



Best aid
SAFEWAY

ISO-9001

DAV

MOST SUITABLE FOR VERTICAL MACHINE CENTER, MILLING MACHINE

最適合立式綜合切削加工機，銑床使用

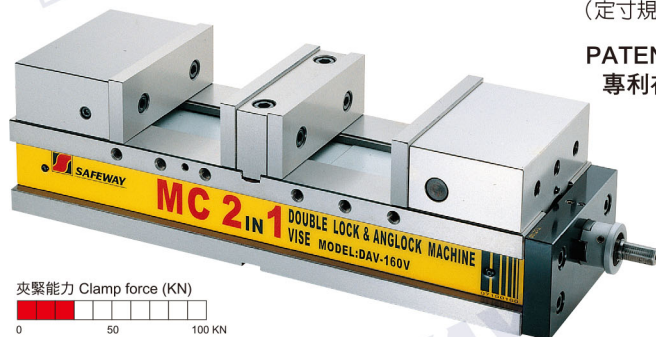
MC · 2 in 1
肯倍得 / 雙量型

MODEL • 07190100 DAV-100V
• 07190130 DAV-130V

• 07190160 DAV-160V
• 07190200 DAV-200V
(定寸規格)

• 07195100 DAV-100S
• 07195130 DAV-130S

• 07195160 DAV-160S
• 07195200 DAV-200S
(不定寸規格)



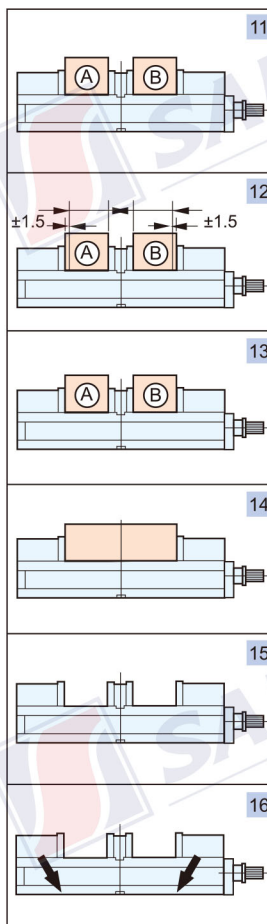
PATENTED
專利在案



夾緊能力 Clamp force (KN)
0 50 100 KN

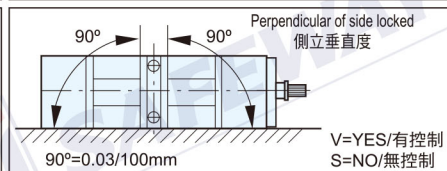
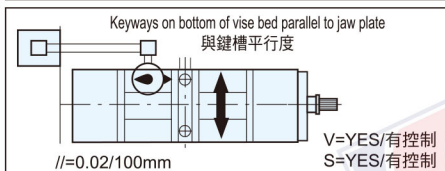
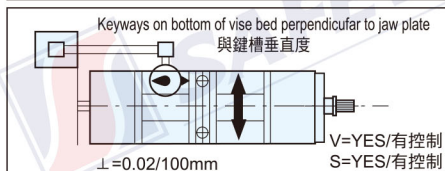
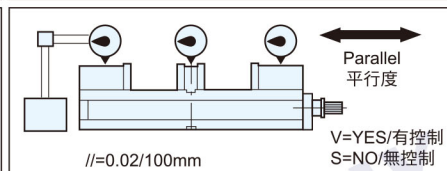
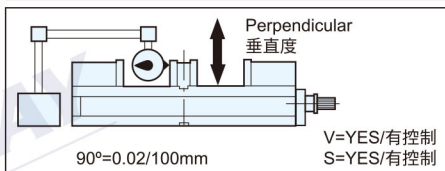
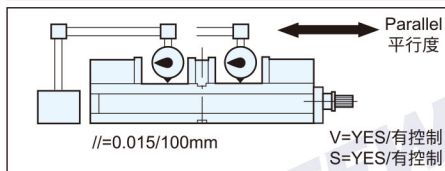
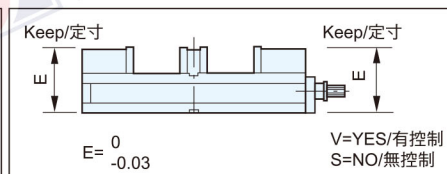
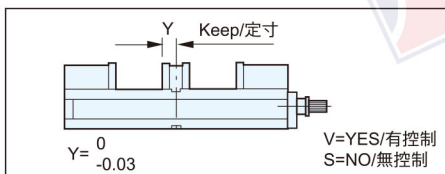
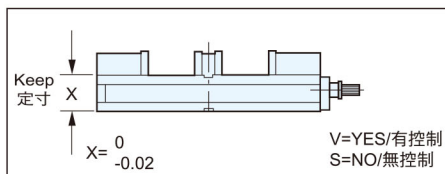
夾緊能力 Clamp force (KN)
0 50 100 KN

