

**CALIPERS, DIVIDERS  
AND TRAMMELS**

## SPRING-TYPE CALIPERS

### 274, 275, 277 TOOLMAKERS' SPRING-TYPE CALIPERS AND DIVIDERS WITH ROUND LEGS AND SOLID NUT

3, 6"/75, 150MM

Toolmakers' Calipers and Dividers are the finest tools of their type. Designed for toolmakers and all good mechanics who require finer adjustment and better balance so a more sensitive "feel" can be obtained. Precision made to rigid Starrett standards throughout.

The fulcrum stud is hardened and the bearing surfaces of the legs are large enough to prevent any side deflection. The bow spring is strong and flexible, and the adjustment is centrally located in the legs to assure smooth action.



274, 275, 277 Calipers



Quick-adjusting spring nut

#### 274, 275, 277 Toolmakers' Spring-Type Calipers and Dividers\*

Inside Calipers		Outside Calipers		Dividers		Size and Approx. Capacity	
Cat. No.	EDP	Cat. No.	EDP	Cat. No.	EDP	in	mm
274-3	51301	275-3	51305	277-3	51309	3	75
274-6	51303	275-6	51307	277-6	51311	6	150

\*Not available with spring nut

### 73, 79, 83 "YANKEE" SPRING-TYPE CALIPERS AND DIVIDERS WITH FLAT LEGS AND QUICK-SPRING OR SOLID NUT

4, 6, 8, 12"/100, 150, 200, 300MM

"Yankee" Calipers and Dividers are made from a high-grade steel and well-finished. The legs are made of flat stock and are very durable. The fulcrum stud is hardened and has a smooth bearing surface. The bow spring, although flexible, is exceedingly strong to assure reliability.

All sizes are available with either spring nut or solid nut. The Starrett quick-adjusting automatic-closing spring nut is designed for making fast, positive adjustments. The threads of the nut firmly engage the screw at the slightest pressure from the leg. When the pressure is withdrawn, the nut automatically releases itself, sliding freely over the screw. This feature saves time in opening and closing.



73, 79, 83 Calipers

#### 73 "Yankee" Spring-Type Inside Calipers

Solid Nut		Quick-Spring Nut		Size and Approx. Capacity	
Cat. No.	EDP	Cat. No.	EDP	in	mm
73A-4	50334	73B-4	50335	4	100
73A-6	50336	73B-6	50337	6	150
73A-8	50338	73B-8	50339	8	200
73A-12	50342	73B-12	50343	12	300

#### 79 "Yankee" Spring-Type Outside Calipers

Solid Nut		Quick-Spring Nut		Size and Approx. Capacity	
Cat. No.	EDP	Cat. No.	EDP	in	mm
79A-4	50364	79B-4	50365	4	100
79A-6	50366	79B-6	50367	6	150
79A-8	50368	79B-8	50369	8	200
79A-12	50372	79B-12	50373	12	300

#### 83 "Yankee" Spring-Type Dividers

Solid Nut		Quick-Spring Nut		Size and Approx. Capacity	
Cat. No.	EDP	Cat. No.	EDP	in	mm
83A-4	50376	83B-4	50377	4	100
83A-6	50378	83B-6	50379	6	150
83A-8	50380	83B-8	50381	8	200
83A-12	50384	83B-12	50385	12	300



# HERMAPHRODITE CALIPERS

## 243 FIRM-JOINT HERMAPHRODITE CALIPERS

6"/150MM

This caliper features a round, adjustable leg and an improved firm-joint, which allows the joint to be adjusted at any tension. The leg that holds the adjustable point is offset.

## 563 FIRM-JOINT HERMAPHRODITE CALIPERS

6"/150MM

This caliper has a round, adjustable point held by a straight leg. An improved, firm-joint feature permits the joint to be adjusted at any desired tension.

## 42 LOCK-JOINT HERMAPHRODITE CALIPERS WITH FINE-ADJUSTMENT

6, 8"/150, 200MM

These calipers have an adjustable point, locking joint and fine-adjustment feature for close measurements. After the legs have been set to approximate size and the joint locked, the final adjustment is made by a few turns of the knurled adjusting nut.

## HERMAPHRODITE CALIPERS

Starrett Hermaphrodite Calipers are used in layout work for locating and testing centers, laying out distances from an edge, etc.

We offer a complete choice from which machinists and toolmakers can select to best suit their requirements.

The rugged, properly shaped legs are made of finely finished, high-grade steel.

Sizes listed are the lengths of the legs.

Actual measuring capacity is approximately one-third greater than the leg size.

### 243 and 563 Firm-Joint Hermaphrodite Calipers

Cat. No.	EDP	Size*	
		in	mm
243-6	51143	6	150
563-6	52572		

### 42 Lock-Joint Hermaphrodite Calipers

Cat. No.	EDP	Size*	
		in	mm
42-6	50263	6	150
42-8	50264	8	200

\* Actual capacity is one-third greater than the listed size.



