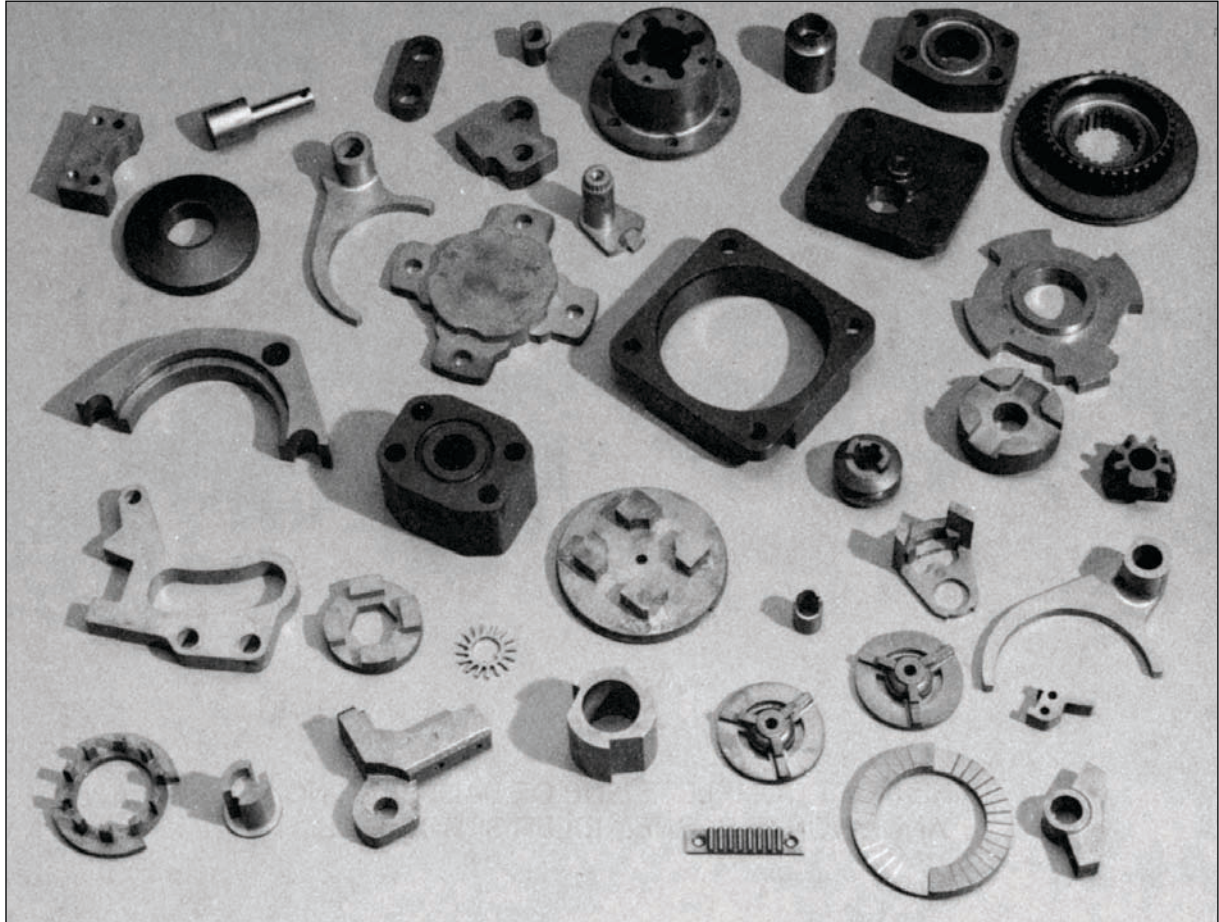


## **SPECIALTY PRODUCTS**

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# Made To Order Specialty Products



**SPLIT S820 SPROCKET**



**TAPER BUSHED  
ADJUSTABLE HUB**



**SPECIAL BEARING  
HOUSING**



*Martin* Semi-Steel 800 Series Conveyor Sprockets are  
Available for All your Flat Top Chain Needs.

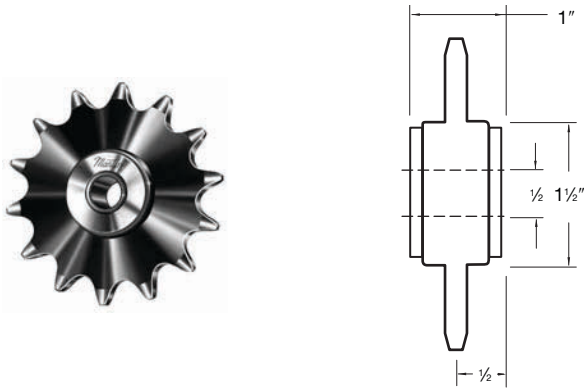


The Most Complete Line of  
Idler Sprockets.



# Idler Sprockets

## Bronze Bushed Type

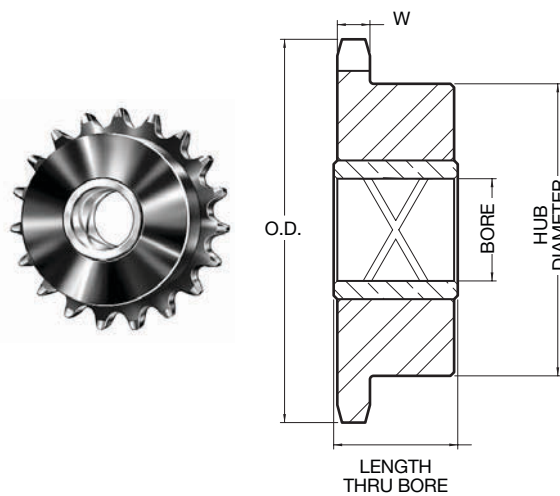


## Bronze Bushed Idler Sprockets

No. Teeth	Catalog Number	Chain Size	O.D.	Stock Bore	Wt. Lbs.
20	31E20	35	2.60	1/2"	.46
15	41E15	41-40	2.65	1/2"	.50
15	51E15	50	3.32	1/2"	.70
14	61E14	60-60H	3.74	1/2"	.92

Above idlers have oil impregnated sintered bronze bearings and are mounted on steel journals. Idler RPM to 2500. Radial load rating to 50 pounds.

## Bronze Bearing Type



## Bronze Bearing Idler Sprocket

No. Teeth	Catalog Number	Bearing Type	Chain Size	O.D.	Stock Bore	Length Thru Bore	W	Hub Diameter	Wt. Lbs.
15	35BR15 1/2	Bronze	35	1.99	1/2"	0.94	0.168	1.35	0.30
21	35BR21 7/8	Bronze	35	2.71	7/8"	1.06	0.168	2.00	0.75
13	41BR13 1/2	Bronze	41	2.33	1/2"	0.94	0.227	1.56	0.50
19	41BR19 7/8	Bronze	41	3.29	7/8"	1.06	0.227	2.50	1.00
13	40BR13 1/2	Bronze	40	2.33	1/2"	0.94	0.284	1.56	0.50
19	40BR19 7/8	Bronze	40	3.29	7/8"	1.06	0.284	2.50	1.25
13	50BR13 1/2	Bronze	50	2.91	1/2"	0.94	0.343	1.87	0.90
17	50BR17 7/8	Bronze	50	3.72	7/8"	1.06	0.343	2.62	1.50
15	60BR15 7/8	Bronze	60	3.98	7/8"	1.06	0.459	2.62	1.75
17	60BR17 1 1/8	Bronze	60	4.46	1 1/8"	1.56	0.459	3.25	2.75
15	80BR15 1 1/8	Bronze	80	5.30	1 1/8"	1.56	0.575	3.50	4.25

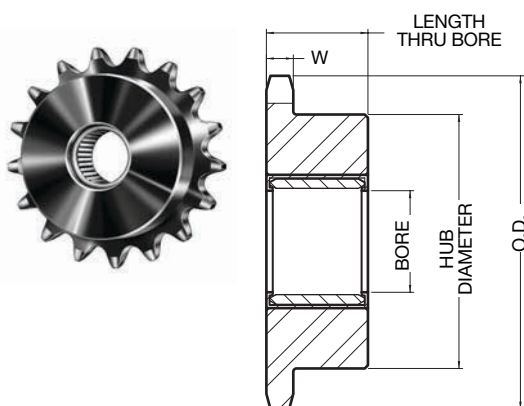
7/8" & 1-1/8" bore have double loop grease groove.

