

MULTI-POWER CNC SUPER VISE

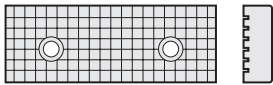
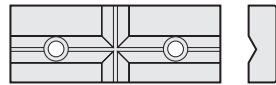
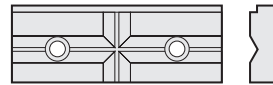
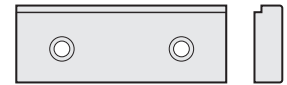
Model: HPAQ-100, 130
HPAQ-160, 200, 250, 160L, 200L

PATENTED
M458489
M395751
M278511
M390838
M435335



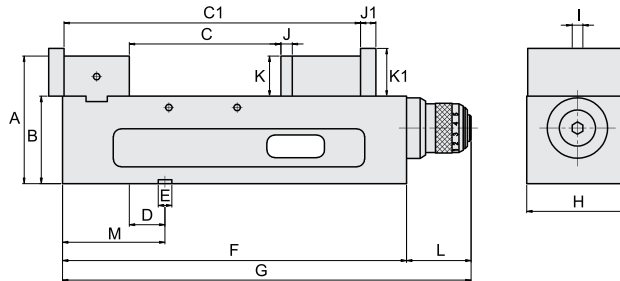
- Shortest Length with Big Jaw Opening
- Extremely High Accuracy and Repeatability
- Special MULTI-POWER design enhances clamping force of **0~8000 KG**
- Suitable for Gantry-Type machining center

OPTIONAL ACCESSORIES

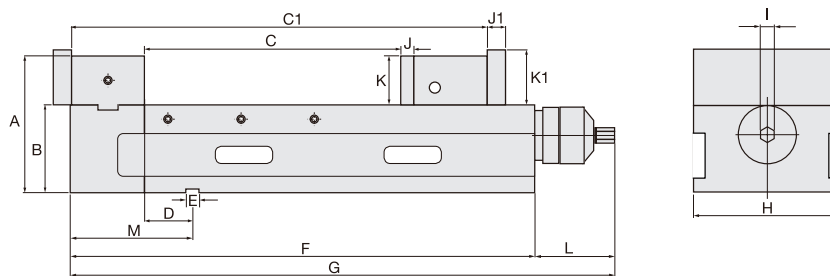

1) Cross Grooved Jaws

2) 'V' Jaws

3) Combined Jaws

4) Step Jaws

DIMENSIONS

HPAQ-100, 130



HPAQ - 160, 200, 250, 160L, 200L



SPECIFICATIONS (Material: FCD 60 Ductile Iron. Hardness: HRC 50°)

Unit: mm

Model	A	B	C	C1	D	E	F	G	H
HPAQ-100	145	105±0.01	0-170	185-350	65±0.02	18	420	507	104
HPAQ-130	163	115±0.01	0-205	195-395	57±0.02	18	470	557	134
HPAQ-160	168	115±0.01	0-300	195-490	57±0.02	18	560	677	160
HPAQ-200	187	120±0.01	0-350	220-570	66±0.02	18	637	754	200
HPAQ-250	187	120±0.01	0-450	220-670	66±0.02	18	746	863	250
HPAQ-160L-400	168	115±0.01	0-400	206-600	57±0.02	18	665	792	160
HPAQ-160L-500	168	115±0.01	0-500	206-700	57±0.02	18	765	892	160
HPAQ-160L-650	168	115±0.01	0-650	206-860	57±0.02	18	925	1042	160
HPAQ-200L-500	187	120±0.01	0-500	220-720	66±0.02	18	806	923	201
HPAQ-200L-600	187	120±0.01	0-600	220-820	66±0.02	18	910	1027	201
HPAQ-200L-850	187	120±0.01	0-850	220-1070	66±0.02	18	1156	1273	201
HPAQ-200L-1140	187	120±0.01	0-1140	220-1360	66±0.02	18	1446	1563	201

Model	I	J	J1	K	K1	L	M	Max. Clamping Force	Weight (kg)
HPAQ-100	14	15	20	40	50	87	145	4000 kg	40
HPAQ-130	14	15	20	48	58	87	145	5500 kg	50
HPAQ-160	19	15	21	53	63	117	145	8000 kg	73
HPAQ-200	19	18	25	66	75	117	168	8000 kg	120
HPAQ-250	19	18	24	66	75	117	168	8000 kg	140
HPAQ-160L-400	19	15	21	53	63	117	145	8000 kg	83
HPAQ-160L-500	19	15	21	53	63	117	145	8000 kg	92
HPAQ-160L-650	19	15	21	53	63	117	145	8000 kg	107
HPAQ-200L-500	19	18	24	66	75	117	168	8000 kg	144
HPAQ-200L-600	19	18	24	66	75	117	168	8000 kg	160
HPAQ-200L-850	19	18	24	66	75	117	168	8000 kg	190
HPAQ-200L-1140	19	18	24	66	75	117	168	8000 kg	217

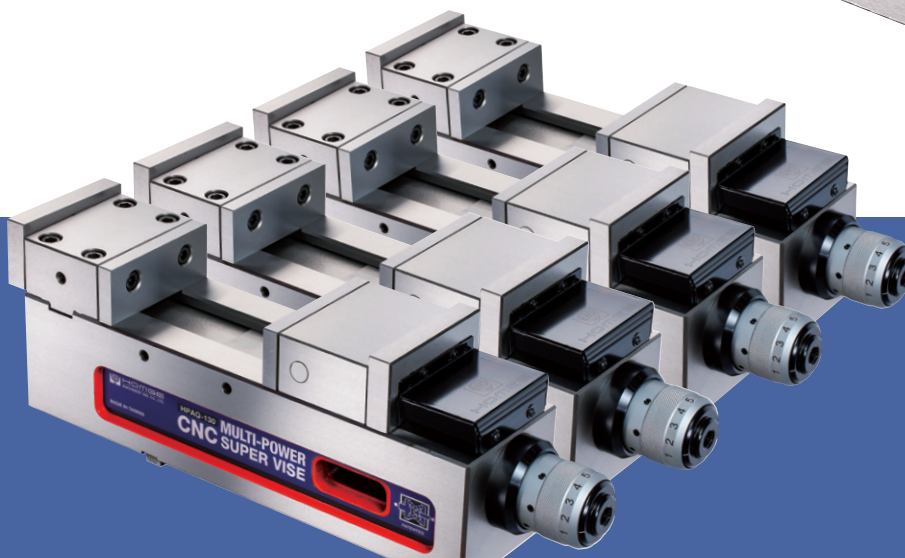
PATENTED
M 523545
M 278511

MULTI-POWER CNC SUPER VISE

Model: HPAQ-100, 130



- Shortest Length with Big Jaw Opening
- Extremely High Accuracy and Repeatability
- Special MULTI-POWER design enhances clamping force of **0~5500 KG**



1. **Vise Fixed Jaw** is made by **high quality steel** and **HARDENED** to **HRC 55°**. Vise body is made of Ductile Iron above FCD 60 grade for high precision and durability. With a force of 2500kg, the shape will deflect less than **0.005mm**.

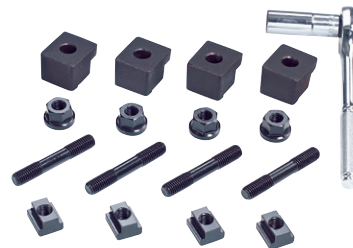
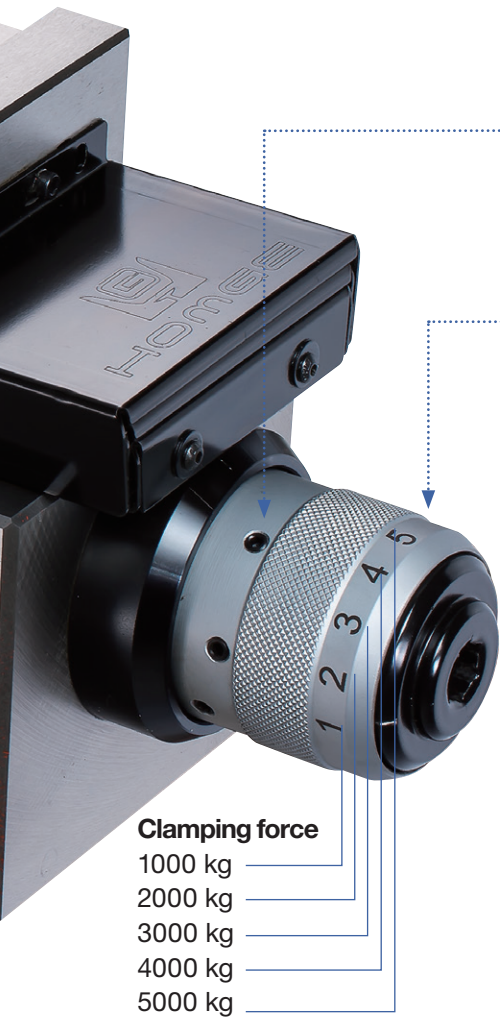
2. Slide ways are **HARDENED** to **HRC 50°** to further increase durability and maintain positioning height over long use.

3. The **Special ANGLE-LOCK SYSTEM** with compact design and high-grade iron of over FCD 60 grade for high rigidity automatically pulls the work-piece down to the accurate position of within **0.005mm** under 2500kg of pressure. This vise is most suitable for precision mould making on Machining Centers.

4. Vise can be mounted horizontally or vertically.

5. The patented MULTI-POWER SYSTEM built of **HIGH GRADE BEARING STEEL** doubles the clamping force. **This special patented system makes the clamping force constant.**

6. Adjusting stop ring: this simple and effective **presetting device enables to preset each desired clamping force** and it guarantees to repeat each clamping operation at the same clamping force.



