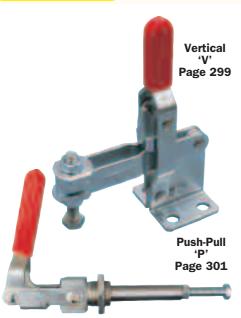
# INDEXA

Indexa-Seiki fixed grip toggle clamps form a complete range suitable for countless applications including holding components in jigs and fixtures, clamping loads etc.





### **Selection - Clamp Type**

#### **Vertical**

For general application in automotive and other heavy industries where trouble free life and robust construction are required. Force applied downward, 90° to bar.

### **Horizontal**

For general application in areas where a lower profile and unobstructiveness are required. Force applied downward, 90° to bar.

#### **Push-Pull**

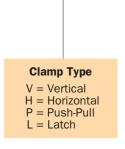
Clamps lock in extended and retracted positions. Force applied in line with spindle (straight line action).

#### Latch

Suitable for applications such as sealing chamber doors, lids of mould closures. Latch bolts are threaded to allow easy adjustment.



## **Selection by Product Number**





**Holding Force** 

Expressed in KG

(1kg = 2.2lb)

**Flanged** 

# S

# A

Page 300

## **Base Type**

F = Flanged S = Straight (except push-pull)

### Bar/Spindle Type

A = U-Bar (adjustable) F = Fixed Spindle

S = Solid Bar (except push-pull)

J = J Hook (latch type)

U = U Hook (latch type) U90 = 90°U Hook (latch type)

**Selection - Base Type** 

### **Flanged**

Suitable for bolting or welding the clamp on to a flat surface.

### Straight

Suitable for mounting on to an outside face or edge of workpiece.



# Selection - Bar/Spindle Type U-Bar

Clamping spindle can be adjusted along length of bar.

## **Fixed Spindle**

Clamping spindle is in a fixed position on the arm.

### Solid Bar

Clamping spindle and retainer are supplied loose to allow the arm to be cut to length and welded in desired position.

#### **Threaded Spindle**

Used for push-pull type of clamp.

### **U-Hook**

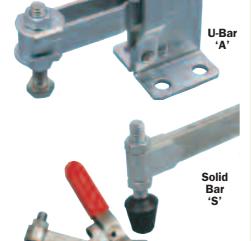
Threaded for easy adjustment.

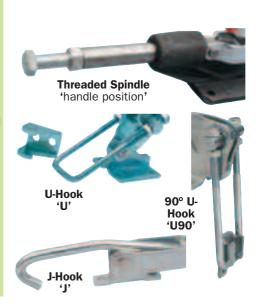
### J-Hook

Locks directly regardless of angle of hook.

### 90° U Hook

Locks at  $90^{\circ}$  to clamp.





Fixed Spindle

# INDEXA Vertical Industrial Toggle Clamp

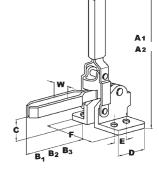


Designed to improve performance in fabrication and engineering clamping applications. The rapid clamping/unclamping made possible by the use of toggle clamps can greatly reduce machine/operator 'down-time' during all stages of production.

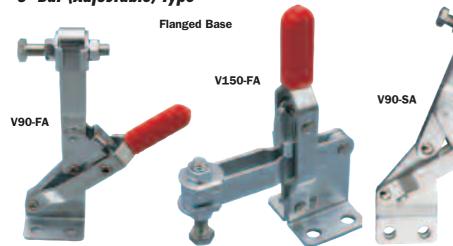
**Clamping Capacity** - the forces stated are the maximum loads that can be applied without causing permanent deformation. Due to leverage ratios, the holding capacity will be greatest at the point on the bar nearest to the handle of the clamp and forces stated have been achieved at this point.

