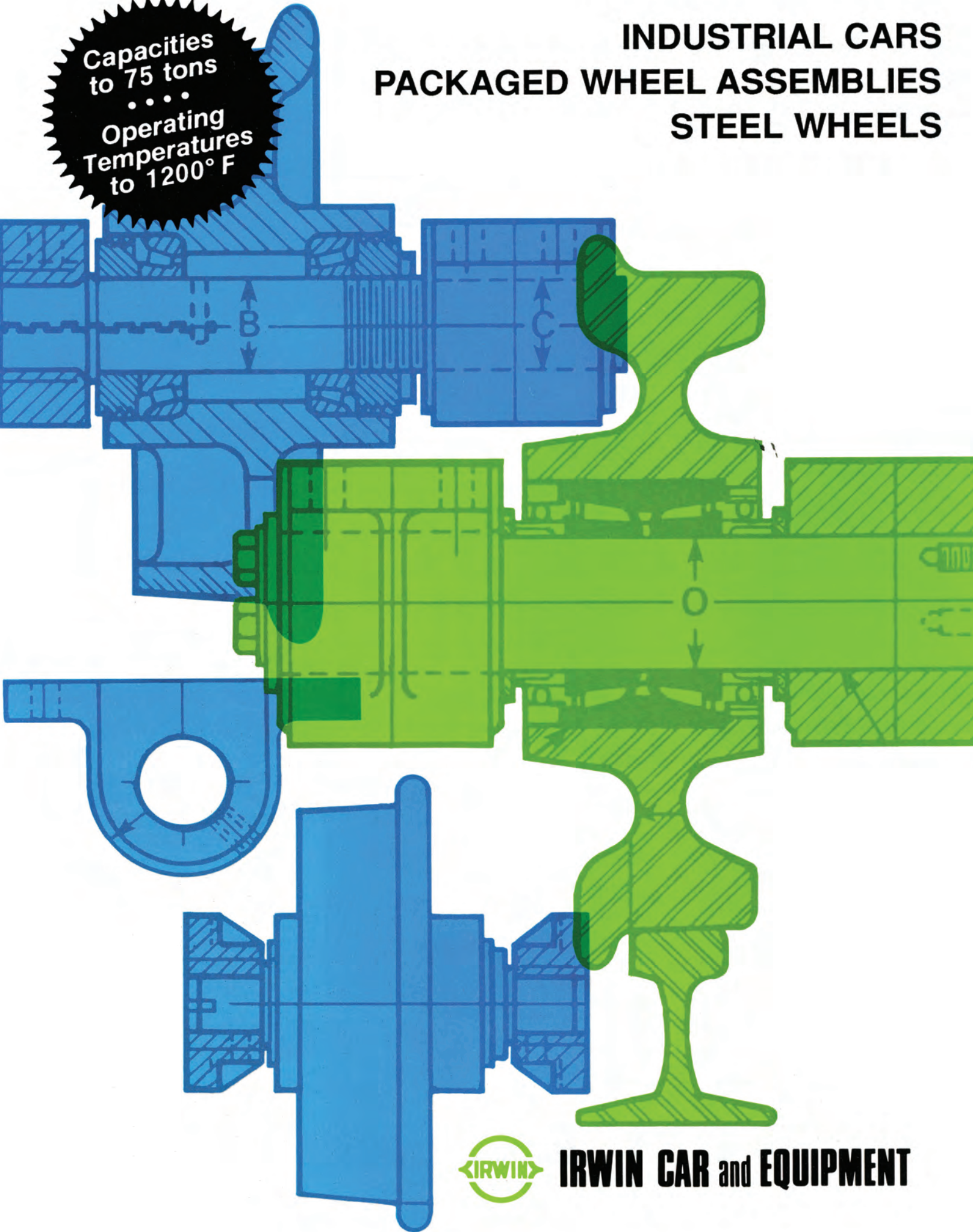


# INDUSTRIAL CARS PACKAGED WHEEL ASSEMBLIES STEEL WHEELS

Capacities  
to 75 tons  
...  
Operating  
Temperatures  
to 1200° F

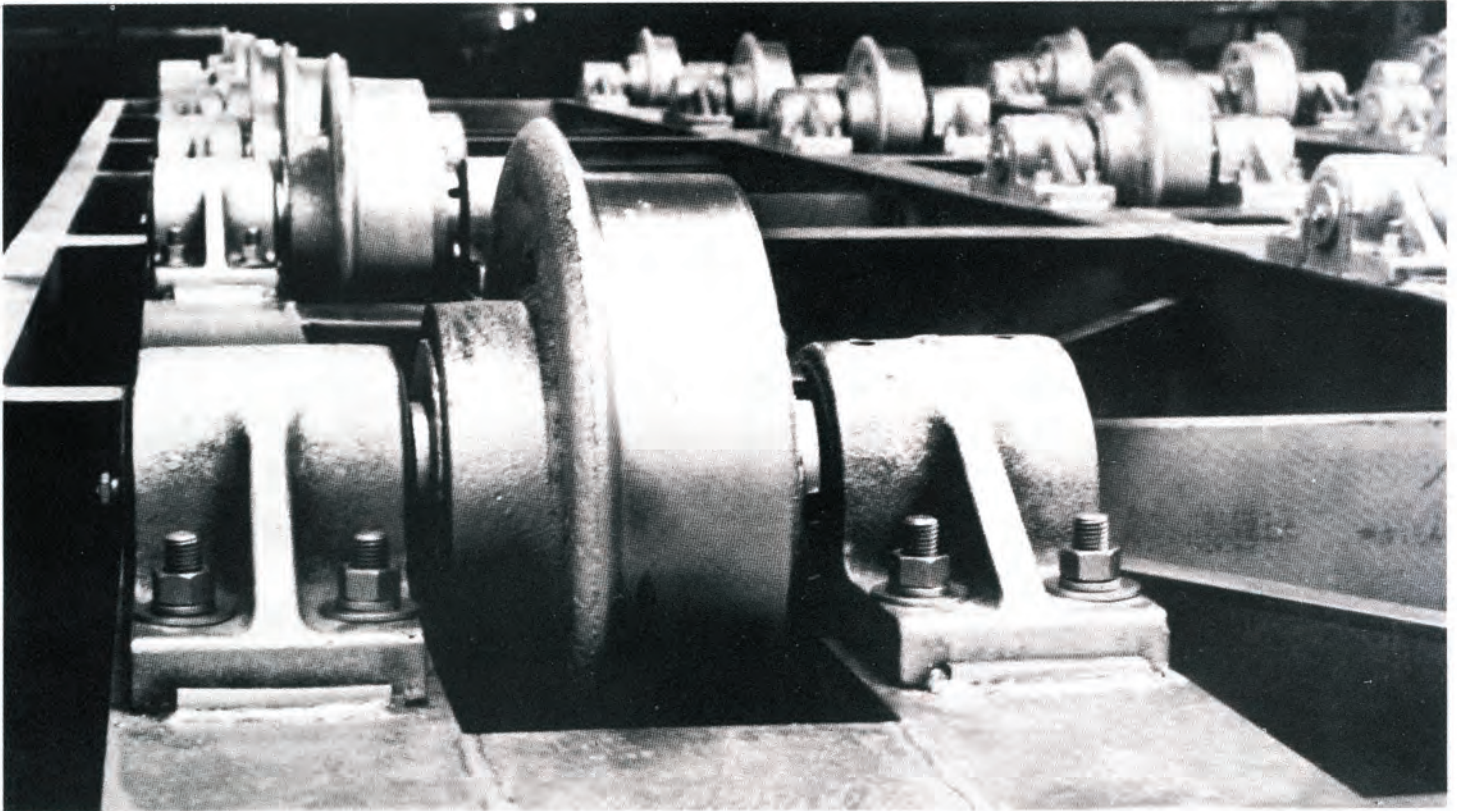


**IRWIN CAR and EQUIPMENT**





# IRWIN DOES THE ENGINEERING



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**Engineering.** IRWIN has over 35 years of engineering knowledge in designing wheel assemblies for our own transfer cars, industrial cars, furnace cars, kiln cars, mine cars, walking beam furnaces and other types of material handling systems. Standard assemblies are capable of carrying loads up to 75 tons per wheel and turn on roller bearings at temperatures up to 1200° F.