STANDARD ACCESSORIES

- 2 pcs of Alignment Wedge
- 4 pcs of Clamp
- 1 pc of Handle

OPTIONAL ACCESSORIES

- Cross Grooved Jaws
- "V" Jaws
- Combined Jaws
- Step Jaws



PAT.

The patented **MULTI-POWER SYSTEM** built of **HIGH GRADE BEARING STEEL** provides extremely high clamping pressure. The pressure is more consistent and eliminates all leakage and maintenance problems associated with Hydraulic Vises.

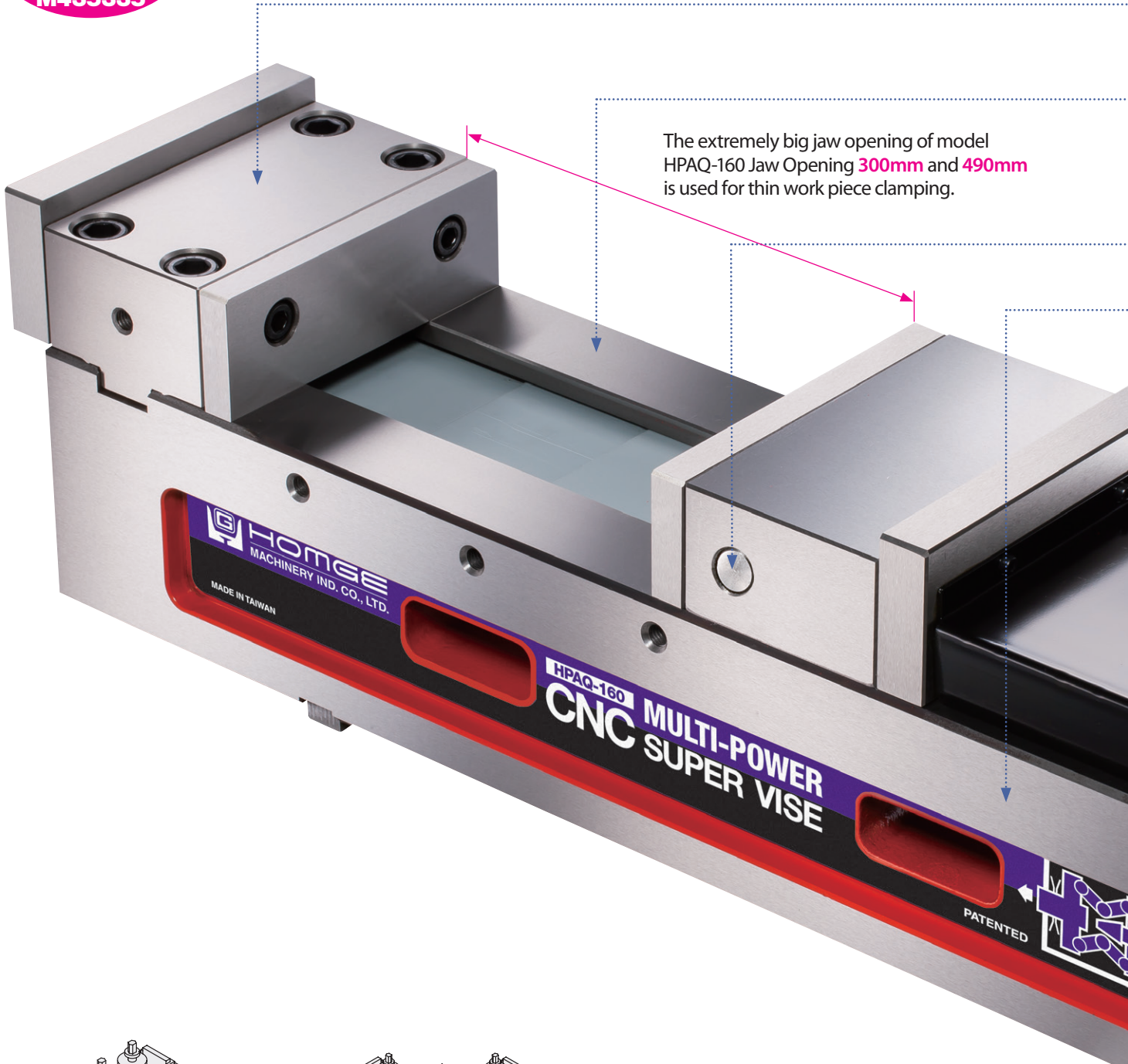
Fixed height so several vises can be used together.

This vise is highly suitable for **precision mould making** on machining centers as well as **heavy duty machining** which required high clamping force with high accuracy.

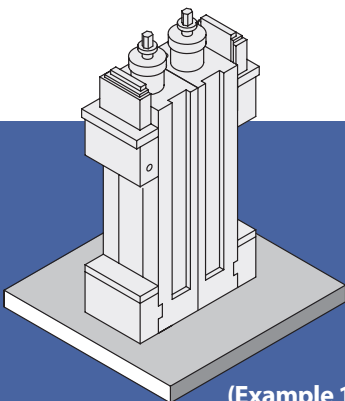
PATENTED
M458489
M395751
M278511
M390838
M435335

MULTI-POWER CNC SUPER VISE

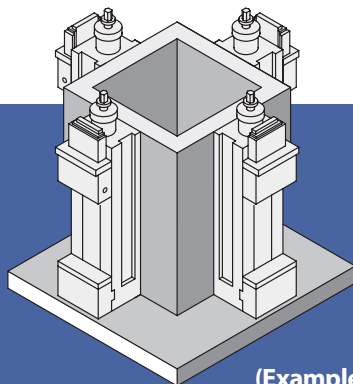
Model: HPAQ-160, 200, 250, 160L, 200L



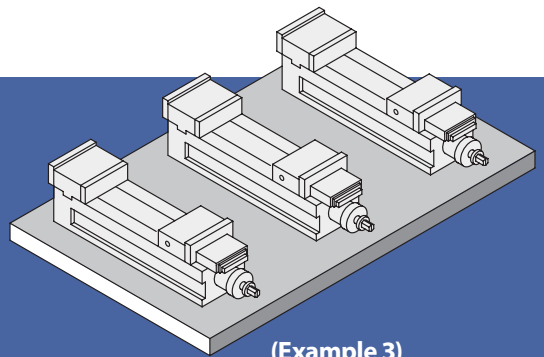
The extremely big jaw opening of model HPAQ-160 Jaw Opening **300mm** and **490mm** is used for thin work piece clamping.



(Example 1)



(Example 2)



(Example 3)

1. **Vise Fixed Jaw** is made of **high quality steel** and **HARDENED** to **HRC 55°**. Vise body is made of Ductile Iron above FCD 60 grade for high precision and durability. With a force of 4500kg, the shape will deflect less than **0.005mm**.

2. Slide ways are **HARDENED** to **HRC 50°** to further increase durability and maintain positioning height over long use.

3. The **Special ANGLE-LOCK SYSTEM** with compact design and high-grade iron of over FCD 60 grade for high rigidity automatically pulls the work-piece down to the accurate position of within **0.005mm** under 4500kg of pressure. This vise is most suitable for precision mould making on Machining Centers.

4. Vise can be mounted horizontally or vertically.

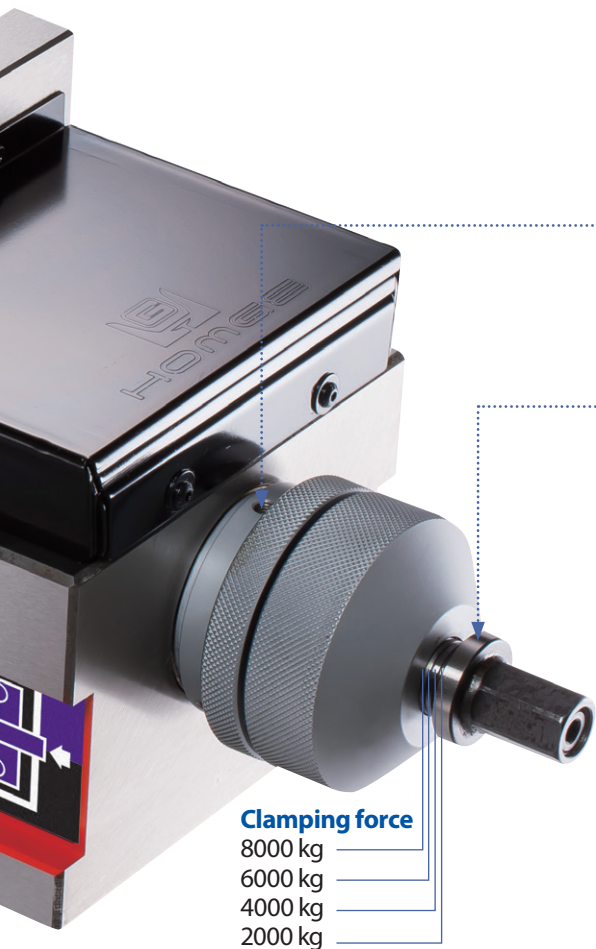
5. The patented MULTI-POWER SYSTEM built of **HIGH GRADE BEARING STEEL** doubles the clamping force.

*With the **first half a turn** the vise will clamp with **2500kg** pressure.*

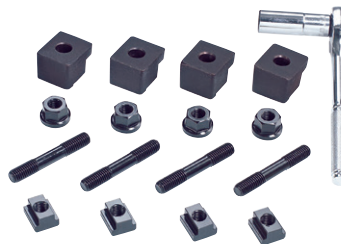
*With a **second half turn** it will apply **4500kg** of clamping force.*

This special patented system makes the clamping force constant.

6. **Adjusting stop ring:** This simple and effective presetting device enables to **preset each desired clamping force** and it guarantees to repeat each clamping operation at the same clamping force.