### **Vertical Clamp Dimensions (mm)**

90kg 95.2 107.1 33.2 33.2 - 23.0 25.4 12.7 39.7 6.4	Holding Capacity	A <sub>1</sub> Flanged Base	A <sub>2</sub> Straight Base	B₁ Adj. Bar	B <sub>2</sub> Fixed Bar	B₃ Solid Bar	C Flanged Base	D	Е	F Flanged Base	W
	50kg	75.0	83.8	24.5	_	_	19.0	25.4	15.9	33.3	5.2
$150k\sigma$ 139.0 160.0 63.0 38.0 /3.0 33.0 50.0 11.0	90kg	95.2	107.1	33.2	33.2	_	23.0	25.4	12.7	39.7	6.4
130kg 133.0 100.0 03.0 30.0 43.0 33.0 30.0 11.0	150kg	139.0	160.0	63.0	-	_	38.0	43.0	33.0	50.0	11.0
227kg 139.7 154.0 71.4 - 57.2 31.8 34.9 31.8 46.0 8.3	227kg	139.7	154.0	71.4	_	57.2	31.8	34.9	31.8	46.0	8.3
300kg 285.0 330.0 120.0 50.0 60.0 30.0 77.0 13.5	300kg	285.0	330.0	120.0	_	_	50.0	60.0	30.0	77.0	13.5
		225.4	257.5	125.4	_		50.8	50.8	31.8	64.2	13.5
550kg 304.8 352.4 153.0 – 153.0 82.6 76.2 50.8 95.2 16.7	550kg	304.8	352.4	153.0	_	153.0	82.6	76.2	50.8	95.2	16.7



## 'U' Bar (Adjustable) Type







Product	Holding		ment	Base	Supplied	Weight	Order Code	
Number	Capacity	Handle	Bar	Туре	With	each	IND-443	
V50-FA	50kg	56°	100°		Tipped Spindle (No.10) and Flanged Washer	60g	-1020K	
V90-FA	90kg	60°	100°		Spindle (1/4") and Flanged Washer	J	-1220K	
V150-FA	150kg	45°	94°		Hex Head Spindle (M8) and Bolt Retainer	320g	-1320K	
V227-FA	227kg	60°	100°		Tipped Spindle (5/16") and Flanged Washer	355g	-1420K	
V300-FA	300kg	67°	140°	Flanged	Hex Head Spindle (M10)	1250g	-1620K	
V450-FA	450kg	70°	135°		Hex Head Spindle (1/2") and Flanged Washer	1140g	-1720K	
V550-FA	550kg	60°	140°		Hex Head Spindle (5/8") and Flanged Washer	2540g	-1920K	
V340-FA	340kg	58°	105°		Tipped Spindle (3/8") and Flanged Washer	635g	-1590K	
V90-SA	90kg	60°	100°		Spindle (1/4") and Flanged Washer	170g	-1270K	
V150-SA	150kg	45°	94°	Ctroight	Hex Head Spindle (M8) and Bolt Retainer	320g	-1370K	
V227-SA	227kg	60°	100°	Straight	Tipped Spindle (5/16") and Flanged Washer	355g	-1470K	
V450-SA	450kg	70°	135°		Hex Head Spindle (5/8") and Flanged Washer	1250g	-1770K	