**Manufacturing.** IRWIN's wheel assemblies provide top dependability and safety. Precision craftsmanship, testing and inspection are all part of our manufacturing process.

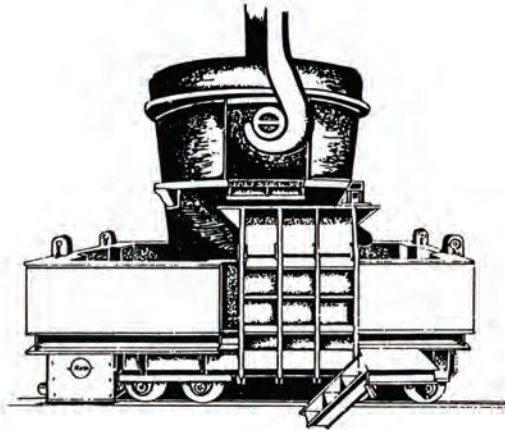
**Service.** IRWIN is interested in your productivity. Our cars' wheel assemblies and steel wheels are available in all sizes ready to roll. And our sales engineers are always at your service, ready to analyze your problems and make specific recommendations.



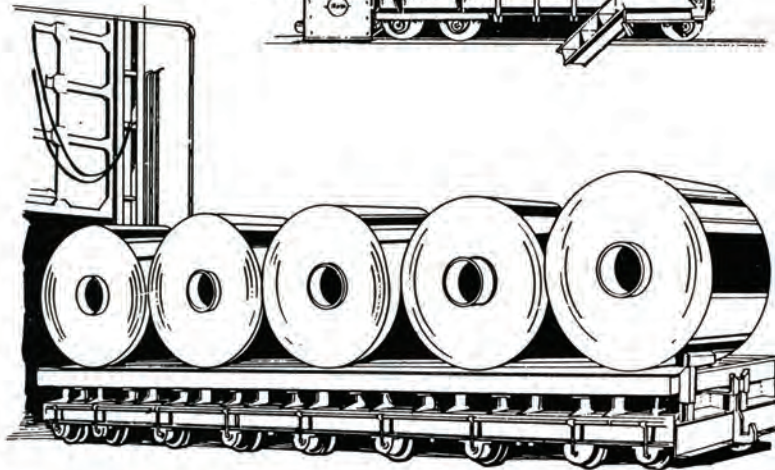


# INDUSTRIAL CARS

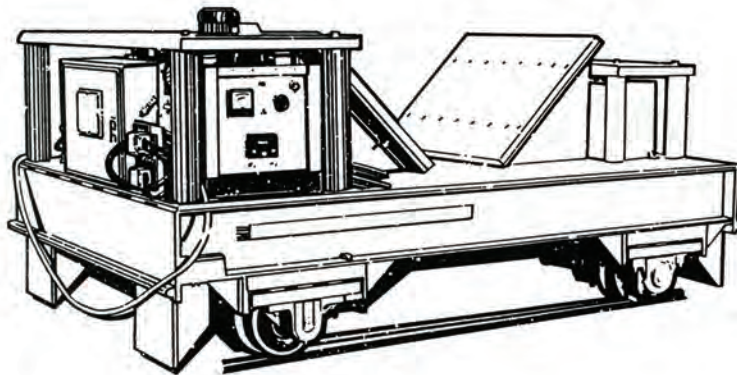
We custom-build a wide variety of industrial cars for mine, mill, foundry, quarry and other applications.