## Radial Load Capacity in Pounds at Various Speeds Needle Bearings

Idler Size	RPM					
	100	500	1000	1500	2000	2500
1/2" Bore	1021	630	512	453	416	389
1" Bore	2751	1698	1379	1221	1120	1048
1-1/2" Bore	6306	3891	3160	2798	2567	-

Ratings shown above are based on an average bearing life of 2500 hours.

## Needle Bearing Type



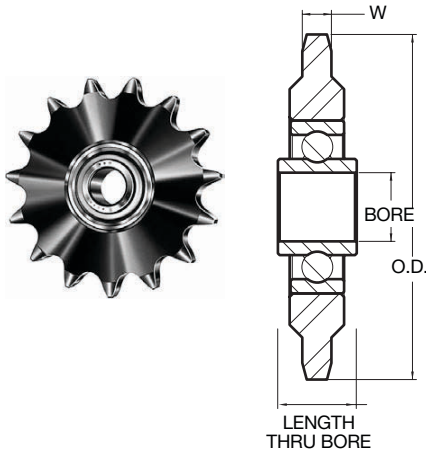
## Needle Bearing Idler Sprocket - Hardened Teeth

No. Teeth	Catalog Number	Bearing Type	Chain Size	O.D.	Stock Bore	Length Thru Bore	W	Hub Diameter	Wt. Lbs.
19	25NB19H 1/2	Needle	25	1.65	0.50	0.75	0.110	1.22	0.10
13	35NB13H 1/2	Needle	35	1.75	0.50	0.75	0.168	1.18	0.20
19	35NB19H 1	Needle	35	2.47	1.00	1.00	0.168	1.84	0.50
19	41NB19H 1	Needle	41	3.29	1.00	1.00	0.227	2.50	1.00
19	40NB19H 1	Needle	40	3.29	1.00	1.00	0.284	2.50	1.10
17	50NB17H 1	Needle	50	3.72	1.00	1.00	0.343	2.25	1.30
17	60NB17H 1	Needle	60	4.46	1.00	1.00	0.459	3.00	2.60
13	80NB13H 1	Needle	80	4.66	1.00	1.25	0.575	2.63	2.90
11	100NB11H 1 1/2	Needle	100	5.01	1.50	1.88	0.692	3.56	3.60
11	120NB11H 1 1/2	Needle	120	6.01	1.50	2.13	0.924	3.56	7.00
11	140NB11H 1 1/2	Needle	140	7.01	1.50	2.25	0.924	4.25	10.90
9	160NB9H 1 1/2	Needle	160	6.70	1.50	2.25	1.156	3.63	9.60

# Idler Sprockets

# Martin

## Ball Bearing Type



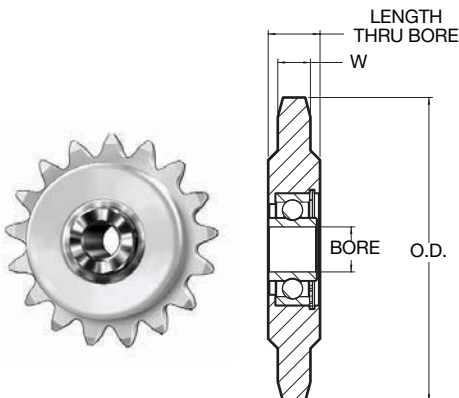
## Ball Bearing Idler Sprocket - Hardened Teeth

No. Teeth	Discontinued Part Number	Catalog Number	Bearing Type	Chain Size	O.D.	Stock Bore	Length Thru Bore	W	Wt. Lbs.
20		25BB20 3/8 *	Ball	25	1.73	0.394	0.35	0.110	0.10
19		35BB19H 3/8	Ball	35	2.47	0.394	0.38	0.168	0.35
19		35BB19H 1/2	Ball	35	2.47	0.510	0.72	0.168	0.35
20	35BB20H	35BB20H 5/8	Ball	35	2.59	0.638	0.72	0.168	0.38
18		41BB18H 1/2	Ball	41	3.14	0.510	0.72	0.227	0.51
18		41BB18H 5/8	Ball	41	3.14	0.638	0.72	0.227	0.51
17	40BB17H	40BB17H 5/8	Ball	40	2.97	0.638	0.72	0.284	0.52
18		40BB18H 1/2	Ball	40	3.14	0.510	0.72	0.284	0.53
18	40BB18H	40BB18H 5/8	Ball	40	3.14	0.638	0.72	0.284	0.53
25		40BB25H 5/8	Ball	40	4.26	0.638	0.72	0.284	0.90
35		40BB35H 5/8	Ball	40	5.86	0.638	0.72	0.284	1.77
48		40BB48H 5/8	Ball	40	7.93	0.638	0.72	0.284	3.37
15	50BB15H	50BB15H 5/8	Ball	50	3.32	0.638	0.72	0.343	0.75
17		50BB17H 1/2	Ball	50	3.72	0.510	0.72	0.343	0.78
17	50BB17H	50BB17H 5/8	Ball	50	3.72	0.638	0.72	0.343	0.78
25		50BB25H 3/4	Ball	50	5.32	0.750	0.61	0.343	1.66
39		50BB39H 3/4	Ball	50	8.12	0.750	0.61	0.343	4.09
12		60BB12H 5/8	Ball	60	3.25	0.638	0.72	0.459	0.72
13	60BB13H	60BB13H 5/8	Ball	60	3.49	0.638	0.72	0.459	0.76
15		60BB15H 1/2	Ball	60	3.98	0.510	0.72	0.459	1.06
15	60BB15H	60BB15H 5/8	Ball	60	3.98	0.638	0.72	0.459	1.06
17		60BB17H 5/8	Ball	60	4.46	0.638	0.72	0.459	1.10
12	80BB12H	80BB12H 3/4	Ball	80	4.33	0.750	0.61	0.575	1.50

Note: .394 Stock Bore is +.000 -.0003; .510 Stock Bore is +.005 -.000; .638 Stock Bore is +.005 -.000; .750 Stock Bore is +.005 -.000. Discontinued Part Numbers will be replaced with Catalog Number when existing inventory is exhausted.