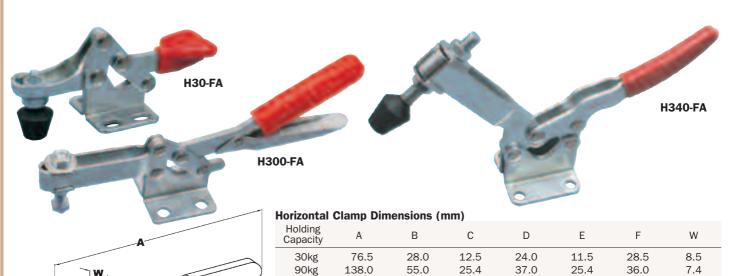


Product Number	Holding Capacity	Move Handle	ement Bar	Base Type	Supplied With	Weight each	Order Code IND-443	
V100-FF	90kg	60°	100°	Flanged	Fixed Spindle (1/4")	170g	-1120K	
V90-SF	90kg	60°	100°	Straight	Fixed Spindle (1/4")	170g	-1170K	
V227-FS	227kg	60°	100°		Solid Bar Hex Head (5/16") and Bolt Retainer*	340g	-1520K	
V450-FS	450kg	70°	135°	Flanged	Solid Bar Hex Head Spindle (1/2") and Bolt Retainer*	1250g	-1820K	
V550-FS	550kg	60°	140°		Solid Bar Hex Head Spindle (5/8") and Bolt Retainer*	2540g	-1940K	
V227-SS	227kg	60°	100°	Ctroidht	Solid Bar Tipped Spindle (5/16") and Bolt Retainer*	340g	-1570K	
V450-SS	450kg	70°	135°	Straight	Solid Bar Hex Head Spindle (5/8") and Bolt Retainer*	1250g	-1870K	

**WORKSHOP EQUIPMENT** 



With a low profile design suitable for use in applications requiring increased access to the actual workpiece. Available in eight sizes for general application in areas where a lower profile is required. Force applied downwards 90° to bar.



			_				
_							
Product	Holding	Moven	nent	Base	Cumplied with	Weight	Order Code
Number	Capacity	Handle	Bar	Type	Supplied with	each	IND-443
H65-FA	75kg	76°	94°		Hex Head Spindle (M5) Moulded PVC Handles	100g	-1960K
H86-FA	150kg	76°	94°		Hex Head Spindle (M6) Moulded PVC Handles	230g	-1970K
H217-FA	250kg	76°	94°		Hex Head Spindle (M8) Moulded PVC Handles	430g	-1980K
H30-FA	30kg	88°	80°		Tipped Spindle (M4)	40g	-2020K
H90-FA	90kg	60°	85°		Tipped Spindle (1/4") and Flanged Washer	130g	-2120K
H227-FA	227kg	65°	90°	Flanged	Tipped Spindle (5/16") and Flanged Washer	255g	-2220K
H300-FA	300kg	85°	80°		Hexagon Head Spindle (3/8") and Flanged Washer	490g	-2320K
H340-FA	340kg	50°	85°		Tipped Spindle (3/8") and Flanged Washer	640g	-2420K
H400-FA	400kg	85°	84°		Tipped Spindle (3/8") and Flanged Washer	600g	-2520K
H500-FA	500kg	85°	65°	-	Hexagon Head Spindle (M10) and Flanged Washer	450g	-2620K
H636-FA	636kg	94°	91°		Hexagon Head Spindle (1/2") and Flanged Washer**	1220g	-2720K

