## STAR TOOL SUPPLY / GRAND TOOL SUPPLY

# 0°- 60° PRECISION ANGLE BLOCKS



**SERIES 227:** 

Fast, simple, easy to use for drilling, milling and set-up applications.

#### **FEATURES:**

- 0°- 60° Adjustable angle by locking the hex screw on the bottom.
- 90° "V"
- Squareness .0002"
- Angle accuracy ± 10 seconds.
- Hardened to HRC 50-55°

Length x Height x Width	Width of "V"	Order No.	Price
4 x 1-7/8 x 1-7/8 4 x 1-7/8 x 1-3/16 3 x 1-1/4 x 1	1-7/8 1-7/8 1	2270001 2270002 2270003	

## **SOLID ANGLE PLATES**

**SERIES 227:** 



Made of hardened steel, precision ground angles for convenient set-ups in tooling production and inspection. Four holes for easy mounting. 1/4" Thick.

		Order	
Dimensions	3	No.	Price
3 x 3"	45°, 45°, 90°	1570201	
2 x 3-3/8"	30°, 60°, 90°	1570202	
Above two in a	plastic case.	1570200	

#### STEEL PARALLELS

SERIES 241:



Made of quality steel, hardened and precision ground to very close tolerances on all four sides. Parallels are finished, packed and sold in pairs.

Dim.	Order No.	Price	Dim.	Order No.	Price
1/4 x 1/2 x 6	2411632		3/4 x 1 x 9	2414864	
1/4 x 5/8 x 6	2411640		3/4 x 1 x 12	2414865	
1/4 x 3/4 x 6	2411648		3/4 x 1-1/4 x 12	2414872	
3/8 x 1/2 x 6	2412432		1 x 2 x 12	2416499	
3/8 x 3/4 x 6	2412448				
			1-1/4 x 1-1/2 x 12	2418096	
1/2 x 3/4 x 6	2413248		1-1/4 x 2 x 12	2418099	
1/2 x 1 x 6	2413264				
1/2 x 3/4 x 9	2413249		1-1/2 x 2 x 12	2419620	
1/2 x 1 x 9	2413265		1-1/2 x 3 x 12	2419630	

# **Quality Precision Tools**







The Choice Is Yours!!!

Tel: 201-518-8461 / Fax: 201-596-3427 650 Huyler St / So. Hackensack, NJ 07606 USA

# ADJUSTABLE PARALLEL SETS SERIES 242:

Superior Import

Useful for layout, inspecting and gaging work. Highly accurate dovetail construction. The 2 halves slide smoothly and are quickly locked into position. The 6 piece set is supplied in an attractive plastic wallet and has the following range:

to	1/2"
to	11/16"
to	15/16"
to	1-5/16"
to	1-3/4"
to	2-1/4"
	to to to





MEDA - SUPERIOR IMPORT						
6 Piece (3/8 - 2-1/4) Order No. 1650016 Price						
PEC TOOLS - USA						
	Order No. 1650006					
4 Piece (3/8 - 1-5/16) Order No. 1650004 Price						

## **ADJUSTABLE PARALLELS**

STARRETT SERIES 154:



Starrett adjustable parallels provide a wide range of use in layout, gaging, inspection work and for setups on various machine tools. Their adjustable feature makes it possible to adjust them to exact size by micrometer measurement and also permits use in place of several solid-type parallels.

Can be inserted in openings and expanded to size. Size of opening can then be determined by measuring parallels with micrometer. Parallels consists of two dovetailed pieces that slide smoothly and can be easily adjusted. All parallels are 9/32" (7mm) thick.

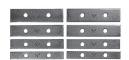


Catalog No.	EDP No.	Ra	Range	
154A 154B 154C 154D 154E 154F	50578 50579 50580 50581 50582 50583	15/16 - 1-5/16"	9.5 - 12.7mm 12.7 - 17.5mm 17.5 - 23.8mm 23.8 - 33.3mm 33.3 - 44.4mm 44.4 - 57.1mm	
S154SZ	50584	Set of 4 parallel-sizes A,B,C,D-in case		
S154LZ	50586	Set of 6 parallel-sizes A,B,C,D,E,F, - in case		

## THIN PARALLEL SET

**SERIES 241:** 





Set consists of 4 matched pairs of hardened and precision ground parallels 5/32" thick, 3" long in 1/2, 5/8, 3/4, and 7/8 heights. Two 1/4" holes in each parallel. Useful for fast setting of work pieces to needed height in vise jaws

Order No. 2410500	Price	
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## PRECISION PARALLEL SETS

**SERIES 241:** 



Tolerance: Parallel 0.0003" on 2 sides, top and bottom. Dimensions: within 0.001" allowance.