\* Unhardened Teeth

## Non-Metallic Teeth -Ball Bearing Type



## Ball Bearing Idler Sprockets - Non Metallic Teeth

No. Teeth	Catalog Number	Bearing Type	Chain Size	O.D.	Stock Bore	Length Thru Bore	W	Wt. Lbs.
17	40BB17NM 1/2	Ball	40	2.97	0.510	0.72	0.284	0.24
18	40BB18NM 5/8	Ball	40	3.14	0.638	0.72	0.284	0.23
17	50BB17NM 1/2	Ball	50	3.72	0.510	0.72	0.343	0.29
18	50BB18NM 5/8	Ball	50	3.92	0.638	0.72	0.343	0.29
15	60BB15NM 1/2	Ball	60	3.98	0.510	0.72	0.459	0.32
16	60BB16NM 5/8	Ball	60	4.22	0.638	0.72	0.459	0.33
12	80BB12NM 3/4	Ball	80	4.33	0.750	0.61	0.575	0.44

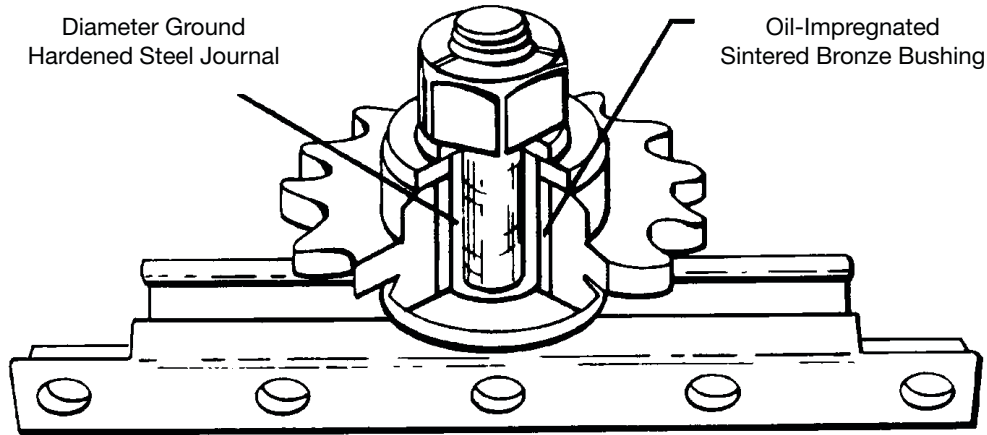
Note: .510 Stock Bore is +.005 -.000; .638 Stock Bore is +.005 -.000;

.750 Stock Bore is +.005 -.000

## Radial Load Capacity in Pounds at Various Speeds Ball Bearings

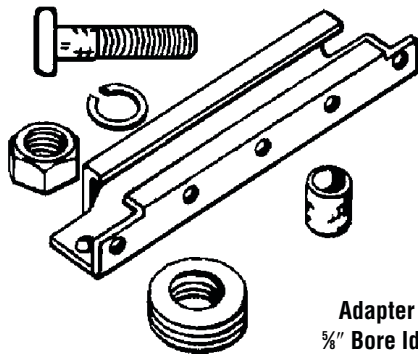
Idler Size	RPM					
	100	500	1000	1500	2000	2500
3/8" Bore	620	363	288	252	229	212
1/2" & 5/8" Bore	800	460	360	320	290	270
3/4" Bore	1290	755	600	523	478	440

Ratings shown above are based on an average bearing life of 2500 hours.

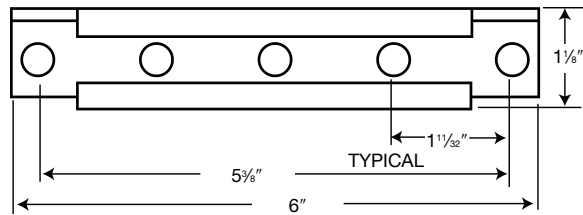


### Chain Tightener (Less Idler Sprocket)

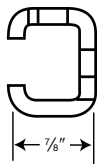
NO. E-5006



Adapter for  
5/8" Bore Idler



Attachment Bolts Not  
Furnished



Attachments Holes  
for 7/8" Bolts

*Martin* Chain Tighteners are economical to use . . . they provide everything needed for a quick, easy installation . . . they save time and money . . . there is no need to design, procure or custom make and assemble separate parts . . . they accommodate mounting in several different positions . . . parallel or at 90° to the mounting surface . . . as cantilever or attached each end.

## Features of *Martin* Idlers

Smooth-running, oil-impregnated, sintered bronze, extra-duty bearing press-fitted in sprocket. Steel journal case hardened . . . for maximum resistance to wear . . . diameter ground surface for free running under load.

Steel sprockets used in *Martin* Idlers . . . are accurately machined (not stamped) the same as sprockets normally supplied for power transmission use.

# 800 Series Conveyor Sprockets

## *Martin* Series 800 Conveyor Sprockets Manufactured From High Quality Semi-Steel



**815 Solid Face  
with Guide Ring Holes  
for Straight Running Chains**

THE NEW  
"QRS"  
SPLIT



**820 Grooved Face for  
Straight Running Chain**

PAT. # 4,964,842

**Split  
815/820 Solid and Grooved Face  
with Guide Ring Holes  
Steel and Thermoplastic**



**821 Heavy Duty  
for Wide Hinged Chain  
Straight Running**



**880 and 882 Single Duty  
for Side Flex Chains**



**881 for Side Flex Chain**

Sprockets for 815, 820, and 881 are all double duty. Sprockets with odd numbers of teeth are recommended for longer wear since a given tooth engages the chain every other revolution. Sprockets with 19, 21, 23, and 25 teeth are preferred. Sprockets with even number of teeth should be advanced one tooth periodically to attain even wear.

## *Martin* “QRS®” Split Sprocket

### Series 815/820 Split Sprockets for Flat Top Conveyor Chains

Split Sprockets Manufactured  
from Steel and Thermoplastic Material  
Stocked in 21, 23, 25, and 27 Tooth Sizes

*Martin's* **Quick Replacement Split Sprocket** eliminates the time consuming and costly dismounting of shafts and pillow blocks to remove worn sprockets — all that's required is a wrench

“QRS” Split Thermoplastic Sprocket Advantages:  
Lightweight — Service Temp. to 300°F — Low Temp. Toughness  
— Excellent Resistance to Oils, Grease, Soaps, and Detergents  
— Outstanding Abrasion and Impact Resistance

Available with solid and grooved face  
and furnished with rust resistant plated steel bolts and nuts

Split (plated carbon steel and stainless) Guide Rings  
available, if necessary, for easy assembly



Proudly made in the U.S.A.

PAT. # 4,964,842

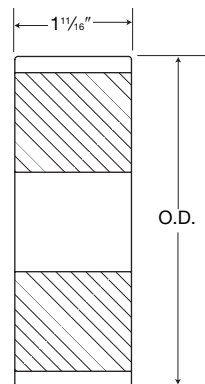
Call your *Martin* Distributor

# Split Steel and Thermoplastic Stock Bore

## Series 815 Sprockets — Split Steel

Catalog Number	No. Teeth		Pitch Diameter†	Outside Diameter†	Bore†		Weight
	Actual	Effective			Stock	Maximum	
QRS815A21	21	10%	5.089 (129.26)	5.12 (130.0)	$\frac{3}{8}$ (19.1)	1½ (38.1)	5.0 (2.27)
QRS815A23	23	11%	5.560 (141.22)	5.59 (142.0)	$\frac{3}{8}$ (19.1)	1½ (38.1)	5.6 (2.54)
QRS815A25	25	12%	6.032 (153.21)	6.07 (154.2)	$\frac{3}{8}$ (19.1)	1½ (38.1)	6.6 (3.0)
QRS815A27	27	13%	6.504 (165.20)	6.56 (166.6)	$\frac{3}{8}$ (19.1)	1½ (38.1)	7.8 (3.54)

★ NOTE: Supplied with  $\frac{3}{8}$ - 18 standard setscrew @ 90° to split.



Solid Face

## Series 815 Sprockets — Split Thermoplastic

Catalog Number	No. Teeth		Pitch Diameter†	Outside Diameter†	Bore†		Weight
	Actual	Effective			Stock	Maximum	
QRS815A21P	21	10%	5.089 (129.26)	5.12 (130.0)	$\frac{3}{8}$ (19.1)	1½ (38.1)	.94 (.43)
QRS815A23P	23	11%	5.560 (141.22)	5.59 (142.0)	$\frac{3}{8}$ (19.1)	1½ (38.1)	1.00 (.45)
QRS815A25P	25	12%	6.032 (153.21)	6.07 (154.2)	$\frac{3}{8}$ (19.1)	1½ (38.1)	1.10 (.50)
QRS815A27P	27	13%	6.504 (165.20)	6.56 (166.6)	$\frac{3}{8}$ (19.1)	1½ (38.1)	1.25 (.57)

Thermoplastic temperature operating range -20°F to +300°F

★ NOTE: Supplied with  $\frac{3}{8}$ - 18 plated setscrew @ 90° to split.