## FIRM AND LOCK-JOINT CALIPERS

### IMPROVED FIRM-JOINT CALIPERS

#### 26 (OUTSIDE)

6-36"/150-900MM

#### 27 (INSIDE)

6-24"/150-600MM

- Improved joint designed for tension adjustment
- Tension will not change with leg movement
- Legs are made from a high-grade steel, are ruggedly constructed and well-finished



### LOCK-JOINT CALIPERS WITH FINE-ADJUSTMENT

#### 38 (OUTSIDE) AND 39 (INSIDE)

6-24"/150-600MM

- Joint can be quickly and firmly locked by a partial turn of the large knurled disc
- Spring washer under the disc maintains proper leg tension when joint is unlocked
- Provided with an adjusting screw to permit fine-adjustments for close measurements
- Once legs have been set to approximate size and joint locked, final adjustment is made by a few turns of the knurled adjusting nut
- Legs are made of well shaped high-grade steel and are ruggedly constructed and nicely finished



### LOCK-JOINT TRANSFER TYPE CALIPERS WITH FINE-ADJUSTMENT

#### 36 (OUTSIDE) AND 37 (INSIDE)

6-24"/150-600MM

One of the handiest and most versatile calipers ever made, Starrett Lock-Joint Transfer Calipers feature a transfer arm, a fine-adjustment screw, and a locking joint.

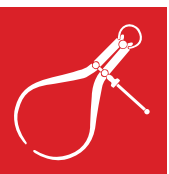
- Transfer arm allows transfer measurements from places where it is necessary to move the legs after they have been set to size
- Adjusting screw permits close adjustment for fine measurements
- Once legs have been set to approximate size and the joint locked, final adjustment is made with a few turns of the knurled adjusting nut
- Joint can be quickly and firmly locked by a partial turn of the large knurled disc
- Spring washer under the disc maintains proper tension of legs when joint is loosened
- Ruggedly constructed legs from high-grade steel and are well-shaped and nicely finished



#### Firm and Lock-Joint Calipers

26 Outside Calipers		27 Inside Calipers		36 Outside Calipers		37 Inside Calipers		38 Outside Calipers		39 Inside Calipers		Size*	
Cat. No.	EDP	Cat. No.	EDP	Cat. No.	EDP	Cat. No.	EDP	Cat. No.	EDP	Cat. No.	EDP	in	mm
26-6	50186	27-6	50193	36-6	50245	37-6	50249	38-6	50253	39-6	50257	6	150
26-12	50189	27-12	50196	36-12	50246	37-12	50250	38-12	50254	39-12	50258	12	300
26-18	50190	27-18	50197									18	450
26-24	50191	27-24	50198	36-24	50248	37-24	50252	38-24	50256	39-24	50260	24	600
26-36	50192											36	900

\* Actual capacity is one-third greater than the listed size.