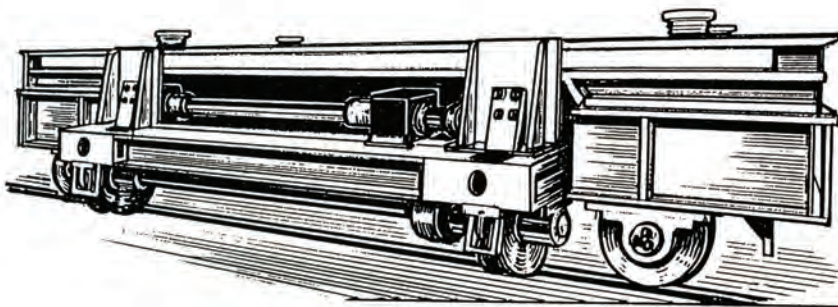
**Heavy Duty Transfer Cars**



**Furnace Cars**



**Battery-Powered Cars**

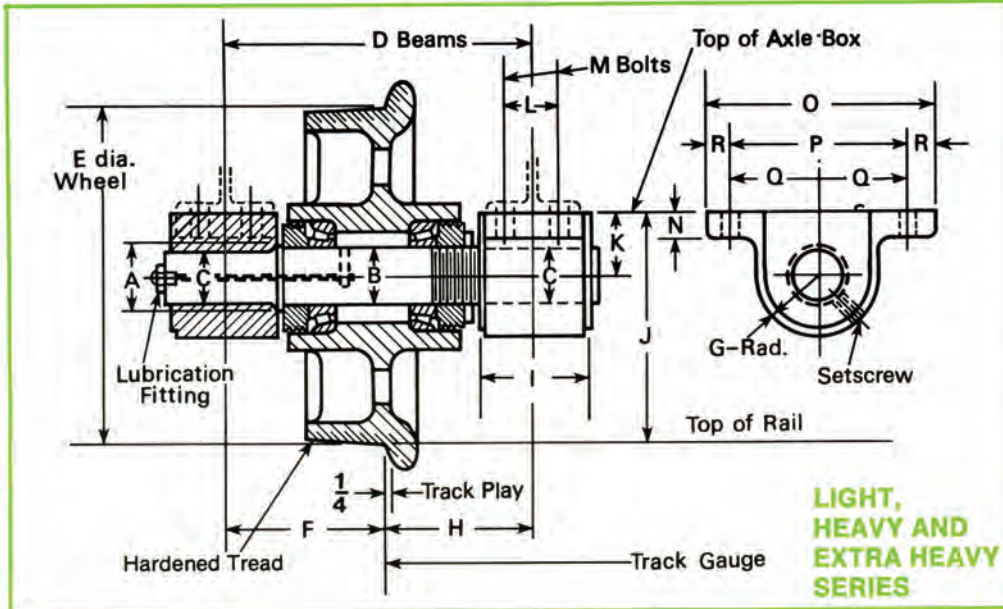


**Four-Directional Bay Transfer Cars**





# STUB AXLE WHEEL ASSEMBLY

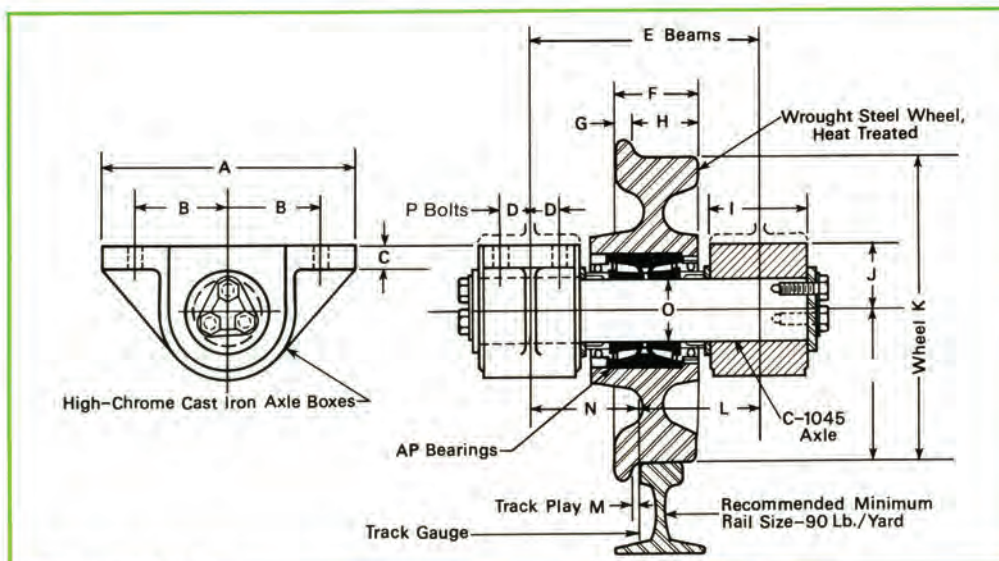


The 1 through 15 ton Stub Axle Wheel Assembly includes the following:

- 1—Wheel
  - 2—Axle boxes—high-grade cast iron
  - 1—Wheel set of tapered roller bearings including dust collars
  - 1—Axle C1045 hot rolled steel with lube fitting
- Wheel diameters 10" thru 20" are available

Model No. SA-101

CAPACITY	SHAFT DIA. A	SHAFT DIA. B	SHAFT DIA. C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	APPROX. WT.
1 ton	1 5/8"	1 3/8"	1 1/8"	8 3/4	10	5 1/8	1 3/4	3 5/8	3	7	2	1 3/4	1/2	3/4	8	6	3	1	190 lbs.
3 ton	2 1/4"	2"	1 3/4"	13	14	6 3/4	2 1/2	6 1/4	4 1/4	9 5/8	2 5/8	2 1/4	3/4	1 1/8	9 3/4	7 1/2	3 3/4	1 1/8	210 lbs.
5 ton	2 3/4"	2 1/2"	2 1/4"	13	14	6 3/4	2 1/2	6 1/4	4 1/4	9 5/8	2 5/8	2 1/4	3/4	1 1/8	9 3/4	7 1/2	3 3/4	1 1/8	225 lbs.
8 ton	3"	2 3/4"	2 1/2"	13	14	6 3/4	2 1/2	6 1/4	4 1/4	9 5/8	2 5/8	2 1/4	3/4	1 1/8	9 3/4	7 1/2	3 3/4	1 1/8	235 lbs.
10 ton	3 1/4"	3"	2 3/4"	14 3/4	14	7 5/8	3	7 1/8	5 5/8	10	3	3 1/2	3/4	1 3/8	15	11	5 1/2	2	350 lbs.
12 ton	3 1/4"	3"	2 3/4"	14 3/4	14	7 5/8	3	7 1/8	5 5/8	10	3	3 1/2	3/4	1 3/8	15	11	5 1/2	2	360 lbs.
15 ton	3 3/4"	3 1/2"	3 1/4"	14 3/4	14	7 5/8	3	7 1/8	5 5/8	10	3	3 1/2	3/4	1 3/8	15	11	5 1/2	2	390 lbs.



The 25 and 40 ton Stub Axle Wheel Assembly includes the following:

- 1—18" or 22" diameter wrought steel wheel—heat treated
  - 2—Axle boxes—high-grade cast iron on the 25 ton and cast steel on the 40 ton
  - 1—"AP" tapered roller bearing
  - 1—Axle C1045 cold rolled steel
  - 2—End caps with hardware
- Load ratings are based on 15 RPM. RPM's greater than 15 are available.
  - Operating temperature 300° F. maximum.
  - Units are completely assembled, painted, permanently lubricated and ready for installation.

