 1 | UP 60 | UP 2.36" | 100% | | | | | |
| T2 | 55 | 2.16" | 95% | 100% | 100% | 100% | 100% | 100% |
| T3 | 50 | 1.97" | 90% | 95% | | | | |
| T4 | 45 | 1.77" | 85% | 90% | | | | |
| T5 | 40 | 1.57" | 75% | 85% | | | | |
| T6 | 35 | 1.38" | 65% | 75% | 90% | 90% | 100% | |
| T7 | 30 | 1.18" | 55% | 65% | 80% | | | |
| T8 | 25 | 0.98" | 45% | 55% | 70% | | | |
| T9 | 20 | 0.79" | 35% | 45% | 60% | 75% | 90% | 100% |
| T10 | 15 | 0.59" | 25% | 35% | 50% | 60% | 70% | |
| T11 | 10 | 0.39" | 15% | 25% | 35% | 45% | 50% | |
| T12 | 5 | 0.20" | 10% | 15% | 20% | 25% | 30% | 40% |

- Calculating Formula for "Range of Lifting Capacity" (TxFxMxCapacity of Lifter)
Example: Terms of workpiece: T8, F1, M2
90% X 125% X 85% X 600kg(APL-600)=573KG
- Safety Factor X 3.5 Time (Safety factor is consideration for ensurint the use in safety.)
- The above diagrams is only for reference. The operator should be test and check if it is in safe range before lift away the workpiece of steel. Other wise, it will be not responsibility by producer for any accidents.

For Vise Accessories

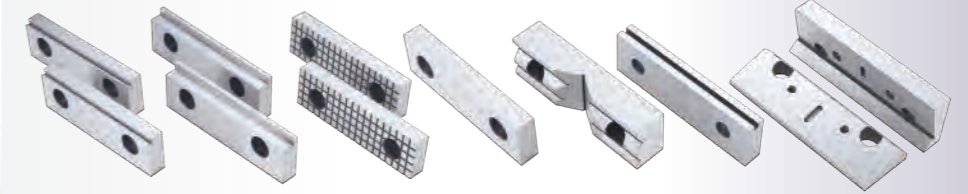
Swivel Base



ATW, HP, MP



Special Jaws



Angle Plate



| Angle Plate | | | | |
|-------------|-------|-------|-------|--------|
| Item No. | L | W | H | Weight |
| AVR-4 | 75mm | 112mm | 85mm | 2kgs |
| AVR-6 | 115mm | 150mm | 127mm | 3.5kgs |
| AVR-8 | 127mm | 203mm | 150mm | 7kgs |
| AVR-10 | 127mm | 254mm | 203mm | 12kgs |
| AVR-12 | 203mm | 304mm | 228mm | 25kgs |

Workstop



Clamp Support Screw Jacks



| Clamp Support Screw Jacks | | |
|---------------------------|-----------|--------|
| Item No. | Height | Weight |
| AS-65 | 70-100mm | 2kgs |
| AS-150 | 110-150mm | 3.5kgs |
| AS-250 | 140-200mm | 7kgs |
| AS-500 | 270-250mm | 12kgs |

Handles



Clamping Kit



| Clamping Kit | | | |
|--------------|--------|-----------|--------------------------|
| MODEL | T-SLOT | STUD SIZE | STEP BLOCK WIDTH |
| ACK-103A | 7/16 | | 1" |
| ACK-103B | 1/2 | 3/8-16 | (STB14. STB24. STB34) |
| ACK-103C | 9/16 | | |
| ACK-104A | 9/16 | 1/2-16 | 1" or 1 1/4" |
| ACK-104B | 5/8 | or | (STB14. STB24. STB34) |
| ACK-104C | 11/16 | 1/2-13 | or (STB15. STB25. STB35) |
| ACK-105A | 11/16 | | 1" or 1 1/4" |
| ACK-105B | 3/4 | 5/8-11 | (STB14. STB24. STB34) |
| ACK-105C | 13/16 | | or (STB15. STB25. STB35) |
| ACK-08 | 10 | M8xP1.25 | 1" (STB14. STB24. STB34) |
| ACK-10 | 12 | M10xP1.5 | 1" (STB15. STB24. STB34) |
| ACK-12A | 14 | | |
| ACK-12B | 16 | M12xP1.75 | 1" (STB14. STB24. STB34) |
| ACK-12C | 18 | | |
| ACK-14 | 16 | M14xP2.0 | 1" (STB14. STB24. STB34) |
| ACK-16 | 18 | M16xP2.0 | 1" (STB14. STB24. STB34) |