168.0

270.0

262.0

240.0

270.0

272.0

70.0

85.0

60.0

91.2

76.2

107.5

34.9

36.5

46.9

54.0

38.0

51.0

38.0

58.0

57.1

70.0

58.0

90.0

25.4

34.0

41.3

42.0

37.0

35.0

60.0

57.2

50.0

70.0

48.0

8.3

11.0

11.0

12.6

11.0

12.7

227kg

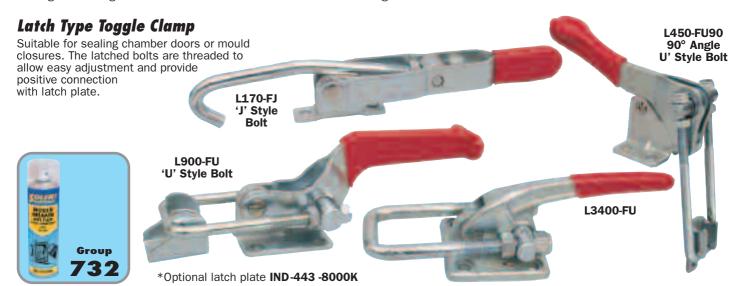
300kg

340kg

400kg

500kg

636kg

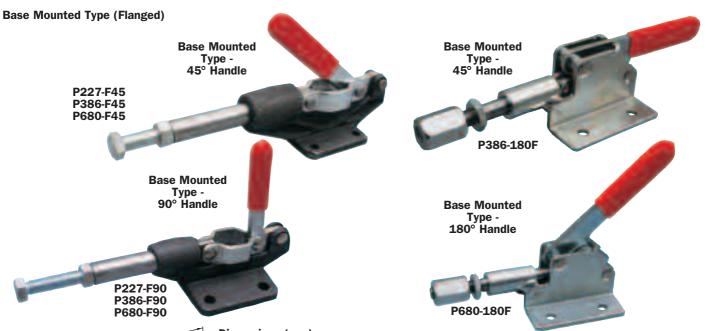


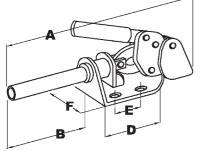
Product Number	Holding Capacity	Drawing Movement	Drawing Adjust	Base Type	Description	Weight each	Order Code IND-443	
L164-FU	164kg	30mm	9.9mm		U-Style Bolt	80g	-4070K	
L318-FU	318kg	45mm	9.6mm		U-Style Bolt	225g	-4010K	
L900-FU	900kg	80mm	23.8mm	Flanged	U-Style Bolt	680g	-4130K	
L1818-FU	1818kg	88.9mm	19mm		U-Style Bolt*	1260g	-4170K	
L3400-FU	3400kg	55.6mm	28.6mm		U-Style Bolt*	1480g	-4210K	
L170-FJ	170kg	100mm	6.5mm		J-Style Bolt	270g	-4030K	
L170-FJ	170kg	105mm	35mm	Flanged	J-Style Bolt	255g	-4050K	
L340-FJ	340kg	140mm	40mm		J-Style Bolt	340g	-4190K	
L225-FU90	225kg	25mm	15mm		90° Angle U-Style Bolt	113g	-4090K	
L450-FU90	450kg	65mm	33mm	Flanged	90° Angle U-Style Bolt	250g	-4110K	
L900-FU90	900kg	45mm	40mm		90° Angle U-Style Bolt	700g	-4150K	

<sup>\*\*</sup>Single mounting centre hole 13mm diameter for 'Tee' bolt mounting

# INDEXA Push Pull Industrial Toggle Clamp

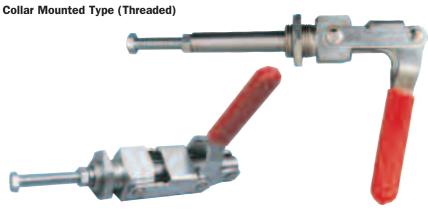
The straight line action which gives these plunger-style clamps extremely high loading capacities whilst maintaining compactness. These clamps also lock in the open position which allows a 'pull' to be exerted (for instance, in use with foam moulds). All models have tapped spindles for use with adjustable spindles.

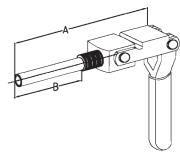




Dimensions	(mm)					
Holding Capacity	A – Excluding Handle	В	С	D	E	F
45kg	72.2	38.9	9.5	33.3	15.0	27.0
50kg	71.9	16.9	13.0	49.0	24.0	42.0
136kg	138.0	47.0	24.6	48.0	35.0	56.0
160kg	146.0	76.0	15.5	70.0	40.0	72.0
200kg	124.5	41.5	14.0	48.0	40.0	50.0
227kg	125.4	52.4	19.0	52.4	35.0	57.2
295kg	204.0	112.0	17.7	92.0	60.0	83.0
386kg	158.8	81.0	23.8	58.8	41.4	57.2
680kg	238.2	120.8	35.0	73.2	50.8	71.4
1136kg	178.6	50.8	12.5	127.8	34.9	56.2
1136kg	178.6	50.8	12.5	127.8	41.3 (6 holes)	56.2
1600kg	310.0	87.0	47.0	227.0	80.0	107.0