Hardness: Case hardened to RC 55 to 62 on 2 sides top and bottom only.

The holes are designed for easier handling and set-ups. Made from fine quality tool steel, stress relieved against distortion, precision ground, and hardened. These precision parallels are recommended for layout work, standards and set-ups.

#### 1/4" STEEL PARALLEL SET **SERIES 241:**



1/32" ULTRA-THIN STEEL PARALLEL SET



SERIES 241:

Parallels in matched pairs made of special steel hardened and precision ground, 2 holes in each parallel. 9 pair in fitted case.

Each parallel is 1/4" wide and 6" long. Height: 1 pair each 3/4, 7/8, 1, 1-1/8, 1-1/4, 1-3/8, 1-1/2, 1-5/8, 1-3/4". Includes fitted case.

PRECISION TOOLS



All are 6" long and only 1/32" thick Set includes: 20 pairs: 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-3/16, 1-1/4, 1-5/16, 1-3/8, 1-7/16, 1-1/2, 1-9/16, 1-5/8, 1-11/16".

Includes fitted case.



Order No. 2410020

**Price** 

STEEL PARALLEL SETS -3/16" and 1/2"

**SERIES 241:** 



Order No. 2410009

**SERIES 241:** 

Includes fitted case.

**Price** 

## 1/8" THIN STYLE STEEL PARALLEL SET



Each set consists of 4 pairs of hardened and ground parallels. All parallels are 6" long. Includes fitted case.



**Thickness** Dia. Height Parallels in matched pairs made of special steel, hardened and preci-3/16 5/16 sion ground. 2 holes in each parallel. 1-1/4 3/16 3/8 10 pair in fitted case. 3/16 7/16 1-1/21 - 3/43/16 1/2 Each parallel is 1/8" wide and 6" long. Height: 1 pair each 1/2 - 1-5/8 x 8ths.

Order No. 1645004 **Price** 



### STEEL PARALLELS **STARRETT SERIES 384:**







- Indispensable for inspection and layout work or various set-ups on machines.
- Furnished in pairs, 6" (150mm) in length.
- · Made from special grade of tool steel, hardened and ground.



Description	Catalog No.	EDP No.	Price
Sets of 4 Pairs - Sizes A,C,E,G-In Case	S384JZ	51453	
Sets of 4 Pairs - Sizes N,M,P,F,-In Case	S384-1Z	63676	
Sets of 4 Pairs - Sizes G.H,R,M,-In Case	S384-2Z	63677	
Sets of 5 Pairs - Sizes S,T,W,X,Y, In Case	S384-3Z	63678	

Thickness		Width				
Inch	mm	Inch	mm	Catalog No.	EDP No.	Price
1/8"	3mm	1"	25mm	384A	51445	
3/16"	5mm	7/8"	22mm	384C	51447	
1/4"	6mm	3/4"	19mm	384E	51449	
		1"	25mm	384F	51450	
3/8"	10mm	1/2"	13mm	384G	51451	
		3/4"	19mm	384H	51452	
		3/8"	10mm	384M	63645	
1/4"	6mm	1/2"	13mm	384N	63646	
		5/8"	16mm	384P	63647	
3/8"	10mm	1"	25mm	384R	63648	
		5/8"	16mm	384S	63649	
		3/4"	19mm	384T	63650	
1/2"	13mm	1"	25mm	384W	63651	
		1-1/8"	28mm	384X	63652	
		1-1/4"	31mm	384Y	63653	

## STAR TOOL SUPPLY / GRAND TOOL SUPPLY

## **PRECISION WAVY PARALLELS**

**SERIES 241:** 



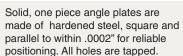
- Unique innovation in the field of clamping-aid techniques.
- Engineered to exceed the practical application possibilities of conventional precision parallels.
- New concept, practical and reliable for the precision vertical positioning of workpiece.
- Economical, simple and easy to use in precision clamping of parts in drilling, boring, milling, grinding, assembly work, etc.
- Ideal for clamping a group of flat workpieces.
- Can readily be used as classic shims.
- Thin and fragile workpieces can be secured without damage by utilizing the spring pressure of these parallels, for example in assembly applications, etc.
- Range of 9 pair set 1/2" to 1-1/2" in 1/8" height increments.
- Each parallel is .012" Thick x 4-5/16" Long
- Made of high quality spring steel, hardened, stress relieved & precision ground.
- Guaranteed to size in height & parallelism ±.0002".
- Set of 9 pairs furnished in attractive fitted case.