DAV



- 11. Patented mechanical clamping lock down jaw mechanism**
11-1 Workpiece are held securely and precisely for heavy machining
11-2 No minimum limit on size of workpiece clamping range is freely adjusted from 0 to the maximum jaw opening see fig P62
- 12. As long as size tolerance clearance is $\pm 1.5\text{mm}$ for parts**
12-1 The vise can clamp parts without re-adjusting the clamping position meanwhile the clamping power is equal on 2 parts.
- 13. When install the part first install part A, after part B. When take out the part first take out part B, after part A.**
13-1 When install the part first install part A then light clamping by handle, after install part B, then light clamping by handle, finally, the clamping power is equal on 2 parts.
13-2 When loosen parts first loosen part B, after part A.
- 14. Large workpiece (Square, Rectangular, Round surface) clamping.**
14-1 Remove stationary jaw for clamping large part. (fig.22. P62)
14-2 Jaws clamp simultaneously with equal clamping power
- 15. MC 2 in 1 anglock vise, Most suitable for machine center**
15-1 Rigid material ductile iron FCD600kgs/mm² or 80,000psi tensile strength.
15-2 Vise bed flame hardened to HRC45° and up take up wear and maintain accuracy for long.
- 16. Movable jaws lock down mechanism eliminates lift of parts.**
16-1 Both movable jaws is featured with lock down mechanism eliminates the lift of parts
16-2 Vise leadscrew is covered with chip way cover to prevent chips for falling into the vise inner bottom and damage the leadscrew
16-3 Jaw plates position set up as shown of fig. 21-26 (P62)

- 11. 雙夾緊機構，單側可隨開口範圍自由調整，可做兩只大小不同工件同時加工。**
11-1 雙側可自由調整夾持範圍從0到最大開口，夾持範圍如第62頁21圖所示。
11-2 如何調整雙側開口範圍大小，如第62頁31-34圖中所示，即可完成夾持前準備。
11-3 本雙夾緊角固虎鉗，內採雙螺桿機構設計，夾緊力強而有力，且穩定性高。
- 12. 兩側工作誤差可自動消除，且兩側夾緊力皆保持相同。**
12-1 雙側工件夾持範圍(AB)如第62頁31-34圖示方法調整好之後，假如很多工件要加工，工件尺寸難免有誤差在 $\pm 2\text{mm}$ 以內，皆可自動消除，且兩側夾持力皆相同。如兩側工件誤差超過 $\pm 2\text{mm}$ ，必須重新調整，如31-34圖示。
- 13. 夾持工件，會自動先夾A之後再夾B；鬆弛工件，會自動先退B之後再退A。**
13-1 夾持工件-先將A工件就定位，輕輕夾住，然後再將B工件就定位，並將B工件輕輕夾住，再將把手施以重力，A、B兩工件會平均且重重被夾緊。
13-2 鬆弛工件-鬆退把手時，B側鉗口會先退，並將B工件取出，再退A工件。
- 14. 方塊體，圓柱體工件，可以做大範圍夾緊。**
14-1 當工件稍大，且雙側開口範圍無法容許，必須將中間虎口拆除，可以放入一件較大工件夾持，如22圖示。
14-2 此一夾持方式，兩側夾持力大小均一致。
- 15. 角固式肯倍得式雙夾緊精密機械虎鉗，適合立、臥式綜合切削加工機使用。**
15-1 強而有力材質-虎鉗本台使用球狀石墨鑄鐵(FCD600~60kgs/mm²)或(80,000psi)
15-2 虎鉗本台均經硬化熱處理，HRC45°以上，可保持長久耐磨性及精度。抗張力強，耐磨性高，不易變形。
- 16. 雙側活動鎖設計有角固下鎖機構，可防止工件上浮。**
16-1 雙側活動鎖皆設計有角固下鎖機構，可防止工件上浮且兩側力量相等。
16-2 虎鉗內部設計有防屑裝置，可防止鐵屑侵入虎鉗內部及螺桿。
16-3 鉗口配置方式參照21.26圖