Clamping force
 8000 kg
 6000 kg
 4000 kg
 2000 kg

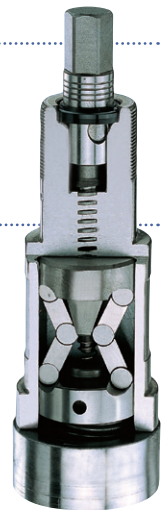


STANDARD ACCESSORIES

- 2 pcs of Alignment Wedge
- 4 pcs of Clamp
- 1 pc of Handle

OPTIONAL ACCESSORIES

- Cross Grooved Jaws
- "V" Jaws
- Combined Jaws
- Step Jaws



The patented MULTI-POWER SYSTEM built of **HIGH GRADE BEARING STEEL** provides extremely high clamping pressure. The pressure is more consistent and eliminates all leakage and maintenance problems associated with Hydraulic Vises.

Fixed height so several vises can be used together.

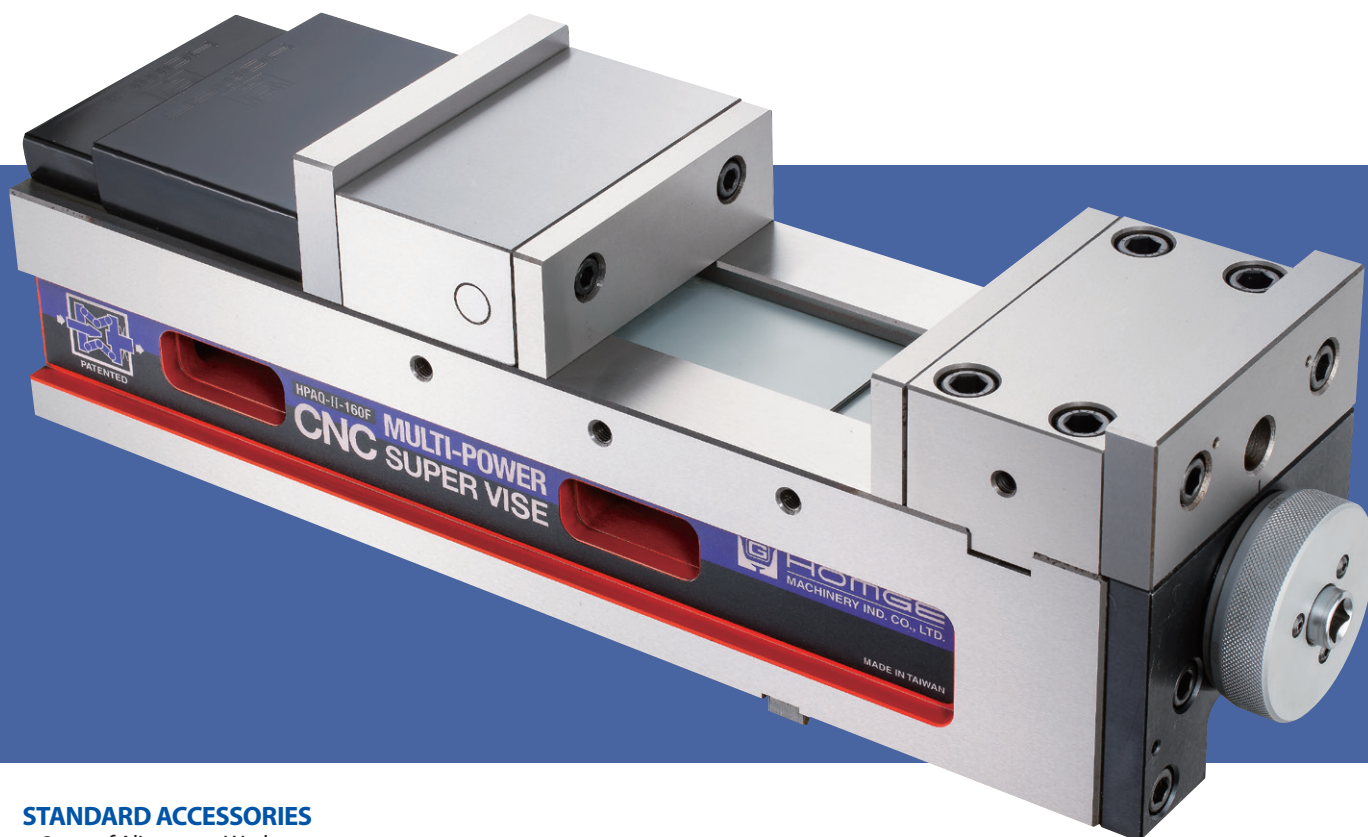
This vise is highly suitable for **precision mould making** on machining centers as well as **heavy duty machining** which required high clamping force with high accuracy.

MULTI-POWER CNC SUPER VISE (FRONT-MOUNTING TYPE)

Model: HPAQ-II-160F

PATENTED
M278511
M458489
M435335
M397304
I373394

- Special MULTI-POWER design enhances clamping force of **0~5000kg**
- It's **ergonomics** for easy reach, thus saves time and prevents back strain
- It possesses all features of HPAQ-Type.

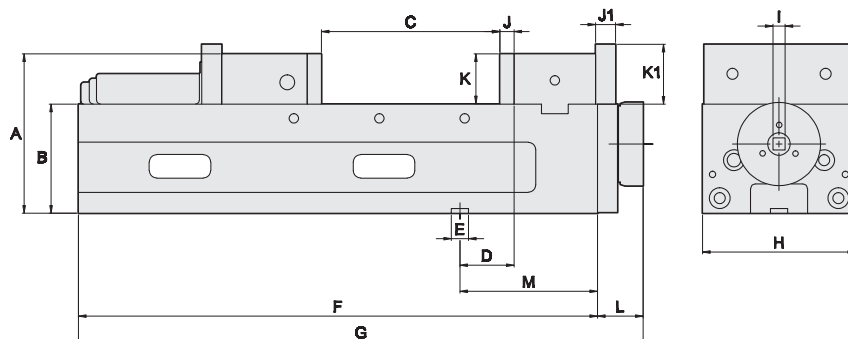


STANDARD ACCESSORIES

- 2 pcs of Alignment Wedge
- 4 pcs of Clamp
- 1 pc of Handle

OPTIONAL ACCESSORIES

- Cross Grooved Jaws
- "V" Jaws
- Combined Jaws
- Step Jaws



SPECIFICATIONS (Material: FCD 60 Ductile Iron. Hardness: HRC 50°)

Unit: mm

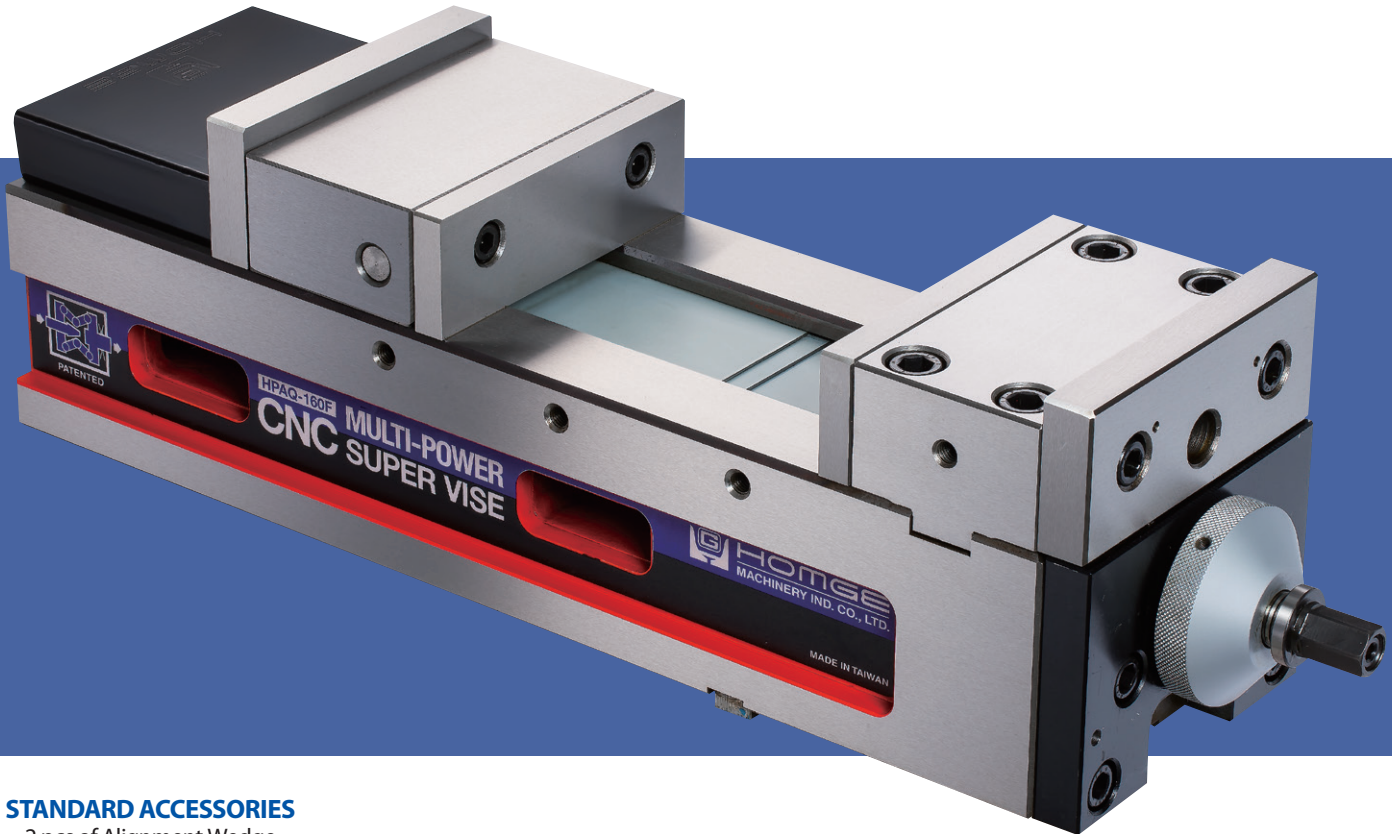
MODEL	A	B	C	D	E	F	G	H	I
HPAQ-II-160F	168	115±0.01	0-300	57±0.02	18	547	595	161	12.7
MODEL	J	J1	K	K1	L	M	Max. Clamping Force	Weight (kg)	
HPAQ-II-160F	15	20	53	63	49	145	5000 kg	70	