Order No. 2410000 **Price** 



## ANGLE PLATES

SERIES 641:





Model No.	Dimensions	Weight	Order No.	Price
AP-333 AP-334-S0 AP-444-S1 AP-446-S2 AP-664-S1	3 x 3 x 3 x 1 x 1-1/2 4 x 3 x 3 x 1 4 x 4 x 4 x 1-1/4 6 x 4 x 4 x 1-1/4 6 x 6 x 4 x 1-1/4	5 lbs. 6 lbs. 10 lbs. 13 lbs. 20 lbs.	6410061 6410062 6410063 6410064 6410065	

### STEPPED ANGLE PLATES

SERIES 227:



## **Product Description**

- Solid one piece construction for longer life
- Hardened to 55 to 62 HRC
- Ground flat, square and parallel within .0002"/.005mm
- Made from alloy steel



Size	Thread Size	Order No.	Price
3" x 3" x 3"	1/4" - 20 UNC	2276456	

#### PRECISION ANGLE PLATE

**STARRETT SERIES 580:** 

Precision ground angle plate is made from hardened steel. Grinding step of 1/4" wide x 3/4" (6.35 x 19mm) down from the top surface that allows for the grinding, machining or inspection of small items. Ten 1/4"-20 tapped holes, six on the face and two on each end, provide for the clamping of work to the angle plate and/or clamping the angle block to a sine fixture or machine.



Description	Catalog No.	EDP No.	Price
3" x 3" x 3"			
75mm x 75mm x 75mm	580	64961	

## Tel: 201-518-8461 / Fax: 201-596-3427 650 Huyler St / So. Hackensack, NJ 07606 USA

### 1-2-3 AND 2-4-6 BLOCK SETS

**SERIES 254: MEDA - SUPERIOR IMPORT** 

**SERIES 641: SUBURBAN** 





Used in layout and setup work. Each set consists of 2 matched, hardened and precision-ground blocks. The squareness on all sides is within .0001" per inch. The blocks are supplied with a plus allowance of .0001" to .0003" to allow nominal lapping. Five 3/8"-16 tapped holes are provided for clamping. SUBURBAN sets include wooden case.

	MEDA		SUBURBAN		
Size	Order No.	Price	Catalog No.	Order No.	Price
1x2x3 2x4x6	1720123 1720246		B123H23M -	6410145	

## 1-2-3 DELUXE BLOCK SET

SERIES 254:



Used in layout and setup work. Each set consists of 2 matched, hardened and precision-ground blocks. The squareness on all sides is within .0001" per inch. The blocks are supplied with a plus allowance of .0001" to .0003" to allow nominal lapping. Five 3/8"-16 tapped holes are provided for clamping. 5 stainless steel socket head 3/8" - 16 cap screws, one hex key in a plastic fitted case.



Order No. 1725123 **Price** 

## STEEL STRAIGHT EDGES

STARRETT SERIES 380, 385, 387;

Made In U.S.A.

Straight edges are precision made of fine tool steel to rigid standards. Ground all over and finely finished. For drawing or scribing straight lines and checking surfaces for straightness. Straight edges in sizes 36"(900mm) and longer are marked with arrows and should be suspended at these two points to minimize deflection caused by their length and weight.



Leng	th	Width x Thick		No. 380 Series Square Edge		
Inch	mm	Inch	mm	No.	Catalog EDP No.	Price
12" 18" 24"	300mm 450mm 600mm	1-13/32"x11/64"	36x4.4mm	380-12 380-18 380-24	51438 51439 51440	
36" 48" 72"	900mm 1200mm 1800mm	2-13/32"x7/32" 3-5/32x9/32"	60x5.5mm 80x7mm	380-36 380-48 380-72	51441 51442 51444	

No. 385 Series with Bevel			
Catalog No.	EDP No.	Price	
385-12 385-18 385-24 385-36 385-48 385-72	51455 51456 51457 51458 51459 51461		

No. 387 Series with Bevel Edge and Graduation				
Catalog No.	EDP No.	Price		
387-12 387-18 387-24 387-36 387-48	51468 51469 51470 51471 51472			