PAT. #4,964,842

## Series 820 Sprockets — Split Steel

Catalog Number	No. Teeth		Pitch Diameter†	Outside Diameter†	Bore†		Weight
	Actual	Effective			Stock	Maximum	
QRS820A21	21	10%	5.089 (129.26)	5.12 (130.0)	$\frac{3}{8}$ (19.1)	1½ (38.1)	5.0 (2.27)
QRS820A23	23	11%	5.560 (141.22)	5.59 (142.0)	$\frac{3}{8}$ (19.1)	1½ (38.1)	5.6 (2.54)
QRS820A25	25	12%	6.032 (153.21)	6.07 (154.2)	$\frac{3}{8}$ (19.1)	1½ (38.1)	6.6 (3.0)
QRS820A27	27	13%	6.504 (165.20)	6.56 (166.6)	$\frac{3}{8}$ (19.1)	1½ (38.1)	7.8 (3.54)

★ NOTE: Supplied with  $\frac{3}{8}$ - 18 standard setscrew @ 90° to split.



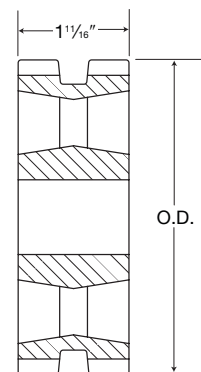
## Series 820 Sprockets — Split Thermoplastic

Catalog Number	No. Teeth		Pitch Diameter†	Outside Diameter†	Bore†		Weight
	Actual	Effective			Stock	Maximum	
QRS820A21P	21	10%	5.089 (129.26)	5.12 (130.0)	$\frac{3}{8}$ (19.1)	1½ (38.1)	.94 (.43)
QRS820A23P	23	11%	5.560 (141.22)	5.59 (142.0)	$\frac{3}{8}$ (19.1)	1½ (38.1)	1.00 (.45)
QRS820A25P	25	12%	6.032 (153.21)	6.07 (154.2)	$\frac{3}{8}$ (19.1)	1½ (38.1)	1.10 (.50)
QRS820A27P	27	13%	6.504 (165.20)	6.56 (166.6)	$\frac{3}{8}$ (19.1)	1½ (38.1)	1.25 (.57)

★ NOTE: Supplied with  $\frac{3}{8}$ - 18 plated setscrew @ 90° to split.

† Inches/mm

For Guide Ring Specifications See page A-12



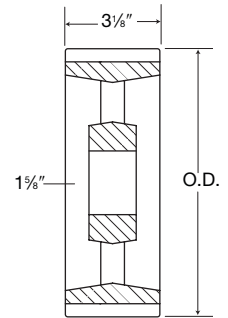
Grooved Face



## Series 821 Sprockets — Semi-Steel — Stock Bore

Catalog Number	No. Teeth		Pitch Diameter†	Outside Diameter†	Bore†		Weight
	Actual	Effective			Stock	Maximum	
821A21	21	10½	5.089 (129.26)	5.12 (130.1)	1 (25.4)	1¾ (44.5)	6.7 (3.0)
821A23	23	11½	5.560 (141.22)	5.59 (142.0)	1 (25.4)	1¾ (44.5)	7 (3.2)
821A25	25	12½	6.032 (153.21)	5.07 (154.2)	1 (25.4)	1¾ (44.5)	7.3 (3.3)
821A27	27	13½	6.504 (165.20)	6.56 (166.6)	1 (25.4)	1¾ (44.5)	7.6 (3.4)
821A29	29	14½	6.978 (177.24)	7.05 (179.1)	1 (25.4)	1¾ (44.5)	8.0 (3.6)

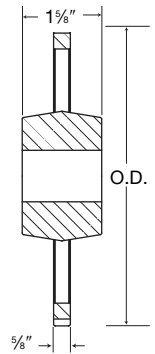
NOTE: † Inches/mm  
821 Series also runs with 815 H chain.



## Series 880 Sprockets — Semi-Steel — Stock Bore

Catalog Number	No. Teeth		Pitch Diameter†	Outside Diameter†	Bore†		Weight
	Actual	Effective			Stock	Maximum	
880C9•	9	9	4.386 (111.40)	4.33 (110.0)	¾ (19.1)	1¾ (44.5)	2.8 (1.3)
880C10	10	10	4.854 (123.29)	4.82 (122.4)	¾ (19.1)	1¾ (31.8)	3.2 (1.4)
880C11	11	11	5.324 (135.22)	5.31 (134.9)	¾ (19.1)	1¾ (44.5)	3.4 (1.5)
880C12	12	12	5.796 (147.22)	5.80 (147.3)	¾ (19.1)	1¾ (44.5)	3.6 (1.6)
880C15	15	15	7.215 (182.26)	7.26 (184.4)	¾ (19.1)	1¾ (44.5)	4.2 (1.9)

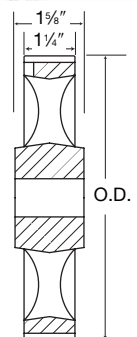
NOTE: • Block Body – Other sizes are arm body  
† Inches/mm



## Series 881 Sprockets — Semi-Steel — Stock Bore

Catalog Number	No. Teeth		Pitch Diameter†	Outside Diameter†	Bore†		Weight
	Actual	Effective			Stock	Maximum	
881C21	21	10½	5.089 (129.26)	5.120 (130.05)	¾ (19.1)	1¾ (44.5)	4.2 (1.9)
881C23	23	11½	5.560 (141.22)	5.590 (141.99)	¾ (19.1)	1¾ (44.5)	4.6 (2.1)
881C25	25	12½	6.032 (153.21)	6.070 (154.18)	¾ (19.1)	1¾ (44.5)	5.0 (2.3)

NOTE: † Inches/mm



# 800 Series Conveyor Sprockets

# Martin



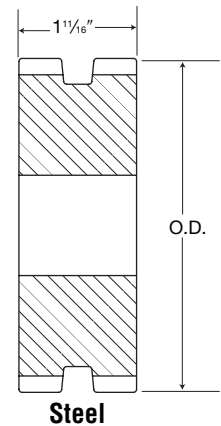
## Series 820 Sprockets — Semi-Steel — Stock Bore