MULTI-POWER CNC SUPER VISE (FRONT-MOUNTING TYPE)

Model: HPAQ-160F, 200F

PATENTED
 M278511
 M458489
 M287204
 M435335
 M397304

- Special MULTI-POWER design enhances clamping force of **0~6000kg**
- It's **ergonomics** for easy reach, thus saves time and prevents back strain
- It possesses all features of HPAQ-Type

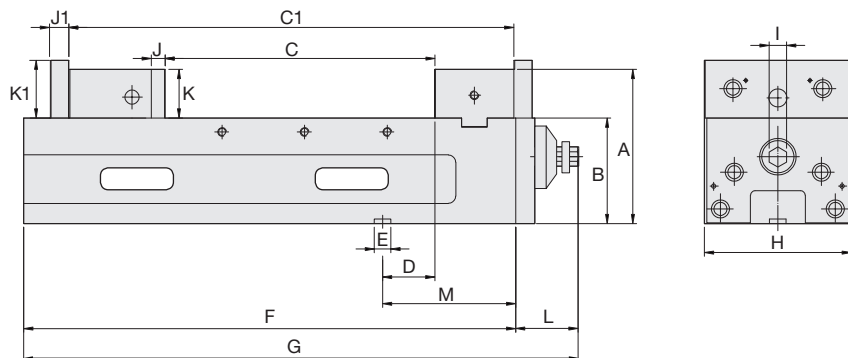


STANDARD ACCESSORIES

- 2 pcs of Alignment Wedge
- 4 pcs of Clamp
- 1 pc of Handle

OPTIONAL ACCESSORIES

- Cross Grooved Jaws
- "V" Jaws
- Comvbind Jaws
- Step Jaws



SPECIFICATIONS (Material: FCD 60 Ductile Iron. Hardness: HRC 50°)

Unit: mm

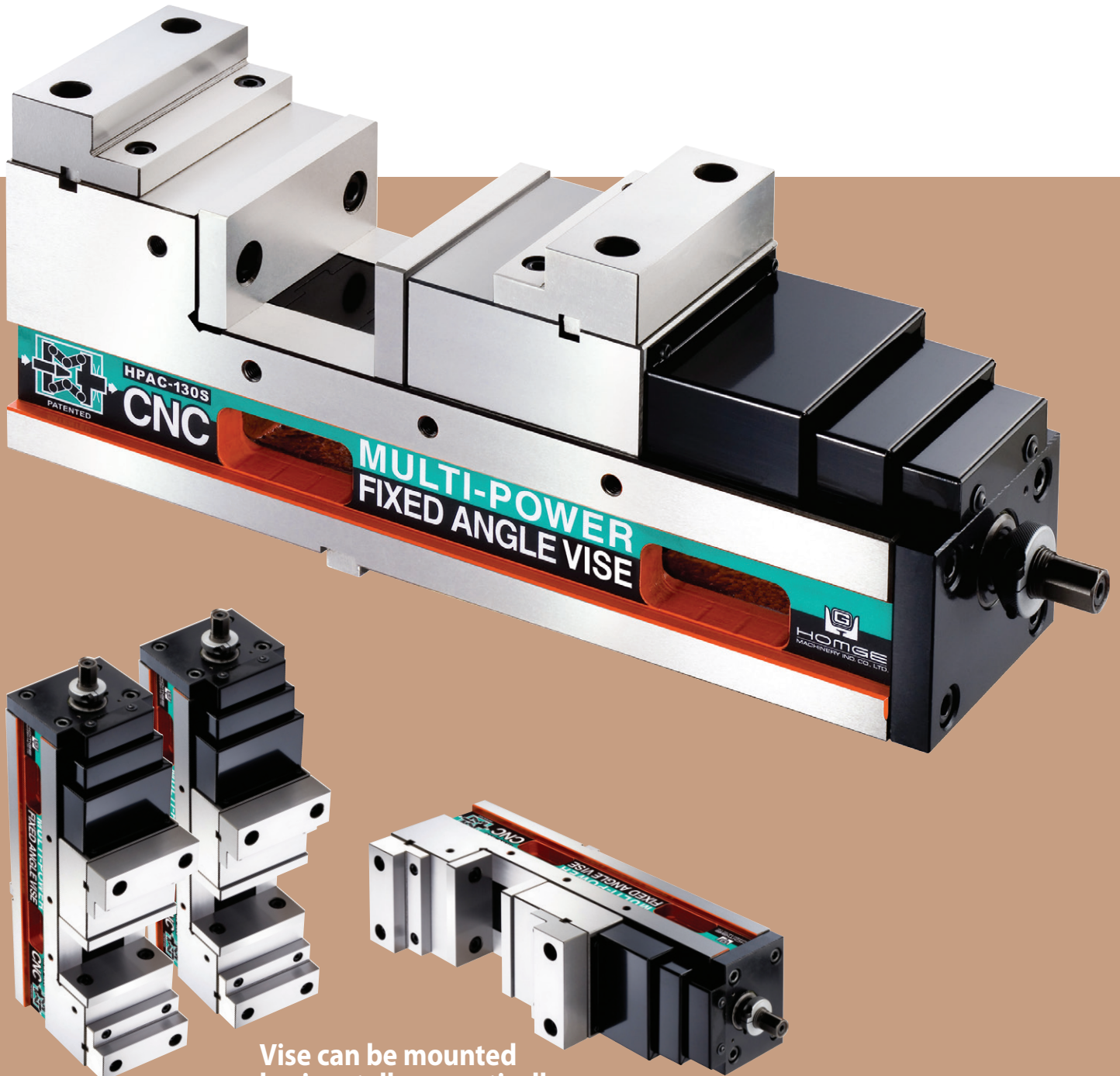
MODEL	A	B	C	C1	D	E	F	G	H
HPAQ-160F	168	115±0.01	0-290	195-480	57±0.02	18	536	637	161
HPAQ-200F	187	120±0.01	0-330	200-550	66±0.02	18	616	715	201
MODEL	I	J	J1	K	K1	L	M	Max. Clamping Force	Weight (kg)
HPAQ-160F	19	15	20	53	63	101	145±0.02	5000 kg	70
HPAQ-200F	19	18	24	66	75	99	168±0.02	6000 kg	120

MULTI-POWER CNC PRECISION FIXED ANGLE VISE

Model: HPAC-100S, 130S, 160S

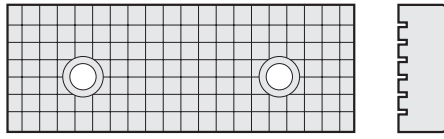
PATENTED
142711
M224615
M287204
M344941

- Shortest Length with Big Jaw Opening
- Extremely High Accuracy and Repeatability
- Special MULTI-POWER design enhances clamping force of 0 ~ 6000KG

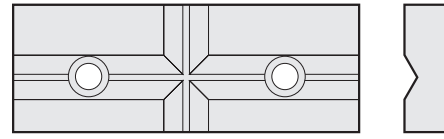


Vise can be mounted
horizontally or vertically.

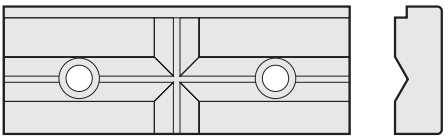
OPTIONAL ACCESSORIES:



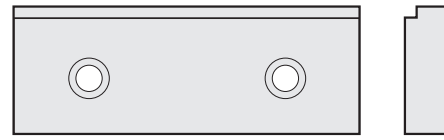
1) Cross Grooved Jaws



2) 'V' Jaws

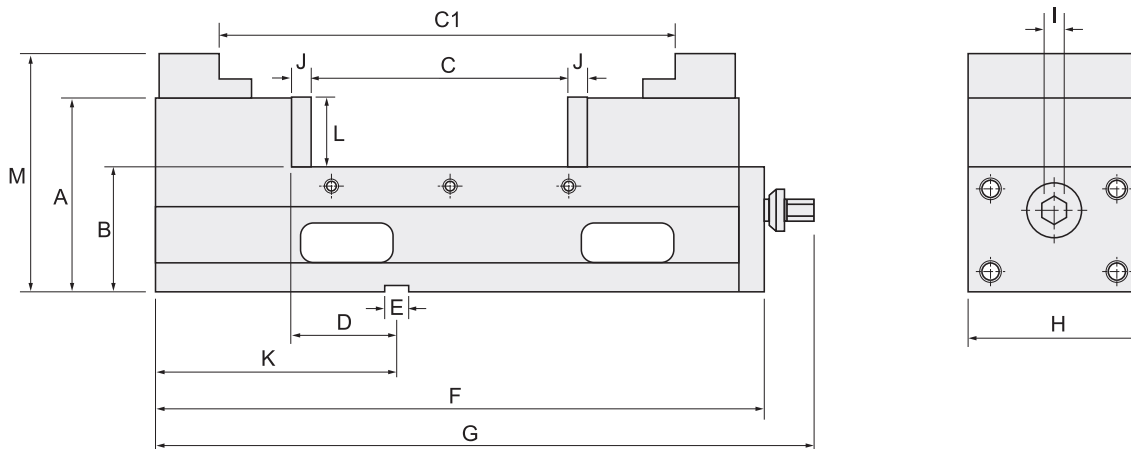


3) Combined Jaws



4) Step Jaws

DIMENSIONS



SPECIFICATIONS (Material: FCD 60 Ductile Iron, Hardness: HRC 50°)