Product Number	Holding Capacity	Spindle Thread	Handle Movement	Handle Position	Base Type	Supplied With	Weight each	Order Code IND-443	
P45-F45	45kg	1/4" UNC x 12 Deep	190°			Nylon Spindle	50g	-3030K	
P136-F45	136kg	M8	180°			Hexagon Head Spindle	300g	-3060K	
P200-F45	180kg	M8 x 1.25	144.5°			Hexagon Head Spindle	345g	-3090K	
P180-FA	180kg	M8 x 1.25	145°	45°	Flanged	Hexagon Head Spindle	35g	-3100K	
P227-F45	227kg	M8	180°	Extended	Hangeu	Hexagon Head Spindle	340g	-3120K	
P386-F45	386kg	M10	180°			Hexagon Head Spindle	580g	-3180K	
P680-F45	680kg	M12	180°			Hexagon Head Spindle	1480g	-3240K	
P1136-F45	1136kg	M10	180°			Hexagon Head Spindle	935g	-3300K	
P227-F90	227kg	M8 x 30 Deep	180°	90°		Hexagon Head Spindle	340g	-3150K	
P386-F90	386kg	M10 x 40 Deep	180°		Flanged	Hexagon Head Spindle	580g	-3210K	
P680-F90	680kg	M12 x 50 Deep	180°	Extended	_	Hexagon Head Spindle	1480g	-3270K	
P50-180F	50kg	M5	66°	1000		Hexagon Head Spindle	100g	-3700K	
P386-180F	160kg	M10	45°	180°	Flanged	Hexagon Head Spindle	454g	-3730K	
P680-180F	295kg	1/2" UNC	45°	Extended		Hexagon Head Spindle	1270g	-3760K	





D:			/ · · · ·
I IIIn	10nei	nne .	(mm)

Holding Capacity	A – Excluding Handle	В
91kg	30.3	20.6
136kg	115.0	37.7
318kg	169.5	65.3

Product Number	Holding Capacity	Spindle Thread	Collar Thread	Handle Movement	Base Type	Supplied with	Weight each	Order Code IND-443	
P91-FT P136-FT	91kg 136kg	1/4" UNC 5/ <sub>16</sub> " UNC	M16 M20	180° 180°	Flanged	Nylon Spindle Hexagon Head Spindle	113g 270g	-3530K -3560K	
P318-FT	318kg	3/8" UNC	M27	180°		Hexagon Head Spindle	690g	-3590K	

# 443 TOGGLE CLAMPS

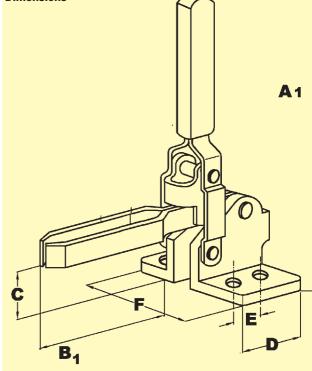
# ATLAS Vertical Industrial Toggle Clamp

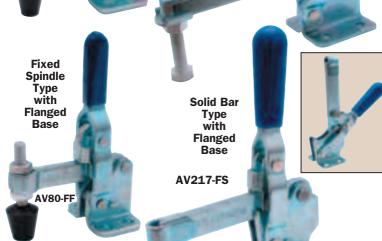
Designed to improve performance in fabrication and engineering clamping applications. The rapid clamping/unclamping made possible by the use of toggle clamps can greatly reduce machine/operator 'down-time' during all stages of production.





'U' Bar





Group

## **'U' Bar (Adjustable) Type with Flanged Base**

Product Number	A <sub>1</sub> Flanged Base	B <sub>1</sub> Flanged Base	C Flanged Base	D	Е	F Flanged Base
AV50-FA	75.0	24.5	19.0	25.4	15.9	39.7
AV90-FA	93.0	39.0	23.0	29.0	14.0	28.0
AV150-FA	143.0	44.0	31.0	19.0	12.7	42.0
AV200-FA	139.0	63.0	38.0	43.0	24.0	50.0
AV217-FA	139.7	71.4	31.8	34.9	19.0	46.0
AV450-FA	272.0	125.0	62.0	70.0	40.0	70.0

## Fixed Spindle Type with Flanged Base

Product Number	A <sub>1</sub> Flanged Base	B <sub>1</sub> Flanged Base	C Flanged Base	D	E	F Flanged Base
AV80-FF	100.0	27.0	23.8	25.4	12.7	39.7
AV217-FS	139.7	57.2	31.8	34.9	19.0	46.0