Catalog Number	No. Teeth		Pitch Diameter†	Outside Diameter†	Bore†		Weight
	Actual	Effective			Stock	Maximum	
820A13B•	13	6½	3.228 (81.99)	3.11 (79.0)	¾ (19.1)	1¼ (31.8)	2.4 (1.1)
820A15B•	15	7½	3.688 (93.68)	3.63 (92.2)	¾ (19.1)	1¼ (31.8)	3.6 (1.6)
820A17B•	17	8½	4.153 (105.49)	4.12 (104.7)	¾ (19.1)	1⅞ (42.9)	4.7 (2.1)
820A19	19	9½	4.620 (117.35)	4.61 (117.1)	¾ (19.1)	1¼ (31.8)	3.1 (1.5)
820A20	20	10	4.854 (123.29)	4.86 (123.4)	¾ (19.1)	1¼ (31.8)	3.8 (1.7)
820A21	21	10½	5.089 (129.26)	5.12 (130.0)	¾ (19.1)	1¾ (44.5)	4.6 (2.1)
820A21B•	21	10½	5.089 (129.26)	5.12 (130.0)	¾ (19.1)	2½ (63.5)	7.1 (3.3)
820A22	22	11	5.324 (135.23)	5.35 (135.9)	¾ (19.1)	1¾ (44.5)	4.2 (1.9)
820A23	23	11½	5.560 (141.22)	5.59 (142.0)	¾ (19.1)	1¾ (44.5)	5.3 (2.4)
820A24	24	12	5.796 (147.22)	5.83 (148.1)	¾ (19.1)	1¾ (44.5)	4.4 (2.0)
820A25	25	12½	6.032 (153.21)	6.07 (154.2)	¾ (19.1)	2 (50.8)	5.6 (2.4)
820A25B•	25	12½	6.032 (153.21)	6.07 (154.2)	¾ (19.1)	3⅞ (81.0)	9.6 (4.4)
820A27	27	13½	6.504 (165.20)	6.56 (166.6)	¾ (19.1)	2 (50.8)	6.5 (2.8)
820A29	29	14½	6.978 (177.24)	7.05 (179.1)	¾ (19.1)	2 (50.8)	6.8 (3.1)
820A31	31	15½	7.452 (189.28)	7.53 (191.3)	¾ (19.1)	2 (50.8)	6.9 (3.1)
820A41	41	20½	9.826 (249.58)	9.93 (252.2)	¾ (19.1)	2½ (64)	16.00 (7.1)

NOTE: • Block Body — Other sizes are arm body  
† Inches/mm

Max. bore shown is with Standard Keyway and Setscrew.

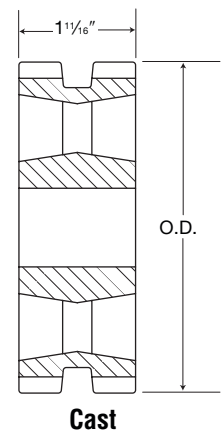
820 Series stocked grooved. (Guide ring holes in 21, 23, 25, and 27 tooth sizes can be provided upon request).



## Series 820 Sprockets — Semi-Steel — Bored to Size

Catalog Number	Inch/Metric Stock Finished Bores With Standard Keyway and Setscrew				
	820BS19	1" (25.4)			
820BS21	1" (25.4)				
820BS23	¾" (22.2)	1" (25.4)	1½" (28.6)	1⅞" (30.2)	1¼" (31.8)
820BS25	1" (25.4)				
820BS27	1" (25.4)				

Stock grooved without guide ring holes. All arm body.





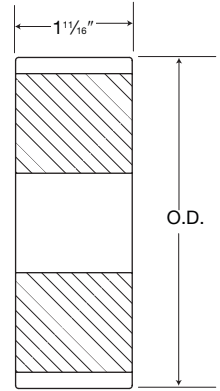
# 800 Series Conveyor Sprockets



## Series 815 Sprockets — Semi-Steel — Stock Bore

Catalog Number	No. Teeth		Pitch Diameter†	Outside Diameter†	Bore†		Weight
	Actual	Effective			Stock	Maximum	
815A13B•	13	6½	3.228 (81.99)	3.11 (79.0)	¾ (19.1)	1¼ (31.8)	2.4 (1.1)
815A15B•	15	7½	3.688 (93.68)	3.63 (92.2)	¾ (19.1)	1¼ (31.8)	3.6 (1.6)
815A17B•	17	8½	4.153 (105.49)	4.12 (104.7)	¾ (19.1)	1⅝ (42.9)	4.7 (2.1)
815A19	19	9½	4.620 (117.35)	4.61 (117.1)	¾ (19.1)	1¼ (31.8)	3.1 (1.5)
815A20	20	10	4.854 (123.29)	4.86 (123.4)	¾ (19.1)	1¼ (31.8)	3.8 (1.7)
815A21	21	10½	5.089 (129.26)	5.12 (130.0)	¾ (19.1)	1¼ (44.5)	4.6 (2.1)
815A21B•	21	10½	5.089 (129.26)	5.12 (130.0)	¾ (19.1)	2½ (63.5)	7.1 (3.3)
815A22	22	11	5.324 (135.23)	5.35 (135.9)	¾ (19.1)	1¼ (44.5)	4.2 (1.9)
815A23	23	11½	5.560 (141.22)	5.59 (142.0)	¾ (19.1)	1¼ (44.5)	5.3 (2.4)
815A24	24	12	5.796 (147.22)	5.83 (148.1)	¾ (19.1)	1¼ (44.5)	4.4 (2.0)
815A25	25	12½	6.032 (153.21)	6.07 (154.2)	¾ (19.1)	2 (50.8)	5.6 (2.4)
815A25B•	25	12½	6.032 (153.21)	6.07 (154.2)	¾ (19.1)	3⅝ (81.0)	9.6 (4.4)
815A27	27	13½	6.504 (165.20)	6.56 (166.6)	¾ (19.1)	2 (50.8)	6.5 (2.8)
815A29	29	14½	6.978 (177.24)	7.05 (179.1)	¾ (19.1)	2 (50.8)	6.8 (3.1)
815A31	31	15½	7.452 (189.28)	7.53 (191.3)	¾ (19.1)	2 (50.8)	6.9 (3.1)
815A41	41	20½	9.826 (249.58)	9.93 (252.2)	¾ (19.1)	2½ (64)	16.00 (7.1)

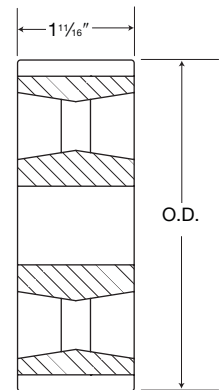
NOTE: • Block Body — Other sizes are arm body  
 † Inches/mm  
 Max. bore shown is with Standard Keyway and Setscrew.  
 815 Series stocked not grooved, with guide ring holes.



## Series 815 Sprockets — Semi-Steel — Bored to Size

Catalog Number	Inch/Metric				
	Stock Finished Bores With Standard Keyway and Setscrew				
815BS19		1" (25.4)			
815BS21		1" (25.4)			
815BS23	⅞" (22.2)	1" (25.4)	1⅝" (28.6)	1⅜" (30.2)	1¼" (31.8)
815BS25		1" (25.4)		1⅜" (30.2)	1¼" (31.8)
815BS27		1" (25.4)			

Stock not grooved but with guide ring holes. All arm body.

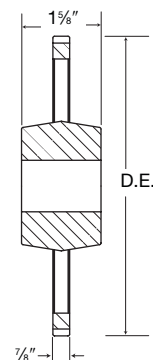


# Series 800 Conveyor Sprockets

## Series 882 Sprockets — Semi-Steel — Stock Bore

Catalog Number	No. Teeth		Pitch Diameter†	Outside Diameter†	Bore†		Weight
	Actual	Effective			Stock	Maximum	
882C9	9	9	4.386 (111.40)	4.430 (112.5)	$\frac{3}{8}$ (19.1)	$1\frac{1}{4}$ (44.5)	3.8 (1.8)
882C10	10	10	4.854 (123.29)	4.920 (125.0)	$\frac{3}{8}$ (19.1)	$1\frac{1}{4}$ (44.5)	4.2 (1.9)
882C11	11	11	5.325 (135.25)	5.410 (137.40)	$\frac{3}{8}$ (19.1)	$1\frac{1}{4}$ (44.5)	4.4 (2.1)
882C12*	12	12	5.796 (147.21)	5.90 (149.90)	$\frac{3}{8}$ (19.1)	$1\frac{1}{4}$ (44.5)	4.6 (2.2)