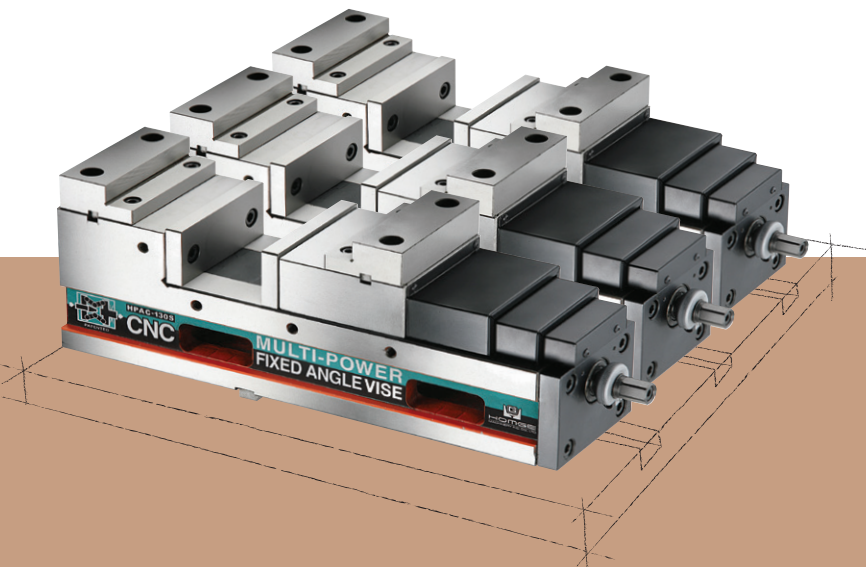
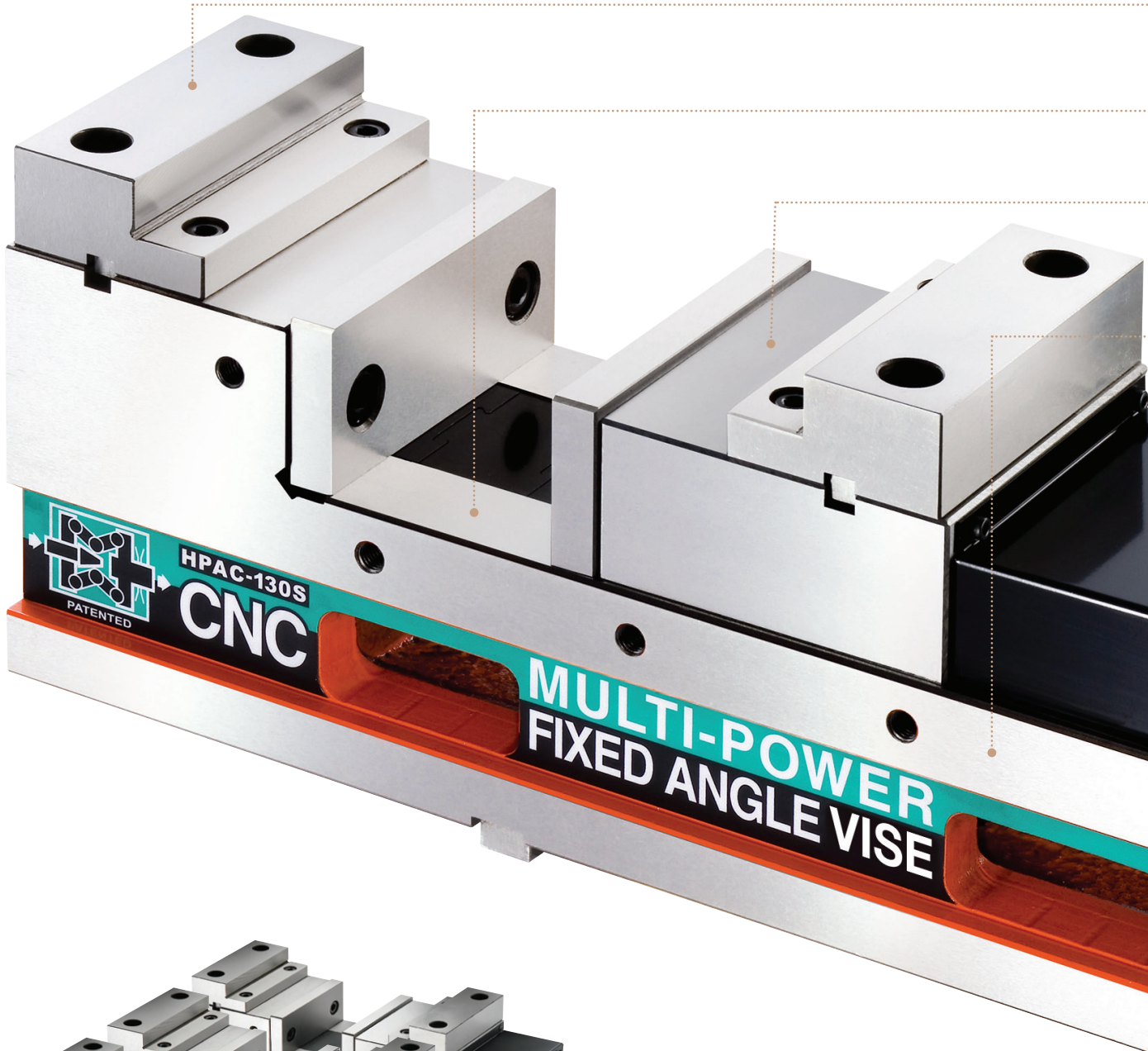
Unit: mm

Model	A	B	C	C1	D	E	F	G
HPAC-100S	127	85 ± 0.01	0-170	115-280	75 ± 0.02	18	414	460
HPAC-130S	147	95 ± 0.01	0-190	155-340	75 ± 0.02	18	462	510
HPAC-160S	160	105 ± 0.01	0-300	190-450	80 ± 0.02	18	550	595
Model	Max. Clamping Force	H	I	J	K	L	M	Weight (kg)
HPAC-100S	4000kg	100	19	15	178	44	153	32
HPAC-130S	5000kg	131	19	15	178	55	181	46.5
HPAC-160S	6000kg	160	19	15	183	58	196	64

PATENTED
142711
M224615
M287204
M344941

MULTI-POWER CNC PRECISION FIXED ANGLE VISE

Model: HPAC-100S, 130S, 160S



*Fixed height
Special for*

1. The patented MULTI-POWER SYSTEM is built of **HIGH GRADE BEARING STEEL** which doubles the clamping force. Adjustable clamping force of **0~6000kg**. With this special patented system the clamping force remains the same.

2. Slide ways are **HARDENED** to **HRC 50°** to further increase durability and maintain positioning height over long use.

3. Using high-grade iron of over FCD 60 grade for high rigidity and also **ANGLE-LOCK SYSTEM**, which automatically pulls the work-piece down to the accurate position of within 0.01mm under 4500kg of pressure, this vise is most suitable for precision mould making on Machining Centers.

4. Vise body is made of **Ductile Iron** above **FCD 60** grade for high precision and durability. It is made in one solid piece and has very high rigidity with a force of 4500kg, the shape will deflect less than 0.01mm.

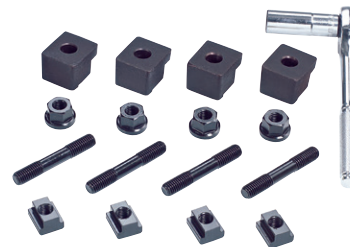
5. Vise can be mounted horizontally or vertically.

6. Adjusting stop ring: this simple and effective presetting device enables to **preset each desired clamping force** and it guarantees to repeat each clamping operation at the same clamping force.



Clamping Force

- 6000 kg
- 4000 kg
- 2000 kg



STANDARD ACCESSORIES

- 2 pcs of Alignment Wedge
- 4 pcs of Clamp
- 1 pc of Handle

OPTIONAL ACCESSORIES

- Cross Grooved Jaws
- "V" Jaws
- Combined Jaws
- Step Jaws



The patented MULTI-POWER SYSTEM built of **HIGH GRADE BEARING STEEL** provides extremely high clamping pressure. The pressure is more consistent and eliminates all leakage and maintenance problems associated with Hydraulic Vises.