#### 'U' Bar (Adjustable) Type with Flanged Base

Product	Holding	Mover	nent	Base	Supplied	Weight	Order Code	
Number	Capacity	Handle	Bar	Type	With	each	ATL-443	
AV50-FA	50kg	56°	100°		Tipped Spindle (M5) and Flanged Washers	60g	-1020K	
AV90-FA**	90kg	60°	100°		Spindle (M6) and Bolt Retainer	115g	-1220K	
AV150-FA	150kg	70°	108°	Flandad	Hex Head Spindle (M6) Moulded PVC Handle	230g	-1970K	
AV200-FA	200kg	45°	94°	Flanged	Hex Head Spindle (M8) and Flanged Washers	370g	-1320K	
AV217-FA	217kg	60°	100°		Tipped Spindle (M8) and Flanged Washers	310g	-1420K	
AV450-FA	450kg	70°	135°		Hex Head Spindle (M12) and Flanged Washers	1220g	-1720K	

AV450-FA

### **Fixed Spindle Type with Flanged Base**

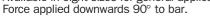
i ixeu opiii	ixed Spiridle Type with Fidinged base								
Product	Holding .	Move	<u>ment</u>	Base	Supplied	Weight	Order Code		
Number	Capacity	Handle	Bar	Type	Ŵith	each	ATL-443		
AV80-FF	90kg	60°	100°	Flongod	Fixed Spindle (M8)	170g	-1120K		
AV217-FS	217kg	60°	100°	Flanged	Solid Bar and Bolt Retainer (M8)*	310g	-1520K		

<sup>\*</sup>Please note that the bolt retainer supplied needs to be welded in to position by the user

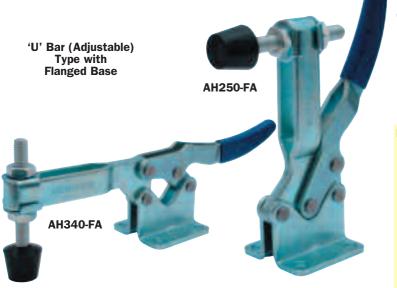
AV150-FA

<sup>\*\*</sup> Model AV90-FA has Side Flange - All other FA models listed have Flat Flanges

With a low profile design suitable for use in applications requiring increased access to the actual workpiece. Available in eight sizes for general application in areas where a lower profile is required.

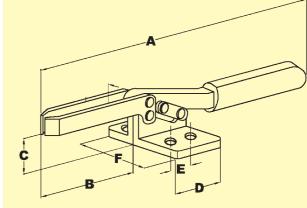


AH80-FA









Product Number	Α	В	С	D	Е	F
AH20-FA	110.0	37.5	24.8	36.5	24.0	30.0
AH80-FA	138.1	55.0	25.4	36.5	25.4	38.0
AH217-FA	168.0	70.0	34.9	38.0	53.4	35.0
AH250-FA	274.0	108.0	45.0	59.0	41.2	59.0
AH340-FA	263.5	108.0	44.4	57.2	41.3	57.2

Product Number	Holding Capacity	<u>Movem</u> Handle	nent Bar	Base Type	Supplied with	Weight each	Order Code ATL-443	
AH20-FA	30kg	88°	80°		Tipped Spindle (M6) and Flanged Washers	100g	-2020K	
AH80-FA	80kg	60°	85°		Tipped Spindle (M6) and Flanged Washers	130g	-2120K	
AH217-FA	217kg	65°	90°	Flanged	Tipped Spindle (M8) and Flanged Washers	312g	-2220K	
AH250-FA	250kg	94°	76°		Hexagon Head Spindle (M10) and Flanged Washers	500g	-2620K	
AH340-FA	340kg	50°	85°		Tipped Spindle ((M10) and Flanged Washers	265g	-2420K	