NOTE: • Arm Body — Other sizes are block body  
† Inches/mm



## 815 Guide Rings — Steel and Stainless Steel

Catalog Number★	O.D. Inches (mm)	Thick Inches (mm)	Weight Per Set
GR15-16 GR15-16SS	3.62 (91.9)	$\frac{1}{8}$ (1.6)	.23 (.10)
GR17-18 GR17-18SS	4.11 (104.4)	$\frac{1}{8}$ (1.6)	.26 (.120)
GR19-20 GR19-20SS	4.58 (116.3)	$\frac{1}{8}$ (3.2)	.37 (.17)
GR21-22 GR21-22SS	5.09 (129.3)	$\frac{1}{8}$ (3.2)	.44 (.20)
GR23-24 GR23-24SS	5.56 (141.2)	$\frac{1}{8}$ (3.2)	.46 (.21)
GR25-26 GR25-26SS	6.04 (153.4)	$\frac{1}{8}$ (3.2)	.47 (.21)
GR27-28 GR27-28SS	6.53 (165.9)	$\frac{1}{8}$ (3.2)	.53 (.24)
GR29-30 GR29-30SS	7.02 (178.3)	$\frac{1}{8}$ (3.2)	.56 (.25)
GR31-32 GR31-32SS	7.50 (190.5)	$\frac{1}{8}$ (3.2)	.67 (.30)
GR41-42 GR41-42SS	9.89 (251.2)	$\frac{1}{8}$ (3.2)	.92 (.42)

★ Carbon Steel  
Stainless Steel



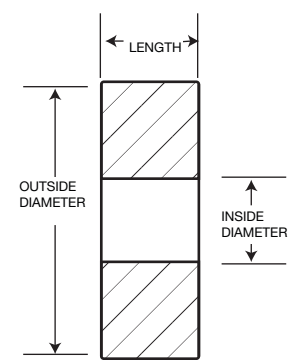
# Semi-Finished Weld-On Hubs

## Stock Semi-Finished Weld-On Hubs

Catalog No.	Dimensions			Approx. Wt. Lbs.
	Outside Diameter	Length	Inside Diameter	
225-28-19	2 1/4	7/8	1 1/32	.9
225-28-23	2 1/4	7/8	2 3/32	.9
225-32-00	2 1/4	1	—	1.1
250-30-00	2 1/2	1 5/16	—	1.3
250-40-00	2 1/2	1 1/4	—	1.7
300-25-19	3	2 5/32	1 1/32	1.2
300-30-23	3	1 5/16	2 3/32	1.6
300-30-30	3	1 5/16	1 5/16	1.6
300-32-00	3	1	—	2.0
300-38-00	3	1 1/8	—	2.4
300-40-30	3	1 1/4	1 5/16	2.3
325-25-19	3 1/4	2 5/32	1 5/32	1.8
325-30-23	3 1/4	1 5/16	2 3/32	2.1
350-30-00	3 1/2	1 5/16	—	2.6
350-34-00	3 1/2	1 1/8	—	2.9
350-38-00	3 1/2	1 3/16	—	3.2
356-28-23	3 3/16	7/8	2 3/32	2.4
356-28-30	3 3/16	7/8	1 5/16	2.3
356-31-23	3 3/16	3 1/32	2 3/32	2.6
375-30-00	3 3/4	1 5/16	—	2.9
375-30-30	3 3/4	1 5/16	1 5/16	2.8
375-45-30	3 3/4	1 1/2	1 5/16	4.1
400-26-00	4	1 3/16	—	2.9
400-26-23	4	1 3/16	2 3/32	2.8
400-26-30	4	1 3/16	1 5/16	2.7
400-31-30	4	3 1/32	1 5/16	3.3
400-32-23	4	1	2 3/32	3.5
400-36-00	4	1 1/8	—	3.5
400-48-30	4	1 1/2	1 5/16	5.1
425-26-00	4 1/4	1 3/16	—	3.3
425-26-30	4 1/4	1 3/16	1 5/16	3.1
425-30-30	4 1/4	1 3/16	1 5/16	3.6
425-38-30	4 1/4	1 3/16	1 5/16	4.5
425-42-40	4 1/4	1 1/8	1 1/4	4.8
425-45-30	4 1/4	1 1/2	1 5/16	5.4
425-50-40	4 1/4	1 1/8	1 1/4	5.7
450-34-00	4 1/2	1 1/8	—	4.8
450-36-40	4 1/2	1 1/8	1 1/4	4.7
450-44-40	4 1/2	1 1/8	1 1/2	5.7
450-44-48	4 1/2	1 1/8	1 1/2	5.7
450-48-48	4 1/2	1 1/2	1 1/2	6.0
475-12-40	4 3/4	3/8	1 1/4	1.8
475-22-30	4 3/4	1 1/8	1 5/16	3.3
475-22-40	4 3/4	1 1/8	1 1/4	3.3
475-26-40	4 3/4	1 3/8	1 1/4	4.0
475-30-30	4 3/4	1 5/16	1 5/16	4.5
475-36-00	4 3/4	1 1/8	—	5.7
475-36-30	4 3/4	1 1/8	1 5/16	5.5
475-44-48	4 3/4	1 1/8	1 1/2	6.2
475-48-38	4 3/4	1 1/2	1 3/8	7.0
475-48-40	4 3/4	1 1/2	1 1/4	7.0
475-50-00	4 3/4	1 1/8	—	7.8
475-50-40	4 3/4	1 1/8	1 1/4	7.8
475-54-00	4 3/4	1 1/16	—	8.5
500-42-40	5	1 1/8	1 1/4	6.8
500-50-00	5	1 1/8	—	8.7
500-50-40	5	1 1/8	1 1/4	8.7
500-58-40	5	1 1/8	1 1/4	9.5
500-58-48	5	1 1/16	1 1/2	9.4
525-24-32	5 1/4	3/4	1	4.4
525-34-00	5 1/4	1 1/16	—	6.5
525-36-40	5 1/4	1 1/8	1 1/4	6.5
525-42-00	5 1/4	1 1/8	—	8.1
525-48-40	5 1/4	1 1/2	1 1/4	8.7
525-48-48	5 1/4	1 1/2	1 1/2	8.7
525-62-32	5 1/4	1 1/16	1	11.5
525-72-32	5 1/4	2 1/4	1	13.3
550-34-00	5 1/2	1 1/8	—	7.2
550-44-40	5 1/2	1 1/8	1 1/4	8.6
550-44-48	5 1/2	1 1/8	1 1/2	8.6