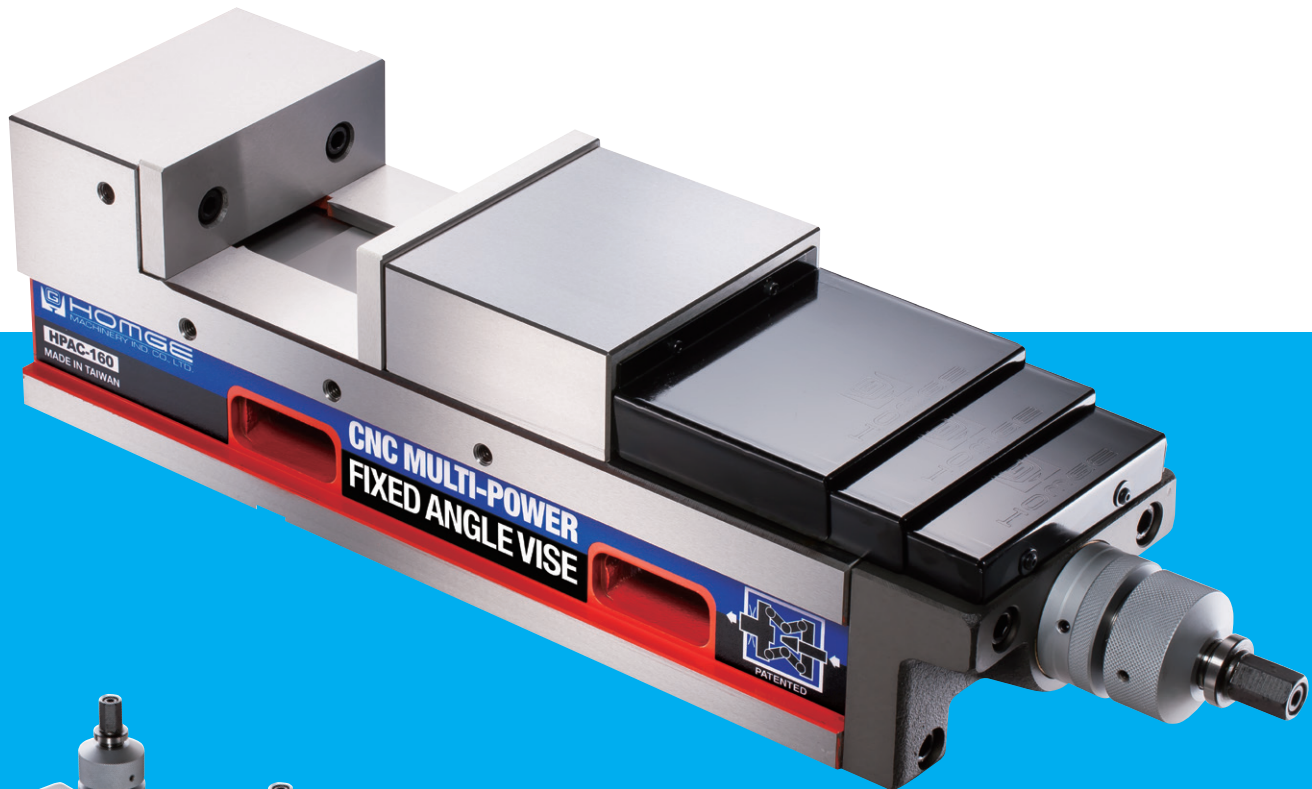
so several vises can be used together.
High Speed CNC Machining Center

MULTI-POWER CNC PRECISION FIXED ANGLE VISE

Model: HPAC-130, 160, 160L, 200

- Extremely high accuracy and repeatability
- Adjustable clamping force of **0~8000KG**

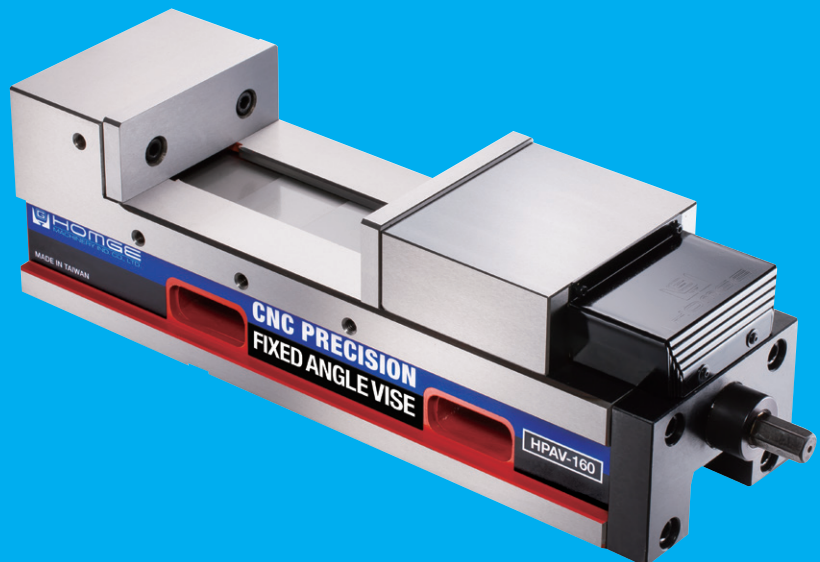
PATENTED
M458489
M395751
M390838
M435335

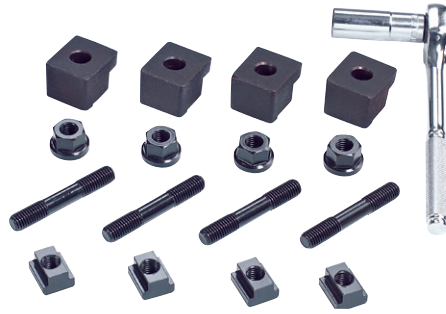


CNC PRECISION FIXED ANGLE VISE

Model: HPAV-130, 160, 160L, 200

This vise has the same features as model HPAC above but has standard clamping screw instead of the MULTI-POWER SYSTEM.

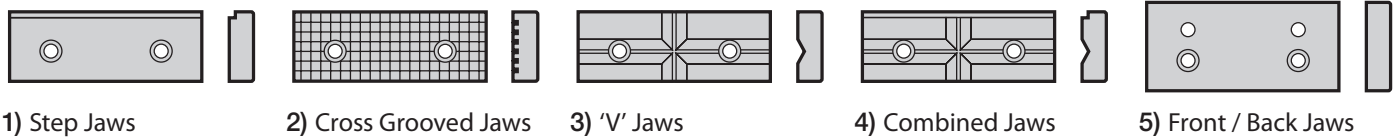




OPTIONAL ACCESSORIES

- 2 pcs of Alignment Wedge
- 4 pcs of Clamp
- 1 pc of Handle

OPTIONAL ACCESSORIES



1) Step Jaws

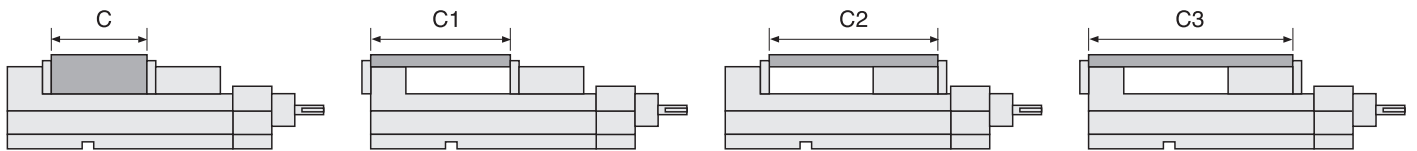
2) Cross Grooved Jaws

3) 'V' Jaws

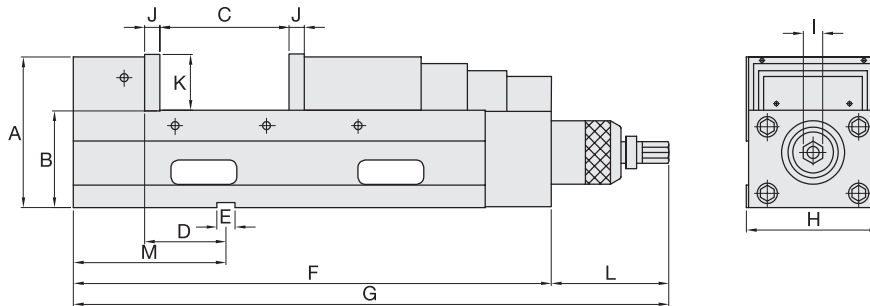
4) Combined Jaws

5) Front / Back Jaws

DIMENSIONS FOR 4 JAW PLATE POSITIONS



DIMENSIONS



SPECIFICATIONS (Material: FCD 60 Ductile Iron. Hardness: HRC 50°)