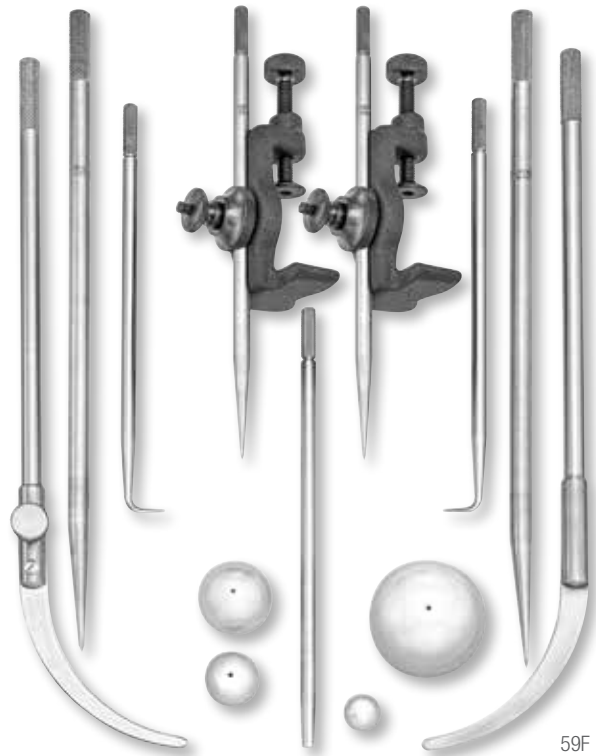
# TRAMMEL HEADS

## 59 TRAMMEL HEADS, DIVIDER POINTS, ATTACHMENTS

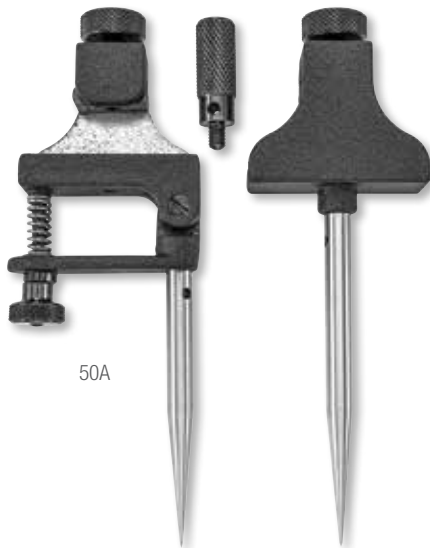
The 59 Trammel Head is very useful for laying out and scribing circles beyond the capacity of ordinary dividers. The trammel heads have a clamping device that firmly holds various attachments.

The attachments consist of two sizes of caliper legs, 6", 9-1/2" (150, 238mm), two sizes of divider points 6", 9" (150, 225mm) which are eccentric for close settings, and a set of four ball points with holder. The ball points with 6" (150mm) holder are for scribing circles from the center of any hole up to 1-1/2" (38 mm) in diameter. One of the large caliper legs features a joint operated by an eccentric thumb piece for fine adjustments. A pencil may be clamped in either head in place of the caliper legs or divider points.

The heads will accommodate any size beam from 3/4 – 1-1/2" (19-38mm) in width. Since beam length requirements vary widely, and they are easy for the user to fashion, we do not furnish a beam.



59F



50A

## 50 IMPROVED TRAMMEL HEADS WITH DIVIDER POINTS, PENCIL SOCKET

Used to measure the distance between points that are too great to be reached with dividers. The heads are die cast with black wrinkle finish and have hardened, forged steel divider points. The points screw into the heads, and the pencil socket accompanying each set of trammel heads can be used in place of either point. 50A has an adjustable point. Longer points (5"/125mm) are also available. A beam is not furnished with these trammels. The heads will accommodate a beam up to 3/8" (9.5mm) thick and 3/4" (19mm) wide.

### 50 Improved Trammel Heads

Cat. No.	EDP	Point Size		Description
		in	mm	
50A	50268	3, 2-1/2	75, 63	(adjustable) Includes 2 heads, 2 points, pencil socket
50B	50269	3	75	Includes 2 heads, 2 points, pencil socket

### 50 (Longer) Points Only

Cat. No.	EDP	Point Size		Description
		in	mm	
50CA	50270	5, 4-1/2	125, 113	2 adjustable points for Starrett 50A
50CB	50271	5	125	2 points for Starrett 50B

### 59 Trammel Heads, Divider Points, Attachments

Cat. No.	EDP	Description
59A	50297	2 trammel heads, 2 small points (6"/150mm)
59B	*	Set of 4 ball points and one holder only
59C	*	Pair small caliper legs only (6"/150mm)
59D	*	Pair large caliper legs only (9-1/2"/228mm)
59E	50301	Large points only (9"/225mm)
59F	50302	Complete Set: 59A, B, C, D, E

\* 59B, 59C and 59D sold only as part of 59F set.



## DIVIDERS

### 85 EXTENSION DIVIDERS WITH CALIPER LEGS

Exceptionally rigid although light in weight and easy to handle. The head is made of forged steel.

#### FEATURES

- The hardened points are bent slightly so they can be rotated and brought closer together if desired
- Sturdy construction of the joint eliminates side deflection of the legs
- Quadrant adjusting nut allows fine-adjustments for close measurements

With Divider - Legs Only		Complete with Divider Legs, Inside and Outside Legs		Size*	
Cat. No.	EDP	Cat. No.	EDP	in	mm
85A	50398	85C	50400	7	175
85B	50399	85D	50401	9	225
85E	50402	85F	50403	12	300



85C



92-6

### 92 CARPENTERS' DIVIDERS

These dividers combine rigidity, light weight and easy handling. The legs are forged steel, well-shaped, properly tempered and highly polished. The adjustable point may be quickly removed and a common pencil inserted in its place.

#### FEATURES

- Sturdy construction of the joint eliminates side deflection of the legs
- Quadrant adjusting nut allows fine-adjustments for close measurements
- Check nut located between the legs locks the legs in place

Cat. No.	EDP	Size*	
		in	mm
92-6	50423	6	150
92-9	50426	9	225

\*Actual capacity is one-third greater than the listed size.



# STEEL BEAM TRAMMELS

## C251 STEEL BEAM TRAMMELS AND ATTACHMENTS

### 10-1/2 – 20"/260 - 500MM BEAMS

A rigid, well-designed trammel for layout, scribing, and measuring distances and circles. The top of the beam is flattened so that when the trams are clamped in position, they will not turn from pressure on the points. The trams are held in place by spring friction, which prevents them from sliding when the nuts are loosened for setting. One tram has a fine-adjusting screw for the points.