Catalog No.	Dimensions			Approx. Wt. Lbs.
	Outside Diameter	Length	Inside Diameter	
550-48-40	5 1/2	1 1/2	1 1/4	9.3
550-48-48	5 1/2	1 1/2	1 1/2	9.3
550-58-40	5 1/2	1 1/8	1 1/4	11.6
550-58-48	5 1/2	1 1/8	1 1/2	11.6
550-64-48	5 1/2	2	1 1/2	12.5
575-24-32	5 3/4	3/4	1	5.4
575-32-00	5 3/4	1	—	7.4
575-42-00	5 3/4	1 1/8	—	9.7
575-42-48	5 3/4	1 1/8	1 1/2	9.7
575-44-36	5 3/4	1 1/8	1 1/8	10.9
575-52-00	5 3/4	1 1/8	—	12.0
575-52-48	5 3/4	1 1/8	1 1/2	12.0
575-72-32	5 3/4	2 1/4	1	16.1
600-41-48	6	1 1/2	1 1/2	9.6
600-46-48	6	1 1/8	1 1/2	10.8
600-52-48	6	1 1/8	1 1/2	12.2
600-58-48	6	1 1/8	1 1/2	13.6
600-62-00	6	1 1/8	—	15.5
600-62-40	6	1 1/8	1 1/4	15.5
600-62-48	6	1 1/8	1 1/2	15.5
600-68-48	6	2 1/8	1 1/2	16.0
600-80-48	6	2 1/2	1 1/2	18.8
625-16-40	6 1/4	1/2	1 1/4	4.4
625-16-48	6 1/4	1/2	1 1/4	4.4
625-24-32	6 1/4	3/4	1	6.4
625-24-40	6 1/4	3/4	1 1/4	6.4
625-24-48	6 1/4	3/4	1 1/2	6.4
625-28-48	6 1/4	3/8	1 1/2	7.2
625-30-48	6 1/4	1 5/16	1 1/2	8.1
625-32-40	6 1/4	1	1 1/4	8.3
625-34-48	6 1/4	1 1/8	1 1/2	9.3
625-38-40	6 1/4	1 1/8	1 1/4	10.0
625-38-48	6 1/4	1 1/8	1 1/2	9.7
625-48-48	6 1/4	1 1/2	1 1/2	12.3
625-52-48	6 1/4	1 1/2	1 1/2	13.3
625-68-48	6 1/4	2 1/2	1 1/2	17.4
625-80-32	6 1/4	2 1/2	1	21.1
650-44-00	6 1/2	1 1/8	—	12.9
650-44-48	6 1/2	1 1/4	1 1/2	12.9
650-52-48	6 1/2	1 1/8	1 1/2	14.5
650-72-48	6 1/2	2 1/4	1 1/2	20.0
650-96-48	6 1/2	3	1 1/2	26.7
675-36-40	6 3/4	1 1/8	1 1/4	11.0
675-38-48	6 3/4	1 1/8	1 1/2	11.4
675-44-48	6 3/4	1 1/8	1 1/2	13.3
675-61-48	6 3/4	1 2 3/32	1 1/2	19.4
675-72-48	6 3/4	2 1/4	1 1/2	21.7
675-94-40	6 3/4	2 1/16	1 1/2	28.3
700-24-48	7	3/4	1 1/2	8.2
700-26-48	7	1 3/16	1 1/2	8.9
700-28-48	7	7/8	1 1/2	8.9
700-30-48	7	1 5/16	1 1/2	9.2
700-32-48	7	1	1 1/2	9.8
700-36-48	7	1 1/8	1 1/2	12.3
700-38-48	7	1 1/8	1 1/2	13.0
700-44-48	7	1 1/8	1 1/2	14.3
700-52-48	7	1 1/8	1 1/2	16.9
700-58-48	7	1 1/8	1 1/2	18.9
700-61-48	7	1 2 3/32	1 1/2	19.8
700-62-48	7	1 1/8	1 1/2	21.1
700-68-48	7	2 1/8	1 1/2	22.1
700-112-48	7	3 1/2	1 1/2	36.4
725-36-40	7 1/4	1 1/8	1 1/4	12.8
725-94-40	7 1/4	2 1/16	1 1/4	33.3
750-24-48	7 1/2	3/4	1 1/2	9.0
750-44-48	7 1/2	1 1/8	1 1/2	16.5
750-50-48	7 1/2	1 1/8	1 1/2	18.8
750-58-48	7 1/2	1 1/8	1 1/2	21.8
750-66-48	7 1/2	2 1/8	1 1/2	24.8
750-68-48	7 1/2	2 1/8	1 1/2	25.5

Catalog No.	Dimensions			Approx. Wt. Lbs.
	Outside Diameter	Length	Inside Diameter	
750-70-48	7 1/2	2 1/8	1 1/2	26.3
750-72-48	7 1/2	2 1/4	1 1/2	27.0
750-74-48	7 1/2	2 1/8	1 1/2	18.5
750-84-48	7 1/2	2 1/8	1 1/2	31.5
750-94-48	7 1/2	2 1/16	1 1/2	35.0
775-36-48	7 3/4	1 1/8	1 1/2	23.0
775-58-48	7 3/4	1 1/8	1 1/2	25.0
775-66-48	7 3/4	2 1/8	1 1/2	26.0
775-74-48	7 3/4	2 5/16	1 1/2	31.0
775-94-48	7 3/4	2 1/16	1 1/2	36.0
800-54-48	8	1 1/16	1 1/2	23.2
800-62-48	8	1 1/8	1 1/2	26.6
800-72-48	8	2 1/4	1 1/2	30.9
800-78-48	8	2 1/8	1 1/2	33.5
800-112-48	8	3 1/2	1 1/2	48.1
850-50-48	8 1/2	1 1/8	1 1/2	24.3
850-52-48	8 1/2	1 1/8	1 1/2	24.3
850-72-48	8 1/2	2 1/8	1 1/2	35.0
850-84-48	8 1/2	2 1/4	1 1/2	40.8
850-124-48	8 1/2	3 1/4	1 1/2	50.0
900-58-48	9	1 1/16	1 1/2	32.0
900-60-48	9	1 1/8	1 1/2	32.9
900-72-48	9	2 1/4	1 1/2	39.4
900-112-48	9	3 1/2	1 1/2	61.3
950-52-188	9 1/2	1 1/8	5 1/2	20.2
950-54-48	9 1/2	1 1/16	1 1/2	33.1
950-60-188	9 1/2	1 1/8	5 1/2	23.3
950-60-48	9 1/2	2 1/8	1 1/2	36.8
950-66-48	9 1/2	2 1/8	1 1/2	40.4
950-70-188	9 1/2	2 1/2	5 1/2	27.5
950-70-48	9 1/2	2 1/8	1 1/2	44.0
950-74-188	9 1/2	2 1/8	5 1/2	28.7
950-74-48	9 1/2	2 5/16	1 1/2	45.3
950-78-188	9 1/2	2 1/8	5 1/2	30.3
950-78-48	9 1/2	2 1/8	1 1/2	49.0
950-80-48	9 1/2	2 1/8	1 1/2	49.0
950-82-188	9 1/2	2 1/8	5 1/2	31.8
950-82-48	9 1/2	2 1/8	1 1/2	50.2
950-86-188	9 1/2	2 1/16	5 1/2	33.4
950-86-48	9 1/2	2 1/16	1 1/2	54.0
950-88-48	9 1/2	2 1/8	1 1/2	53.9
950-96-48	9 1/2	3	1 1/2	58.7
100-80-48	10	2 1/2	1 1/2	54.4
100-100-48	10	3 1/4	1 1/2	68.0
100-116-48	10	3 1/8	1 1/2	78.8
100-124-48	10	3 1/8	1 1/2	84.3
105-56-200	10 1/2	1 1/4	6 1/4	27.8
105-58-200	10 1/2	1 1/8	6 1/4	28.7
105-100-200	10 1/2	3 1/8	6 1/4	49.6
105-106-200	10 1/2	3 3/8	6 1/4	52.5
110-128-48	11	4	1 1/2	105.7



# Custom Capabilities Forgings & Castings



## Forgings

Know how garnered through decades provides unsurpassed benefit for the industrial user of custom forgings. This includes all phases in the forging process - die design and engineering, forging, coining, heat treating, and polishing.

Hammers ranging in size from 1,000 to 5,000 pounds produce finished parts from a few ounces to 50 pounds. Various alloys, the use of multi-cavity dies, expansive capacity, and secondary machining capability enable *Martin* to deliver near 100% density requirements in a cost effective manner.

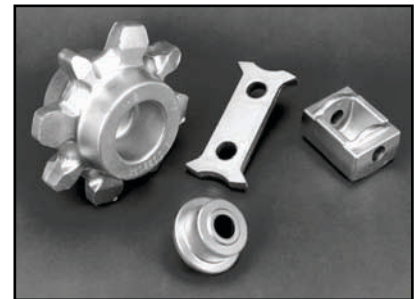
**Application:** Counter weight on unit handling equipment.

**Problem:** Parts were being milled in-house from purchased burned plate. Process was expensive, but low volumes had prevented consideration of alternate methods of manufacture.