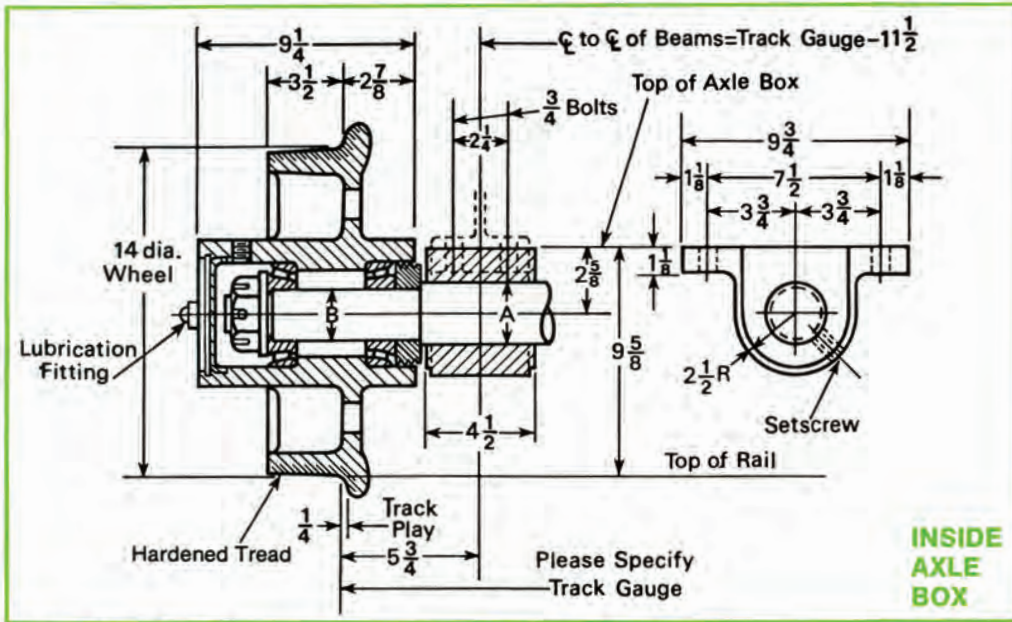
Model No. SA-102

CAPACITY	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	WT.
25 ton	15	5 1/2	1 3/8	1 3/4	13 3/4	5	1 5/32	3 27/32	6	4	18 OR 22	7 1/8	1 3/32	6 5/8	4	3/4	670
40 ton	17	6 1/2	2	2	16 1/2	5	1 5/32	3 27/32	7	5		8 1/4	1 3/32	8 1/4	5 3/16	1	800





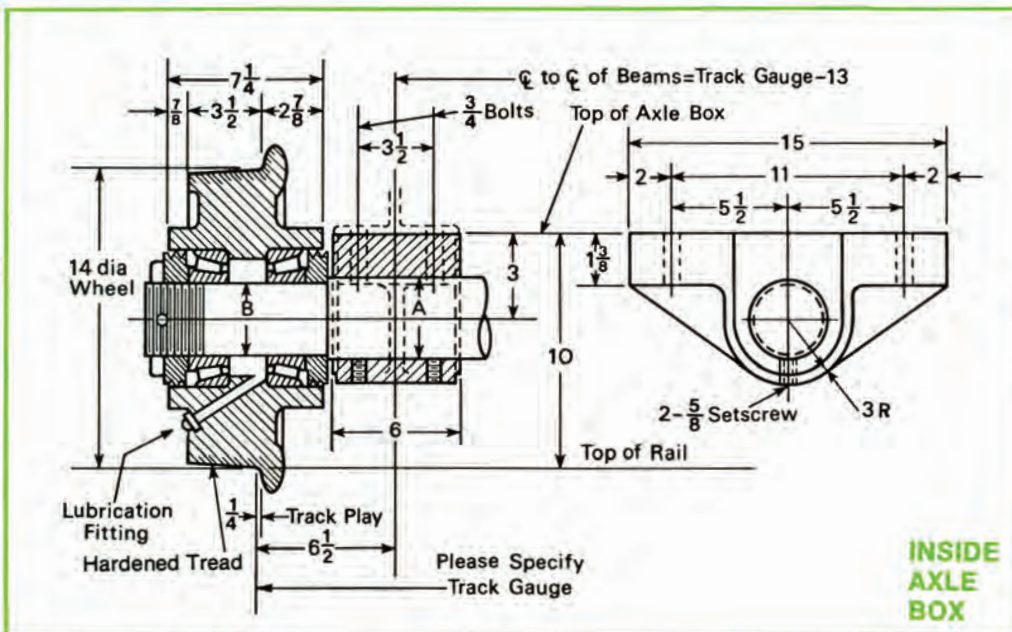
# THRU AXLE WHEEL ASSEMBLY



Model No. TA-101

Ratings shown are for 56 1/2" track gauge or less.

CAPACITY	SHAFT DIA. A	SHAFT DIA. B	WT.
1 ton/axle	1 5/8"	1 3/8"	335 lbs.
3 ton/axle	2 1/4"	2"	365 lbs.
6 ton/axle	2 3/4"	2 1/2"	400 lbs.
8 ton/axle	3"	2 3/4"	425 lbs.



Model No. TA-102

Ratings shown are for 56 1/2" track gauge or less.

CAPACITY	SHAFT DIA. A	SHAFT DIA. B	WT.
10 ton	3 1/4"	3"	575 lbs.
15 ton	3 3/4"	3 1/2"	660 lbs.

The 1 through 8 ton Inside Axle Box Thru Axle Wheel Assembly includes the following:

- 2—Wheels with lube fittings
  - 2—Axle boxes—high-grade cast iron
  - 2—Wheel sets of tapered roller bearings, including nuts and dust collars
  - 1—Axle C1045 hot rolled steel. Models are available with steel wheels ranging from 10" through 24" diameters
- Please Specify Track Gauge

The 10 and 15 ton Inside Axle Box Thru Axle Wheel Assembly includes the following:

- 2—Wheels with lube fittings 10" thru 24" diameter are available
- 2—Axle boxes—high-grade cast iron
- 2—Wheel sets of tapered roller bearings including dust collars
- 1—Axle C1045 hot rolled steel
- Load ratings are based on 50 RPM. RPM's greater than 50 are available.
- Operating temperature 300°F. maximum.
- Units are completely assembled, painted, lubricated and ready for installation.

Please Specify Track Gauge

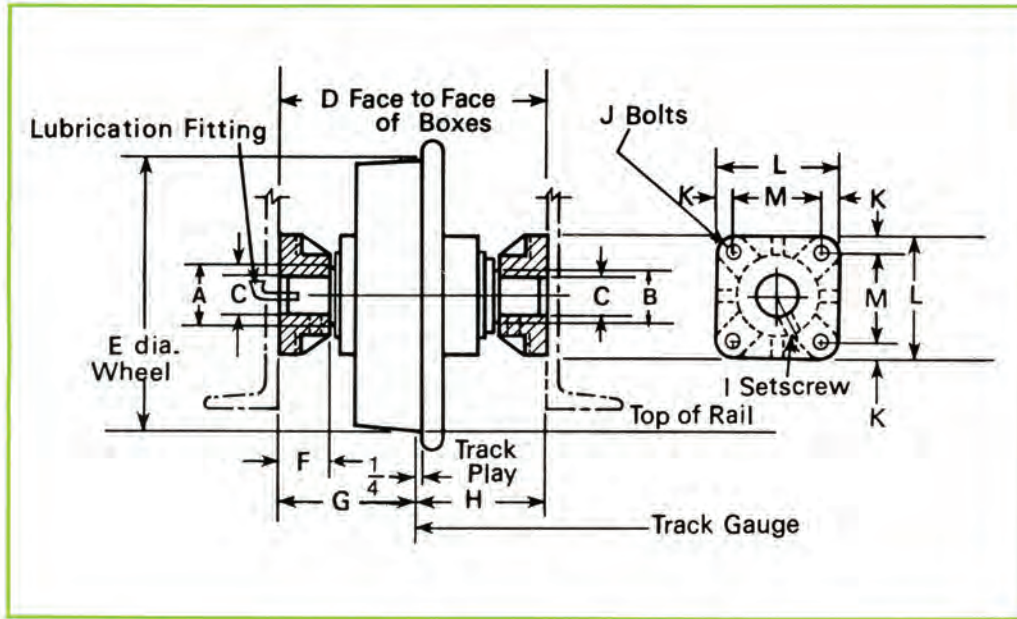








# FLANGE MOUNTING



Flange Mounting Box FM-1 is available for use on the 1 through 8 ton wheel assemblies using tapered roller bearings.