#### Latch Type Toggle Clamps **Dimensions** AL165-FU Suitable for sealing chamber doors or mould closures. The latched bolts are threaded to allow easy adjustment and provide positive connection with latch plate. 'U' Style Bolt Type with Flanged Base AL900-FU AL320-FU Product В С D Ε G 0 Α Н $J_1$ Κ Ν Number 45 13.2 17.5 30.0 AL165-FU 36 88 9.9 16 19 26 28 4.3 4.3 19 12 3.3 151.6 25 38 6.8 8.4 25.4 44.5 AL320-FU 45 19 31.8 39.6 44.5 6.8 17 14 4 8 41.4 24 AL900-FU 70.6 190 19 38 60.5 54 8.4

Product Number	Holding Capacity	Drawing Movement	Drawing Adjust	Base Type	Description	Weight each	Order Code ATL-443	
AL165-FU AL320-FU AL900-FU	165kg 320kg 900kg	30mm 45mm 80mm	9.9mm 9.6mm 23.8mm	Flanged	U-Style Bolt U-Style Bolt U-Style Bolt	68g 225g 650g	-4070K -4010K -4130K	

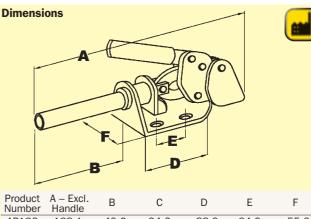
# 443 TOGGLE CLAMPS

# ATLAS Push Pull Industrial Toggle Clamps

The straight line action gives these plunger-style clamps extremely high loading capacities whilst maintaining compactness. These clamps also lock in the open position which allows a 'pull' to be exerted (for instance, in use with foam moulds). All models have tapped spindles for use with adjustable spindles.



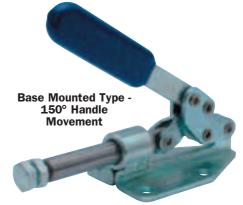




Product Number	A – Excl. Handle	В	С	D	Е	F
AP136	138.1	49.2	24.6	88.9	34.9	55.6
AP200	124.5	41.5	14.0	83.0	40.0	50.0
AP227	151.0	63.0	15.0	88.0	32.0	63.0







Product	Holding	Spindle	Handle	Handle	Base	Supplied	Weight	Order Code
Number	Capacity	Thread	Movement	Position	Type	With	each	ATL-443
AP136	136kg	M8	180°			Hexagon Head Spindle	285g	-3060K
AP200	200kg	M8 x 1.25	150°	45°	Flanged	Hexagon Head Spindle	330g	-3090K
AP227	227kg	M8 x 30 Deep	190°	Extended		Hexagon Head Spindle	540g	-3150K

## INDEXA

## Heavy Duty Weldable Toggle Clamps

Hold down action suitable for high production automotive type applications. Heavy duty forged components with hardened and ground pivot points. The users provide their own handle and bar and weld them to the clamp which is then welded to a base. The flexible mounting of these clamps allows them to be used in situations where standard clamps are not effective.



110mm

130mm

170mm

205mm

-5010K

-5030K

-5070K

808g 915g

1574g

2881g

## Latch Plates

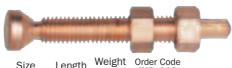
For use with latch type toggle clamps.



Base Size	Hook Width	Order Code IND-443
80 x 55mm	22mm	-8000K

## Swivel Foot Spindles

As Neoprene capped but suitable for clamping onto irregular shapes or angled workpieces.



Size	Length	Weight each	Order Code IND-443
1/4" UNC	21/4"	18g	-8500K
5/16" UNC	23/4"	31g	-8520K
3/8" UNC	3"	47g	-8540K
1/2" UNC	4"	115g	-8560K

## **Neoprene Caps**

For standard adjustable spindles.



To fit Spindle	Weight each	Order Code IND-443
1/4"	8g	-8600K
<sup>5/</sup> 16"	15g	-8620K
3/8"	24g	-8640K
1/2"	45g	-8660K

## **Flanged Washers**

For use in conjunction with all spindles on clamps with



To fit	Weight	Order Code	
Spindle	each	IND-443	
5/32" (No.8/M4	) 2g	-8700K	
3/16" (No.10)	2g	-8720K	
1/4"	4g	-8740K	
<sup>5/</sup> 16" (M8)	10g	-8780K	
<sup>3</sup> /8" (M10)	15g	-8800K	
1/2"	37g	-8820K	
5/8"	49g	-8840K	

## **Neoprene Capped Spindles**

For use with adjustable 'U' bar type clamps and solid bar type clamps that have bolt retainers.