Unit: mm

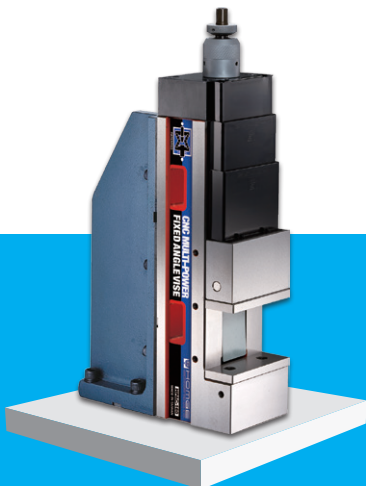
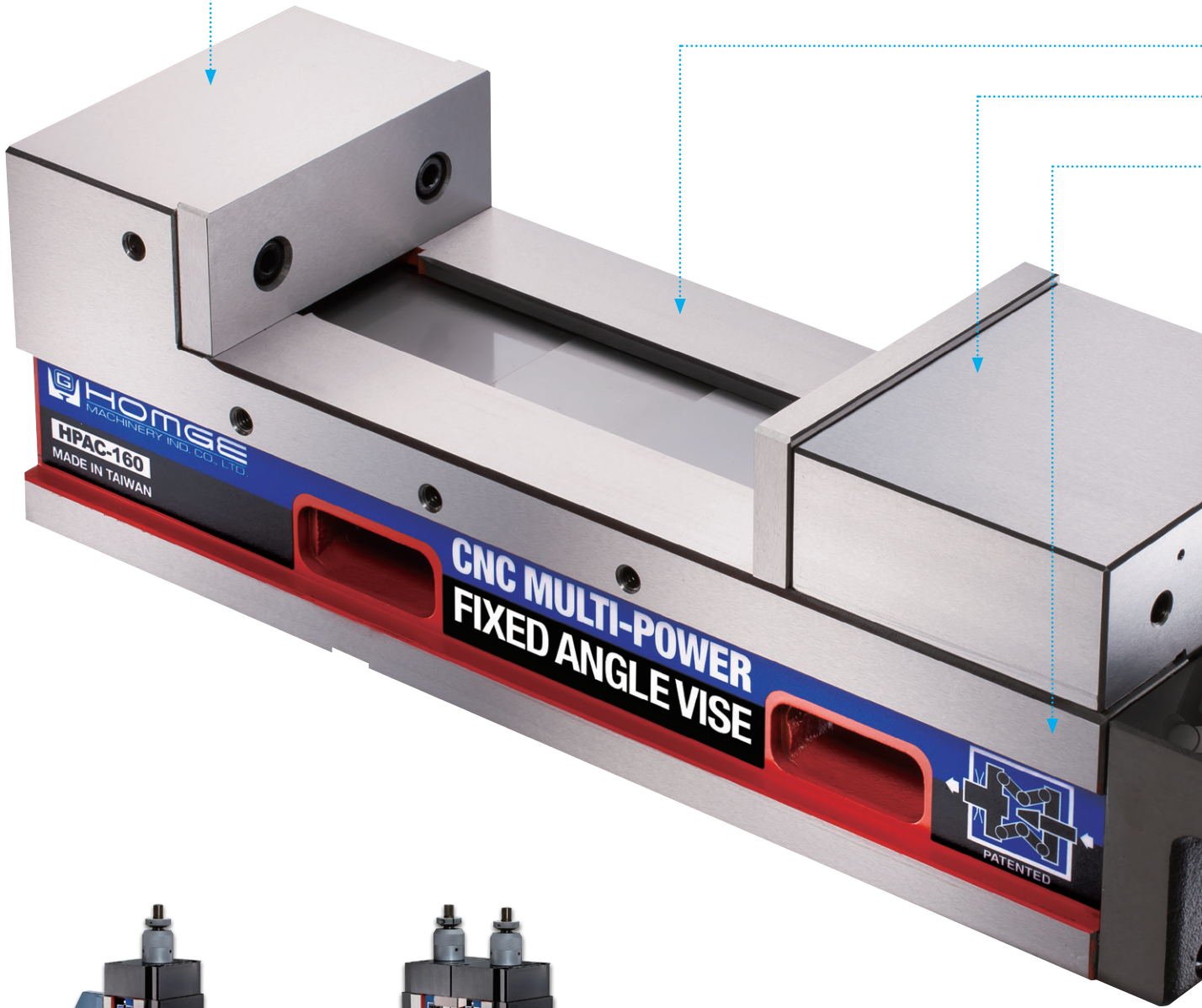
Model	A	B	C	C1	C2	C3	D	E	F
HPAC-130	147	95±0.01	0-190	70-260	115-305	185-375	80±0.02	18	475
HPAC-160	160	105±0.01	0-250	85-325	140-375	220-460	80±0.02	18	560
HPAC-160L	160	105±0.01	0-300	85-375	110-395	190-480	80±0.02	18	580
HPAC-200	170	110±0.01	0-305	90-380	155-440	240-530	100±0.02	18	635

Model	G	H	I	J	K	L	M	Max. Clamping Force	Weight (kg)
HPAC-130	583	131	19	15	55	120	150	6000kg	47
HPAC-160	670	161	19	15	58	120	165	8000kg	65
HPAC-160L	690	161	19	15	58	120	165	8000kg	67
HPAC-200	743	201	19	18	63	120	197	8000kg	95

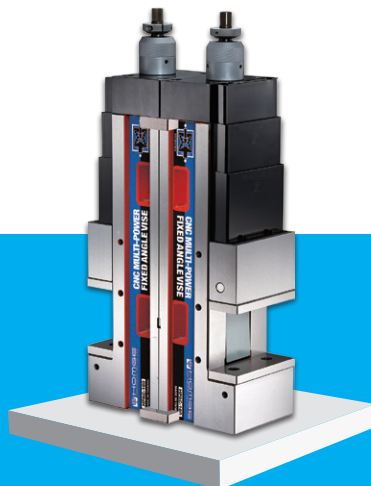
PATENTED
M458489
M395751
M390838
M435335

MULTI-POWER CNC PRECISION FIXED ANGLE VISE

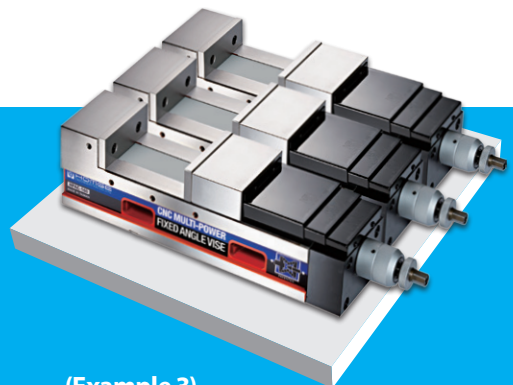
Model: HPAC-130, 160, 160L, 200



(Example 1)



(Example 2)



(Example 3)

1. Vise body is made of **Ductile Iron** above **FCD 60** grade for high precision and durability and is made in one solid piece. It has very high rigidity and with a force of 4500kg, the shape will deflect less than **0.01mm**.

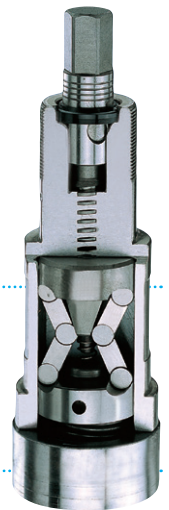
2. Slide ways are **HARDENED** to **HRC 50°** to further increase durability and maintain positioning height over long use.

3. Using high-grade iron of over FCD 60 grade for high rigidity and also **ANGLE-LOCK SYSTEM** which automatically pulls the work-piece down to the accurate position of within **0.01mm** under 4500kg of pressure, this vise is most suitable for precision mould making on Machining Centers.

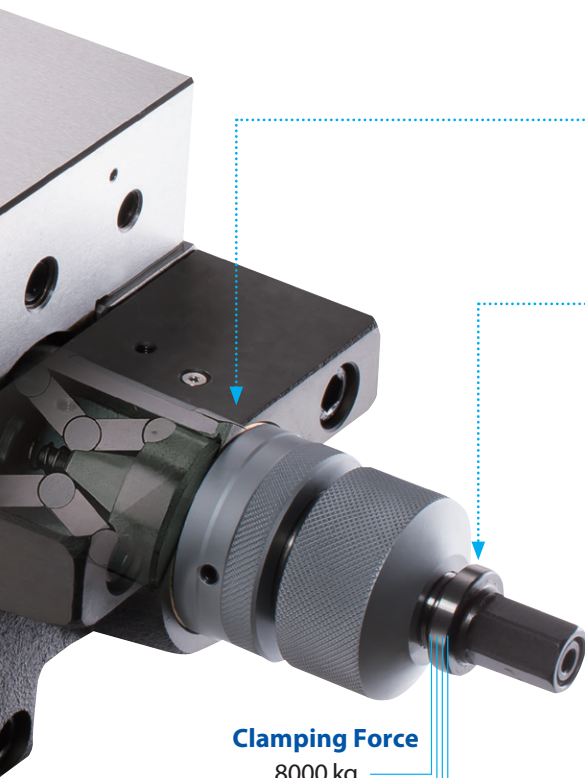
4. Vise can be mounted horizontally or vertically.

5. The patented MULTI-POWER SYSTEM built of **HIGH GRADE BEARING STEEL** doubles the clamping force.
With the first half a turn the vise will clamp with 2500kg pressure.
With a second half turn it will apply 4500kg of clamping force.
This special patented system makes the clamping force constant.

6. **Adjusting stop ring:** this simple and effective presetting device enables to **preset each desired clamping force** and it guarantees to repeat each clamping operation at the same clamping force.

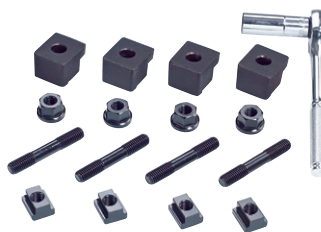


The patented MULTI-POWER SYSTEM built of **HIGH GRADE BEARING STEEL** provides extremely high clamping pressure. The pressure is more consistent and eliminates all leakage and maintenance problems associated with Hydraulic Vises.



Clamping Force

- 8000 kg
- 6000 kg
- 4000 kg
- 2000 kg



STANDARD ACCESSORIES

- 2 pcs of Alignment Wedge
- 4 pcs of Clamp

OPTIONAL ACCESSORIES

- Cross Grooved Jaws
- 'V' Jaws
- Combined Jaws
- Step Jaws
- Front / Back Jaws

Fixed height so several vises can be used together.