Flange Mounting Box FM-2 is available for use on the 10 through 15 ton wheel assemblies using tapered roller bearings and the 700°-1200°F. Extra High Temperature Assembly.

- Flange mounted units also available.

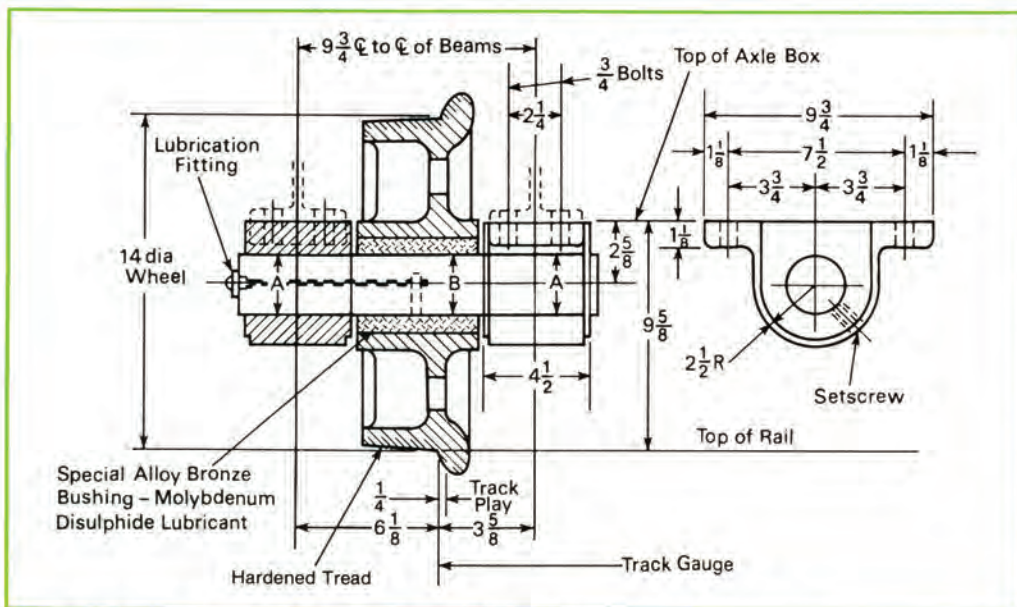
NOTE: For high temperature assemblies, contact IRWIN for "D" dimension.

TYPE	A	B	C	D	E	F	G	H	I	J	K	L	M
Heavy Duty FM-1	SEE			13½	14	2½	7	6½	5/8	5/8	7/8	6¾	4½
Ex. Heavy Duty FM-2	NOTE			15¾	14	3½	8½	7¾	¾	¾	1½	7¾	5½

NOTE: For Dimensions A, B, and C see stub axle wheel assembly at the capacity required.



# HI TEMP. WHEEL ASSEMBLY



The Irwin 3 through 7½ ton Stub Axle 550°F. Wheel Assembly includes:

- 1—Wheel, 10" - 24" diameter steel
- 2—Axle boxes, high-grade cast iron
- 1—Special alloy bronze, high-temperature bushing
- 1—Axle C1045 hot rolled steel with lube fitting
- Load ratings are based on 50 RPM. RPM's greater than 50 are available.
- Operating temperature 550°F. maximum.
- Units are completely assembled, painted, lubricated and ready for installation.

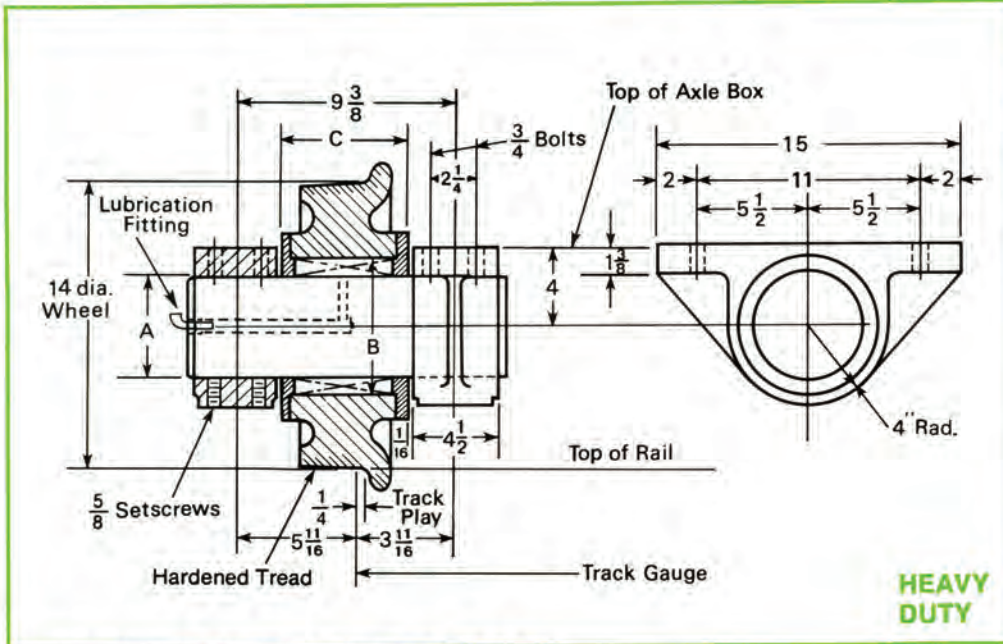
HI-TEMP 550° F. SERIES Model No. HT-101

CAPACITY	SHAFT DIA. A	SHAFT DIA. B	APP. ASSEM. WEIGHT
3 ton	2½"	2½"	210 lbs.
5 ton	3"	3"	225 lbs.
7½ ton	3"	3½"	235 lbs.