Each tram has a knurled swivel grip at the top that turns freely, making it very convenient to swing the tool when scribing circles. The 3" (75mm) points may be adjusted for length in the spring chucks and can be easily replaced with caliper legs or other attachments listed. The ball points with 3" (75mm) holder permit working from holes up to 1-1/2" (38mm) in diameter. A pair of 3" (75mm) caliper points is included with each trammel.

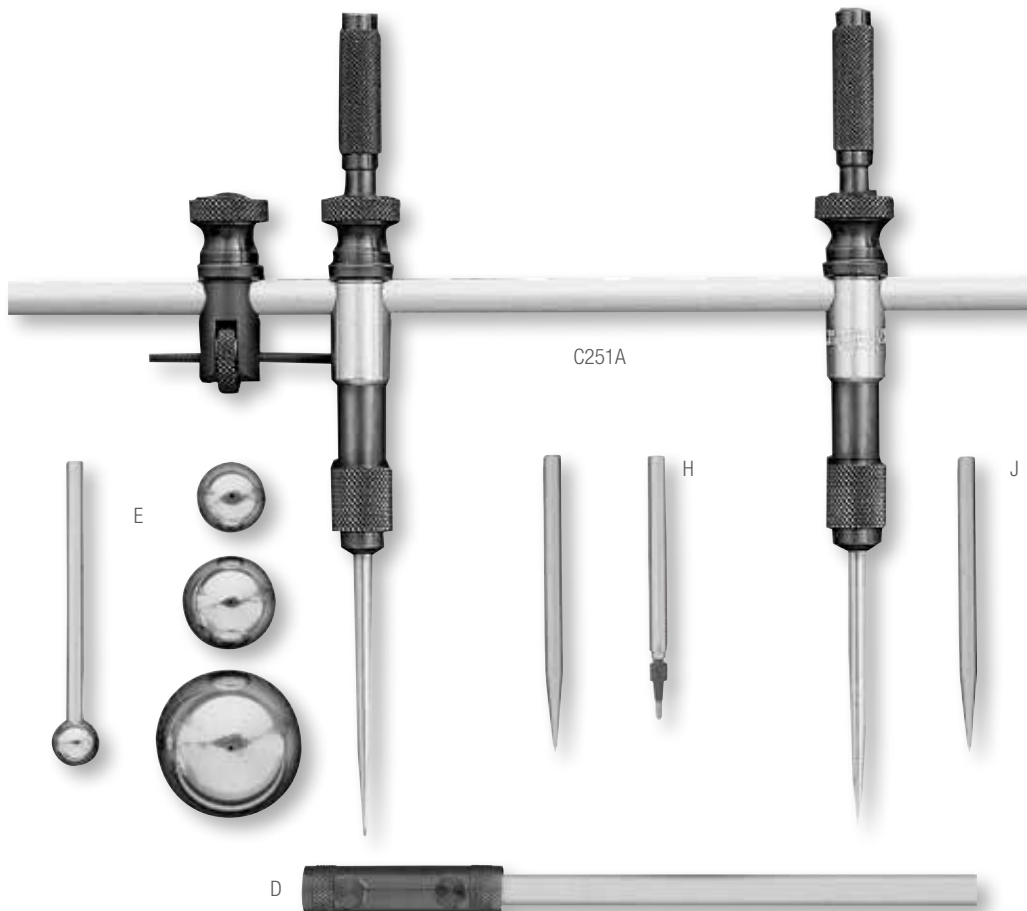
- Ideal for draftsmen, engineers, metal-workers for layout work, scribing and measuring
- Furnished with rigid steel beam – 10-1/2" (263mm), 14-1/2" (360mm) or 20" (500mm) sizes
- Bright chrome finish for longer life, resistance to corrosion
- Highly versatile – handy attachments available to extend range and measure

#### C251 Steel Beam Trammels

Cat. No.	EDP	Max. Dividing Range		Max. Circle Scribing Diameter Range		Beam Size	
		in	mm	in	mm	in	mm
C251A	51205	9	225	18	450	10-1/2	263
C251B	51207	13-1/2	338	26	650	14-1/2	363
C251C	51209	18	450	36	900	20	500

#### C251 Trammel Individual Attachments Only

Photo Key	Cat. No.	EDP	Description
D	C251D	51211	Coupling, with extra 20" (600mm) beam (when used with C251C will scribe circle 72" [1800mm] diameter)
E	C251E	51212	Ball points and holder
H	C251H	51214	Steel point and socket (one) (has .076" [1.9mm] hole diameter to hold leads)
J	251J	51203	Needle point (chrome not available) (one)





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