MC 2 IN 1 DOUBLE LOCK & ANGLOCK MACHINE VISE

MC 雙夾緊 / 角固式精密機械虎鉗

21

Model / 型號	A	B
DAV-100V/S	0-75mm	0-75mm
DAV-130V/S	0-85mm	0-85mm
DAV-160V/S	0-100mm	0-100mm
DAV-200V/S	0-150mm	0-150mm

22

Model / 型號	A=MAX.	A=MIN.
DAV-100V/S	210mm	80mm
DAV-130V/S	230mm	60mm
DAV-160V/S	260mm	60mm
DAV-200V/S	370mm	90mm

23

Model / 型號	Dia=MAX.	Dia=MIN.
DAV-100V/S	180mm	60mm
DAV-130V/S	220mm	60mm
DAV-160V/S	230mm	60mm
DAV-200V/S	340mm	80mm

24

Model / 型號	A=MIN. Thickness	B=MIN. Thickness
DAV-100V/S	48mm	48mm
DAV-130V/S	48mm	48mm
DAV-160V/S	48mm	48mm
DAV-200V/S	63mm	63mm

25

Model / 型號	A=MAX.	B=MIN.
DAV-100V/S	80-170mm	80-170mm
DAV-130V/S	90-190mm	90-190mm
DAV-160V/S	100-220mm	100-220mm
DAV-200V/S	110-280mm	110-280mm

26

Model / 型號	A=MAX.	A=MIN.
DAV-100V/S	400mm	260mm
DAV-130V/S	440mm	280mm
DAV-160V/S	490mm	300mm
DAV-200V/S	630mm	340mm

• When work in self-centering condition (fig.22&23), Optional jaw plates (2 pcs) are available for size of work-piece smaller than 60mm or 80mm.(P81,82)

• Optional fixed plate is available for converting the vise to be a standard vise. (See fig 24.)

• **OPTIONAL METHODS: FIGURES FOR SHOWING THE PROCEDURES OF CLAMPING WORKPIECES.**

31-1 If part a and b are different in sizes.
31-2 First of all make sure the set screw (D) is loosen stated.
31-3 Second make sure the clutch (E) is engagement stated.
31-4 Rotate handle till the part b can fit in.

32-1 Adjusting the gap between movable jaw and part (B) is 3-6mm.
32-2 Then lock the set screw (D) but don't lock too tight.
32-3 Then pull out the clutch to non engagement stated.
32-4 Finally rotate handle till the part A can fit in. But part B the gap always keep 3-6mm can't move it.

33-1 The set screw (D) keep lock and clutch (E) keep non engagement stated.
33-2 Rotate handle by clockwise till the movable jaw and part A is touch.
33-3 Then rotate handle by under clockwise till near next slot also push clutch to engagement stated.
33-4 Finally loosen set screw (D).