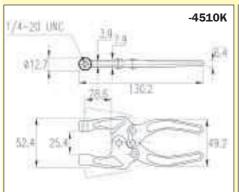


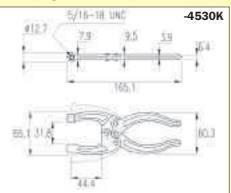
Size	Length		Order Code IND-443	
M4 x 0.7	25mm	5g	-8020K	
M8 x 1.25	63mm	34g	-8100K	
M10 x 1.5	85mm	64g	-8140K	
No 10UNC	13/8"	9g	-8200K	
1/4" UNC	13/4"	16g	-8220K	
5/16" UNC	$2^{1/2}$ "	31g	-8260K	
3/8" UNC	31/2"	58g	-8300K	
1/2" UNC	33/4"	125g	-8340K	

700kg 28mm 700kg 45mm 1100kg 50mm

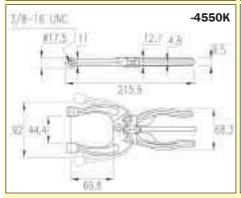
2200kg 63mm

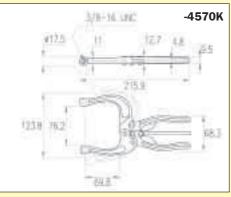
Toggle pliers have the advantage of a pivoting jaw mechanism to allow a deep throat depth to open and close easily for clamping awkward profiles such as steel angle section. The spindle clamping distance and pressure can be pre-set to and is ideal for repetitious applications.

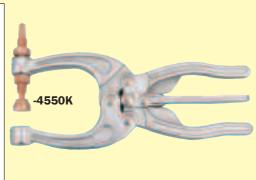












<b>Plain</b>	Hand	dle
Hald	-	10

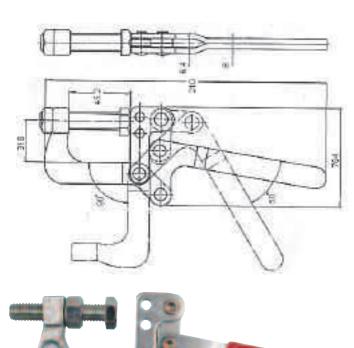
	Capacity	Min.	Max.	Standard Spindle Supplied	IND-443
159kg 31 X 65 1 Hex Head -4530	90kg	25.4	52.4	Hex. Head	-4510K
	159kg	31.8	65.1	Hex. Head	-4530K

### **Quick Release Handle**

Holding	Jaw C	pening	Standard Spindle	Order Code IND-443
Capacity	Min.	Max.	Supplied	
318kg	44.4	92.0	Swivel	-4550K
318kg		123.8	Hex. Head & Swivel	-4570K

## Cam Type Toggle G-Clamp (Pull Back Clamp)

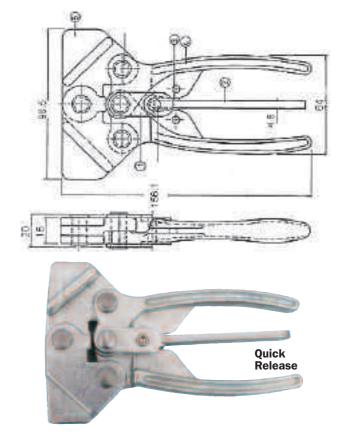
To securely fix the clamp into position the base can be welded to the work surface.



Holding Capacity	Jaw Opening	Jaw Movement	Handle Movement	Order Code IND-443	
340kg	45.2mm	90°	50°	-5510K	

## 'Stub' Type Toggle Pliers

With two stub arms for easy linking to special jaw extensions.



Holding Capacity	Closed Head Width	Overall Length	Order Code IND-443	
500kg	98.5mm	156.1mm	-4590K	