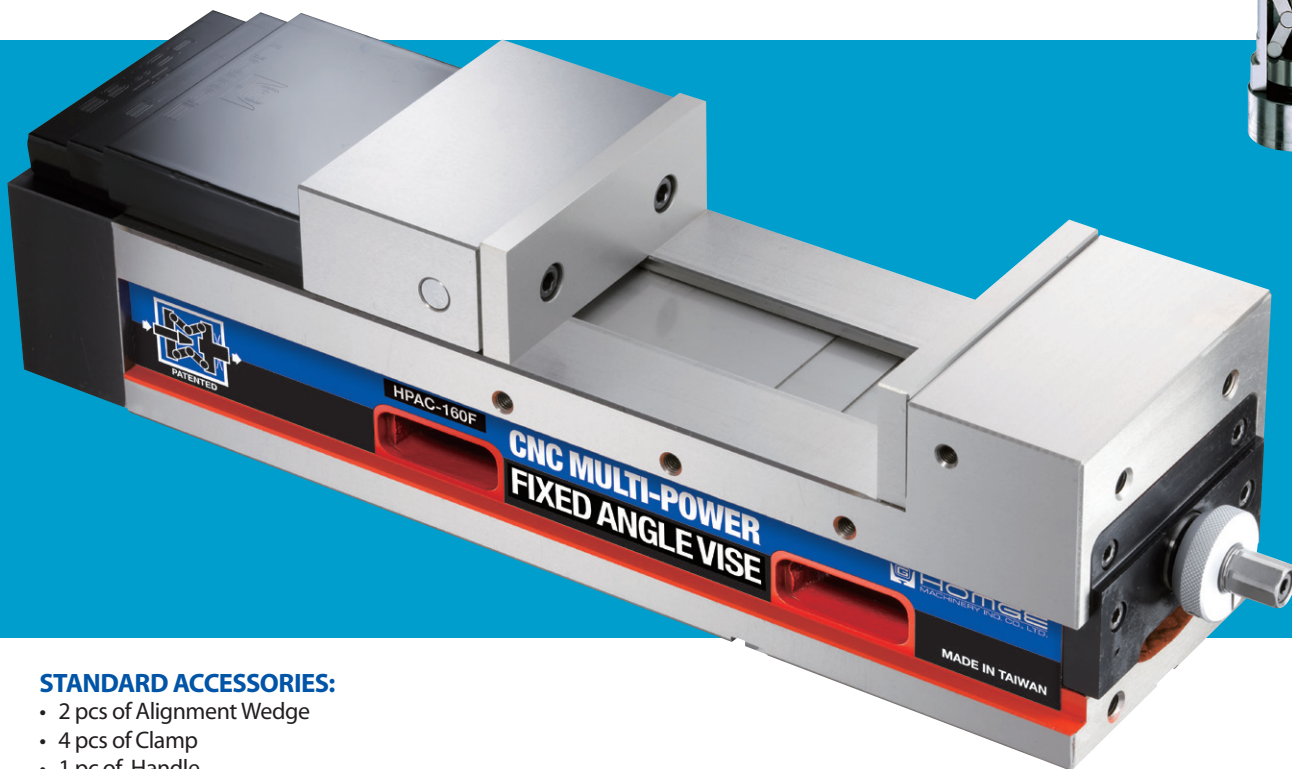
This product is suitable for multi-unit applications on both horizontal and vertical CNC Machining Centers as well as conventional Milling Machines where heavy duty machining requires a very high clamping force.

MULTI-POWER CNC PRECISION FIXED ANGLE VISE (FRONT-MOUNTING TYPE)

Model: HPAC-160F, 200F

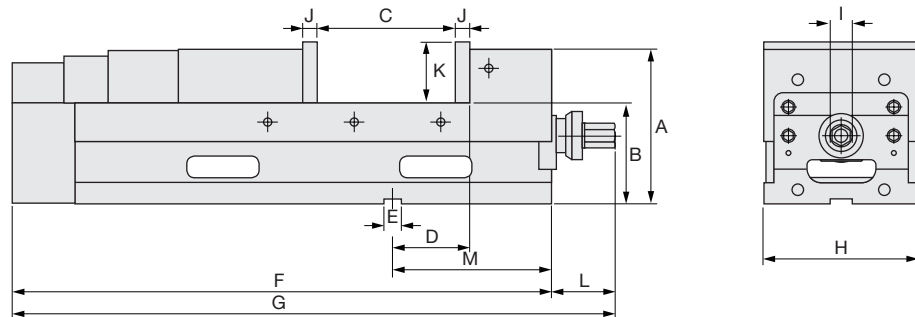
- Special MULTI-POWER design enhances clamping force of **0~6000kg**
- It's **ergonomics** for easy reach, thus saves time and prevents back strain.
- The HPAC-160F possesses all features of HPAC-Type.

PATENTED
M287204
M458489
M397304
M278511



STANDARD ACCESSORIES:

- 2 pcs of Alignment Wedge
- 4 pcs of Clamp
- 1 pc of Handle



SPECIFICATIONS (Material: FCD 60 Ductile Iron. Hardness: HRC 50°)

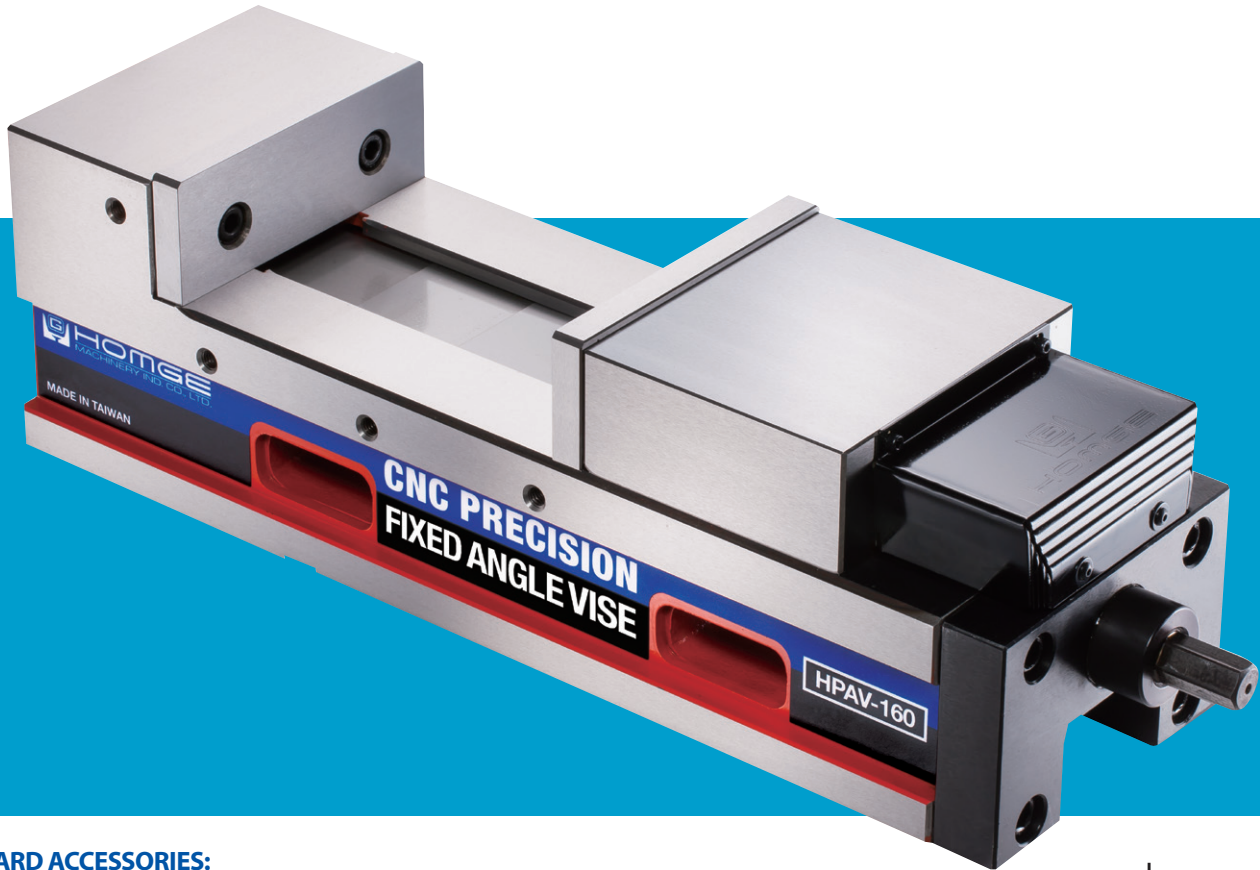
Unit: mm

MODEL	A	B	C	C1	C2	C3	D	E	F
HPAC-160F	160	105±0.01	0-300	85-375	110-395	190-480	80±0.02	18	580
HPAC-200F	170	110±0.01	0-290	99-280	155-440	240-530	100±0.02	18	635
MODEL	G	H	I	J	K	L	M	Max. Clamping Force	Weight (kg)
HPAC-160F	637	161	19	15	58	57	165±0.02	5000 kg	65
HPAC-200F	743	201	19	18	63	57	197±0.02	6000 kg	95

CNC PRECISION FIXED ANGLE VISE

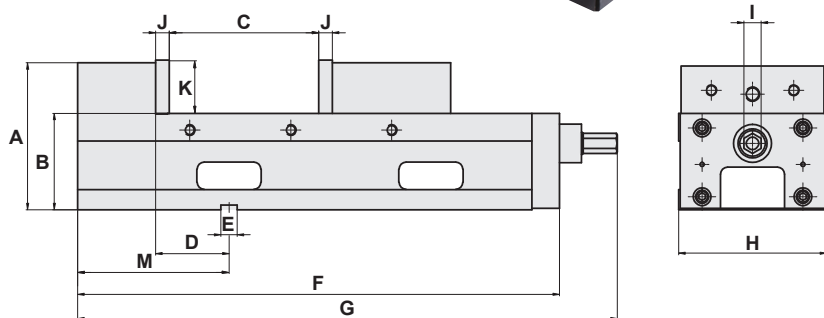
Model: HPAV-130, 160, 160L, 200

- This vise has the same features as model HPAC above but has standard clamping screw instead of the MULTI-POWER SYSTEM.



STANDARD ACCESSORIES:

- 2 pcs of Alignment Wedge
- 4 pcs of Clamp
- 1 pc of Handle



SPECIFICATIONS (Material: FCD 60 Ductile Iron. Hardness: HRC 50°)

Unit: mm

Model	A	B	C	C1	C2	C3	D	E
HPAV-130	147	95±0.01	0-190	70-260	115-305	185-375	80±0.02	18
HPAV-160	160	105±0.01	0-250	85-325	140-375	220-460	80±0.02	18
HPAV-160L	160	105±0.01	0-300	85-375	110-395	190-480	80±0.02	18
HPAV-200	170	110±0.01	0-290	90-380	155-440	240-530	100±0.02	18
Model	F	G	H	I	J	K	M	Weight (kg)
HPAV-130	440	503	131	19	15	55	150	42
HPAV-160	525	588	161	19	15	58	165	60
HPAV-160L	545	608	161	19	15	58	165	62
HPAV-200	600	662	201	19	18	63	197	90