**Solution:** Instead of utilizing their expensive CNC milling equipment on relatively low-tech part, *Martin* designed a simple die for a forged part, which worked well for medium quantity production runs. When compared to sourcing costs, production time, and scrap, the forged part was less expensive than the milled part. The real savings has resulted from the enhanced utilization of the CNC milling equipment for other, more profitable work.



One of the many hammers capable of producing forgings up to 50 lbs.



## Castings

Operating its own foundry enables *Martin* to provide its customers with quality assurance, quick lead times, and application engineering assistance on cast and ductile iron parts.

With an upper range of 96" in diameter and 10,000 pounds, our own pattern shop, and streamlined access to secondary machining, *Martin's* comprehensive capabilities serve a broad spectrum of industrial uses.

**Application:** Conveyor.

**Problem:** Redesign of equipment required flywheel and synchronous drive to be used in more compact area. The two separate components had clearance problems.

**Solution:** *Martin* designed a one piece casting which allowed machining of a duplex drive to fit in tight area. Equipment is more compact, one final part rather than two saves costs, and installation time is reduced.



# Martin

## Custom Capabilities Sintered Metal

### Sintered Metal

Commonly associated with large quantity runs of fairly simple products, the sintered metal process also effectively addresses small quantities for many complex and multi-level parts where intricate machining or milling was required. Smooth surface finishes, self-lubrication, and tolerance repeatability are just a few of the attributes resulting from this technology. Using a wide range of alloys, *Martin* produces custom sintered parts for many industries and applications.

**Application:** Timing plate on an agricultural implement.

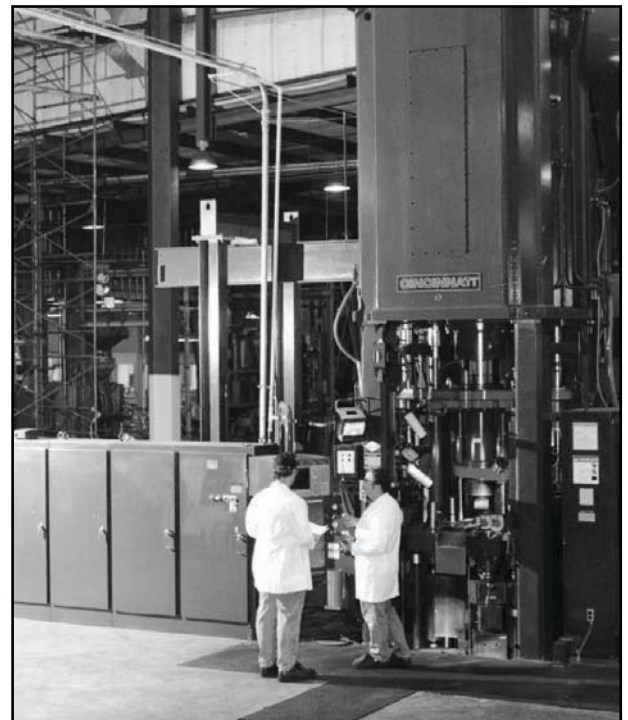
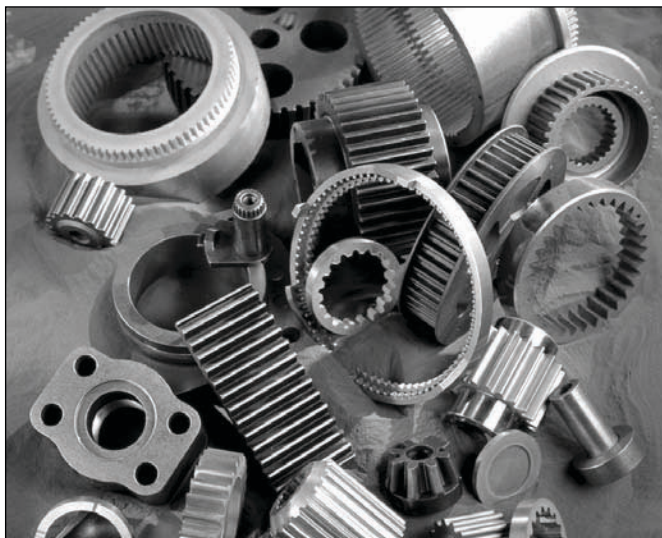
**Problem:** Production of parts required several steps. Purchase of disc blanks . . . Initial rough machining . . . Drilling holes . . . Milling slots and teeth . . . Application of rust inhibitor . . . Use of several outside sources.

All these factors led to inconsistent tolerances, difficulty in coordination of lead times, scrapped parts and production interruptions.

**Solution:** *Martin* reviewed sample parts and prints. *Martin* met with OEM engineering and service personnel to better understand the application. The *Martin* sintered component reduced the total cost of each part by an average of 54%, slashed acquisition costs and allowed for deliveries using staged release dates.



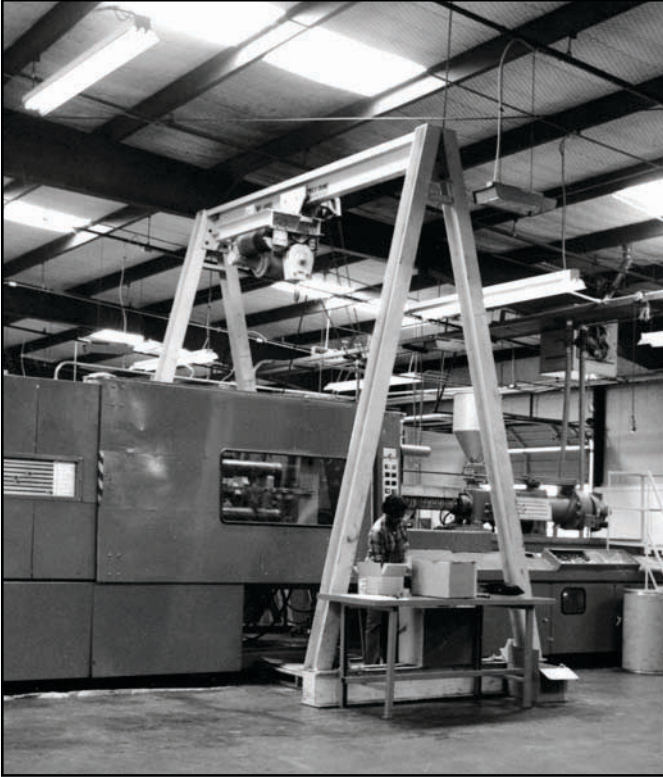
*Sintered metal is an excellent choice for a wide variety of products especially those with irregular shapes that would be difficult to manufacture using conventional methods.*



*Presses delivering more than 880 tons of pressure form parts from bronze, iron, copper, manganese, etc.*

# Custom Capabilities Injection Molding

# Martin



One of the many injection molding machines used to manufacture a variety of products.



*Martin* manufactures plastic products for both power transmission and non-power transmission applications.

## Injection Molding

Since the inception of our line of injection molded plastic components, *Martin* has emerged as a leading supplier of cost effective non-metallic products.

A combination of polymers are used to achieve desired wear, corrosion resistance, and color characteristics. Injection molded plastic is also advantageous in non-sparking and sanitary applications.

While the final form of most components is achieved directly from the press, *Martin* is able to perform secondary machining on molded parts if necessary.

**Application:** Packaging equipment.

**Problem:** A sticky product required cleaning with a caustic solution which led to corrosion based fatigue of a threaded collar. In addition, high maintenance costs in the field were encountered due to difficulty of replacing the seized collar.

**Solution:** A *Martin* manufactured part made of glass filled nylon was produced. The *Martin* part withstood constant exposure to the caustic solution and prevented the seizing of threads which provided a longer part life. Unit price was reduced by approximately 34%, warranty claims dropped significantly and the user logo stamped on the part aided in capturing replacement part sales.