# EXTRA HI-TEMP WHEEL ASSEMBLY



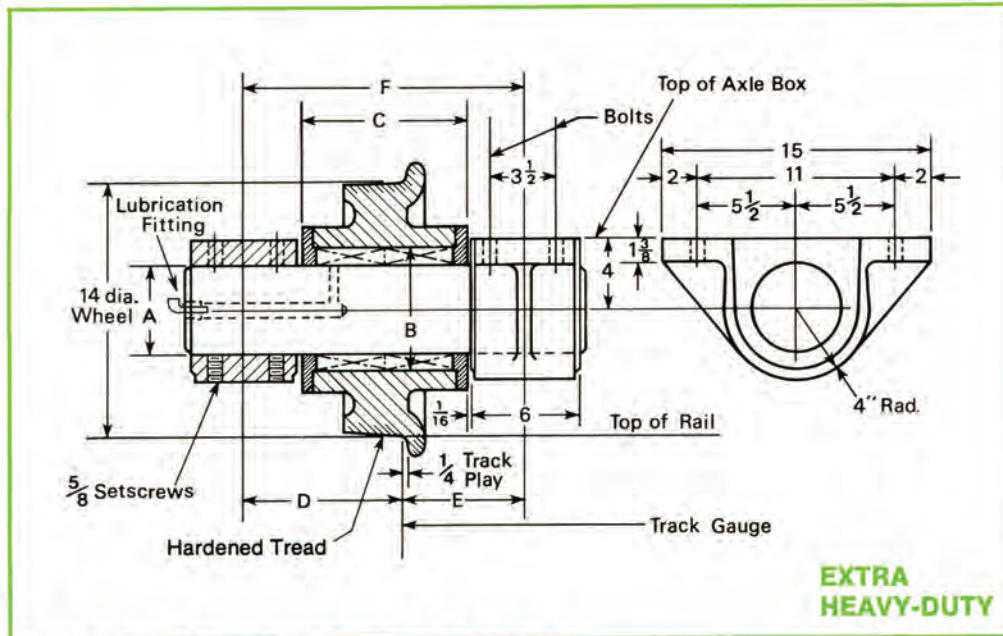
The 3 and 5 ton Extra High-Temperature Wheel Assembly includes:

- 1—Wheel
- 2—Axle boxes, high-grade cast iron
- 1—Die steel caged roller bearing
- 1—Axle with lube fitting—C1045 cold rolled steel for 700°F. operation and stainless steel for 1000°F. and 1200°F. operation

Wheel diameters 10" thru 20" are available

**700° F.-1200° F. SERIES Model No. ET-101**

CAPACITY	AXLE DIA. A	WHEEL BORE B	DISTANCE THRU WHEEL C	APP. ASSEM. WEIGHT
3 ton	3 3/8"	4 7/8"	4 3/4"	240 lbs.
5 ton	4"	5 1/2"	4 3/4"	255 lbs.



The 10-15 ton Extra High-Temperature Wheel Assembly includes:

- 1—Wheel
- 2—Axle boxes, high-grade cast iron
- 2—Die steel caged roller bearings
- 1—Axle with lube fittings—C1045 cold rolled steel for 700°F. operation and stainless steel for 1000°F. and 1200°F. operation

- Load ratings are based on 50 RPM. RPM's greater than 50 are available.
- Operating temperature 700°F.-1000°F.-1200°F.
- Wheel diameter 10" - 20".
- Units are completely assembled, painted, lubricated and ready for installation.

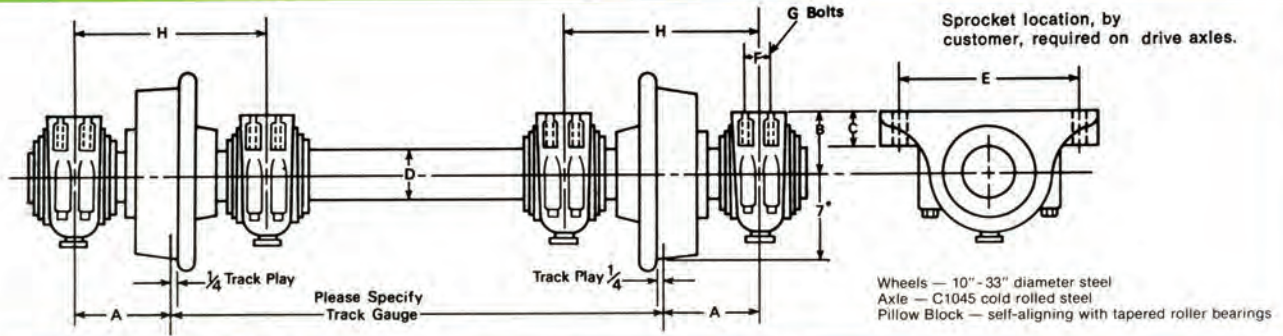
**700° F.-1200° F. SERIES Model No. ET-102**

CAPACITY	AXLE DIA. A	WHEEL BORE B	DISTANCE THRU WHEEL C	D	E	F	APP. ASSEM. WEIGHT
10 ton	3 3/8"	4 7/8"	8 1/4"	7 1/16"	6 1/16"	14 3/8"	360 lbs.
12 ton	4"	5 1/2"	8 1/4"	7 1/16"	6 1/16"	14 3/8"	370 lbs.
15 ton	5"	6 3/8"	9 1/4"	8 3/16"	7 3/16"	15 3/8"	380 lbs.





# DRIVE THRU AXLE

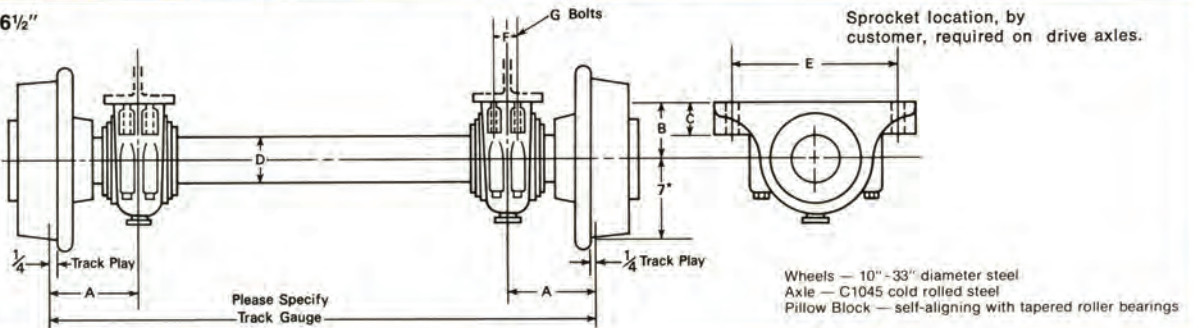


## Model No. DA-101 DOUBLE BOX ASSEMBLY

CAPACITY	A	B	C	D	E	F	G	H	WT.
10 ton	6 $\frac{3}{4}$ "	3 $\frac{1}{4}$ "	1 $\frac{3}{4}$ "	2 $\frac{7}{16}$ "	10"	1 $\frac{3}{4}$ "	$\frac{1}{2}$ "	13"	410
15 ton	6 $\frac{3}{4}$ "	3 $\frac{3}{4}$ "	2"	2 $\frac{15}{16}$ "	11 $\frac{1}{4}$ "	1 $\frac{7}{8}$ "	$\frac{5}{8}$ "	13"	565
24 ton	7 $\frac{5}{8}$ "	4 $\frac{1}{2}$ "	2 $\frac{1}{4}$ "	3 $\frac{7}{16}$ "	13 $\frac{1}{2}$ "	2"	$\frac{3}{4}$ "	14 $\frac{3}{4}$ "	790