34-1 As procedurs 31-33 already finished adjusting part A and B size then lock set screw (F) on clutch (E).
34-2 Rotate handle by clockwise first the part A will be by clamping, then will be move the part B gap (L=3-6mm) till the gap between movable jaw and part B is by clamping.
34-3 By heavy power on handle by clockwise the part A, B will be heavy power capacity by clamped. (The part A and B is same power capacity by designed).
34-4 依以上步驟即完成A,B兩工件開口範圍之調整F鎖緊。

REMARKS:
1. When clamping other size, please follow the same procedurs as stated below.
2. When install the part first part A after part B.
3. When take out the part, first part B after A

31-1 假如兩只A,B大小不同尺寸工件,欲放入虎鉗兩側內
31-2 首先先確認固定螺絲D必須鬆開狀態。
31-3 然後確認離合器E必須在啮合狀態。
31-4 轉動把手,直到B工件可放入為止。

32-1 轉動把手,調整B工件和活動鉗口保持3-6mm間隙
32-2 將固定螺絲D鎖緊(不必猛力鎖緊)
32-3 再將離合器E拉出(保持脫離狀態)
32-4 轉動把手直到A工件可放入為止,並順時鐘方向轉動把手直到A側活動鉗口輕微夾住A工件為止(此時B工件間隙L=3-6mm不會移動)

33-1 逆時鐘方向微量轉動把手,將離合器E找最近之槽互相咬合。
33-2 然後將固定螺絲D鬆開,此時兩側可同時自由前進後退。

34-1 依以上步驟即完成A,B兩工件開口範圍之調整F鎖緊。

注意:
當A,B兩工件大小不同欲放入虎鉗開口範圍內,請依下列31-34步驟依序完成兩側開口範圍調整。
1. 當A,B兩側開口範圍已依以上步驟調整好之後,當A,B工件單一側誤差超過3mm以上,必須上列步驟重新調整。
2. 夾緊工件時,先放入A工件,並將活動鉗口輕微夾住A工件,然後再放入B工件夾緊。
3. 退工件時,先退B工件,並將B工件取出,然後再退A工件。

Standard Accessories

- 1.Handle x 1pc
- 2.Guid key x 2pcs, M6 x 10L x 2pcs
- 3.Vise locked block x 4pcs
- 4.Chip cover x 1 set

標準附件

- 1.把手一組
- 2.導正鍵 x 2只, (M6 x 10L)螺絲x2只
- 3.虎鉗固定塊x4只
- 4.虎鉗防屑裝置

Unit: mm

Order NO. 訂購編號	Model 型號	A	B	C	D	E	F	G	H	I	L Each Opening / 每側開口		M
07190100	DAV-100V	495	410	85	101	45	125	128	15	30	0-75	0-75	16
07195100	DAV-100S	495	410	85	101	45	125	128	15	30	0-75	0-75	16
07190130	DAV-130V	535	450	85	131	52	137	140	15	30	0-85	0-85	18
07195130	DAV-130S	535	450	85	131	52	137	140	15	30	0-85	0-85	18
07190160	DAV-160V	585	500	85	161	55	145	148	15	30	0-100	0-100	18
07195160	DAV-160S	585	500	85	161	55	145	148	15	30	0-100	0-100	18
07190200	DAV-200V	727	642	85	201	60	155	158	18	40	0-150	0-150	18
07195200	DAV-200S	727	642	85	201	60	155	158	18	40	0-150	0-150	18

Order NO. 訂購編號	Model 型號	N	X	X= 0 -0.02	Y	Y= 0 -0.02	N.W. 淨重	G.W. 毛重	Shipment Size 裝箱尺寸		Remark 備註
07190100	DAV-100V	48	30	YES	80	YES	27kg	29kg	600x220x185		
07195100	DAV-100S	48	30	NO	80	NO	27kg	29kg	600x220x185		
07190130	DAV-130V	55	30	YES	85	YES	39kg	41kg	665x250x205		
07195130	DAV-130S	55	30	NO	85	NO	39kg	41kg	665x250x205		
07190160	DAV-160V	58	30	YES	90	YES	56kg	59kg	760x280x215		
07195160	DAV-160S	58	30	NO	90	NO	56kg	59kg	760x280x215		
07190200	DAV-200V	63	38	YES	95	YES	89kg	92kg	860x320x225		
07195200	DAV-200S	63	38	NO	95	NO	89kg	92kg	860x320x225		