CAPACITY	A	B	C	D	E	F	G	H	WT.
30 ton	7 $\frac{5}{8}$ "	5"	2 $\frac{3}{4}$ "	3 $\frac{15}{16}$ "	14 $\frac{1}{2}$ "	2"	$\frac{3}{4}$ "	14 $\frac{3}{4}$ "	1045
40 ton	7 $\frac{5}{8}$ "	5 $\frac{3}{4}$ "	3"	4 $\frac{7}{16}$ "	16"	2 $\frac{1}{4}$ "	$\frac{3}{4}$ "	14 $\frac{3}{4}$ "	1390
50 ton	8 $\frac{5}{8}$ "	6 $\frac{1}{4}$ "	3 $\frac{1}{4}$ "	4 $\frac{15}{16}$ "	17 $\frac{3}{4}$ "	2 $\frac{1}{2}$ "	$\frac{7}{8}$ "	16 $\frac{1}{2}$ "	1800

Ratings shown are for 56 $\frac{1}{2}$ " track gauge or less.

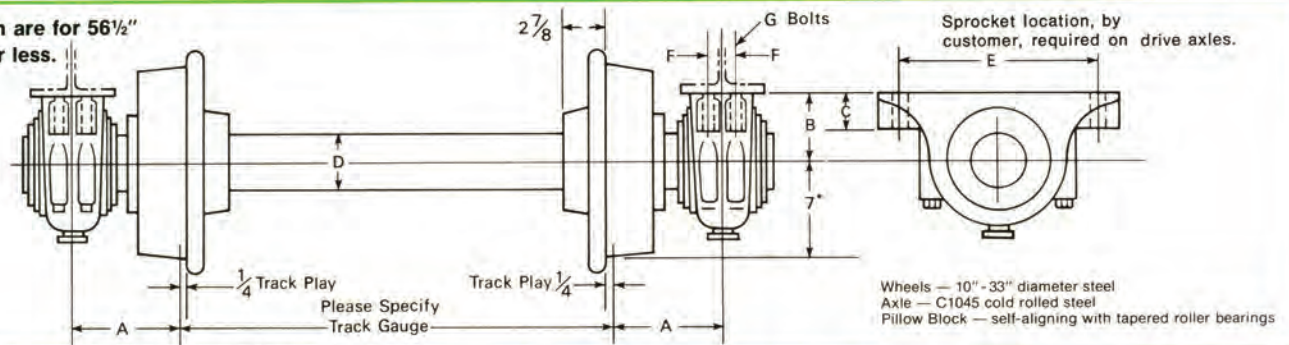


## Model No. DA-102 INSIDE BOX ASSEMBLY

CAPACITY	A	B	C	D	E	F	G	WT.
4 ton	5 $\frac{3}{4}$ "	3 $\frac{1}{4}$ "	1 $\frac{3}{4}$ "	2 $\frac{7}{16}$ "	10"	1 $\frac{3}{4}$ "	$\frac{1}{2}$ "	340
6 ton	5 $\frac{3}{4}$ "	3 $\frac{3}{4}$ "	2"	2 $\frac{15}{16}$ "	11 $\frac{1}{4}$ "	1 $\frac{7}{8}$ "	$\frac{5}{8}$ "	465
10 ton	6 $\frac{1}{2}$ "	4 $\frac{1}{2}$ "	2 $\frac{1}{4}$ "	3 $\frac{7}{16}$ "	13 $\frac{1}{2}$ "	2"	$\frac{3}{4}$ "	630
15 ton	6 $\frac{1}{2}$ "	5"	2 $\frac{3}{4}$ "	3 $\frac{15}{16}$ "	14 $\frac{1}{2}$ "	2"	$\frac{3}{4}$ "	785
20 ton	6 $\frac{7}{8}$ "	5 $\frac{3}{4}$ "	3"	4 $\frac{7}{16}$ "	16"	2 $\frac{1}{4}$ "	$\frac{3}{4}$ "	880

CAPACITY	A	B	C	D	E	F	G	WT.
25 ton	7 $\frac{1}{8}$ "	6 $\frac{1}{4}$ "	3 $\frac{1}{4}$ "	4 $\frac{15}{16}$ "	17 $\frac{3}{4}$ "	2 $\frac{1}{2}$ "	$\frac{7}{8}$ "	1050
30 ton	7 $\frac{7}{8}$ "	6 $\frac{11}{16}$ "	2 $\frac{3}{4}$ "	5 $\frac{1}{2}$ "	18 $\frac{1}{4}$ "	3 $\frac{3}{4}$ "	1"	1150
35 ton	8 $\frac{1}{4}$ "	7 $\frac{1}{16}$ "	2 $\frac{7}{8}$ "	6"	20 $\frac{1}{2}$ "	4 $\frac{1}{4}$ "	1"	1250
42 ton	8 $\frac{1}{2}$ "	7 $\frac{1}{2}$ "	3"	6 $\frac{1}{2}$ "	22 $\frac{1}{4}$ "	4 $\frac{5}{8}$ "	1"	1350
50 ton	8 $\frac{3}{4}$ "	7 $\frac{7}{8}$ "	3 $\frac{1}{8}$ "	7"	23"	4 $\frac{1}{2}$ "	1 $\frac{1}{4}$ "	1450

Ratings shown are for 56 $\frac{1}{2}$ " track gauge or less.

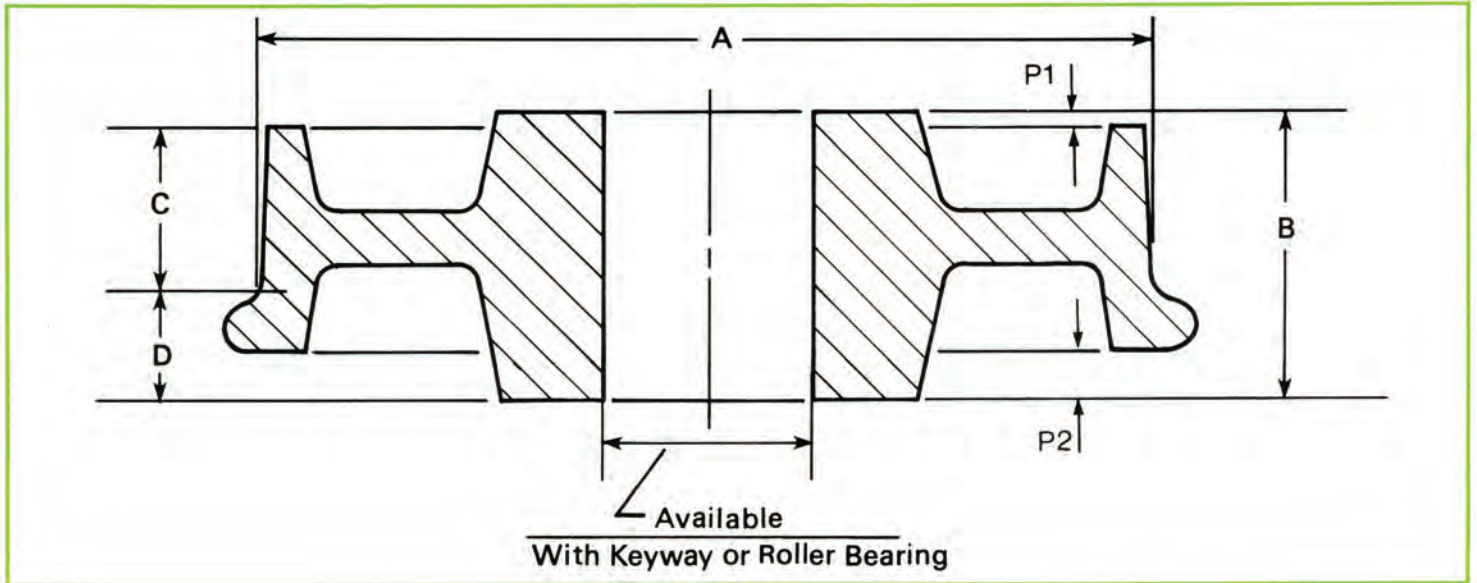


## Model No. DA-103 OUTSIDE BOX ASSEMBLY

CAPACITY	A	B	C	D	E	F	G	WT.
4 ton	7 $\frac{1}{4}$ "	3 $\frac{1}{4}$ "	1 $\frac{3}{4}$ "	2 $\frac{7}{16}$ "	10"	1 $\frac{3}{4}$ "	$\frac{1}{2}$ "	355
6 ton	7 $\frac{1}{4}$ "	3 $\frac{3}{4}$ "	2"	2 $\frac{15}{16}$ "	11 $\frac{1}{4}$ "	1 $\frac{7}{8}$ "	$\frac{5}{8}$ "	490
10 ton	8 $\frac{1}{8}$ "	4 $\frac{1}{2}$ "	2 $\frac{1}{4}$ "	3 $\frac{7}{16}$ "	13 $\frac{1}{2}$ "	2"	$\frac{3}{4}$ "	660
15 ton	8 $\frac{1}{8}$ "	5"	2 $\frac{3}{4}$ "	3 $\frac{15}{16}$ "	14 $\frac{1}{2}$ "	2"	$\frac{3}{4}$ "	830
20 ton	8 $\frac{1}{8}$ "	5 $\frac{3}{4}$ "	3"	4 $\frac{7}{16}$ "	16"	2 $\frac{1}{4}$ "	$\frac{3}{4}$ "	940

CAPACITY	A	B	C	D	E	F	G	WT.
25 ton	8 $\frac{1}{8}$ "	6 $\frac{1}{4}$ "	3 $\frac{1}{4}$ "	4 $\frac{15}{16}$ "	17 $\frac{3}{4}$ "	2 $\frac{1}{2}$ "	$\frac{7}{8}$ "	1130
30 ton	8 $\frac{7}{8}$ "	6 $\frac{11}{16}$ "	2 $\frac{3}{4}$ "	5 $\frac{1}{2}$ "	18 $\frac{1}{4}$ "	3 $\frac{3}{4}$ "	1"	1230
35 ton	9 $\frac{1}{4}$ "	7 $\frac{1}{16}$ "	2 $\frac{7}{8}$ "	6"	20 $\frac{1}{2}$ "	4 $\frac{1}{4}$ "	1"	1330
42 ton	9 $\frac{1}{2}$ "	7 $\frac{1}{2}$ "	3"	6 $\frac{1}{2}$ "	22 $\frac{1}{4}$ "	4 $\frac{5}{8}$ "	1"	1430
50 ton	9 $\frac{3}{4}$ "	7 $\frac{7}{8}$ "	3 $\frac{1}{8}$ "	7"	23"	4 $\frac{1}{2}$ "	1 $\frac{1}{4}$ "	1530





- Dimensions P1 and P2 can be made to specs.
- Finished, ready-to-roll sizes from 6" to 33" tread diameter or custom made to your specs.
- Hardened tread.
- Brinell up to 500 available.
- Available with plain bore and keyway or roller bearings.
- For new industrial and mine cars or as replacements.
- Other sizes available.

PART NO.	TREAD DIAMETER	DISTANCE THROUGH HUB	TREAD WIDTH	FLANGE AND PROJECTION
	A	B	C	D
160	6"	3 $\frac{3}{8}$ "	2 $\frac{7}{16}$ "	$\frac{3}{4}$ "
201	6"	9 $\frac{1}{4}$ "	6 $\frac{3}{8}$ "	2 $\frac{7}{8}$ "
116	8"	9 $\frac{1}{4}$ "	5"	2 $\frac{7}{8}$ "
V 95A	8"	3 $\frac{9}{16}$ "	2 $\frac{3}{8}$ "	1 $\frac{1}{16}$ "
V 160	8"	7 $\frac{1}{4}$ "	4 $\frac{3}{8}$ "	2 $\frac{7}{8}$ "
149B	10"	7 $\frac{15}{16}$ "	3 $\frac{3}{4}$ "	2 $\frac{7}{8}$ "
249	10"	6"	3 $\frac{3}{8}$ "	2 $\frac{5}{16}$ "
113	12"	4"	3 $\frac{1}{8}$ "	$\frac{7}{8}$ "
C 132	12"	6"	3 $\frac{1}{2}$ "	2 $\frac{1}{4}$ "
156AA	12"	9 $\frac{1}{4}$ "	3 $\frac{1}{2}$ "	2 $\frac{7}{8}$ "
V 200	14"	9"	3 $\frac{1}{2}$ "	2 $\frac{7}{8}$ "
234	14"	7 $\frac{1}{4}$ "	3 $\frac{1}{2}$ "	2 $\frac{7}{8}$ "
544B	14"	4 $\frac{5}{16}$ "	3 $\frac{1}{8}$ "	1"
V222	18"	9 $\frac{1}{4}$ "	3 $\frac{1}{2}$ "	2 $\frac{7}{8}$ "
177B	20"	6 $\frac{1}{16}$ "	3 $\frac{1}{4}$ "	2 $\frac{7}{16}$ "
V 144	20"	4 $\frac{7}{8}$ "	3 $\frac{3}{8}$ "	2 $\frac{1}{8}$ "



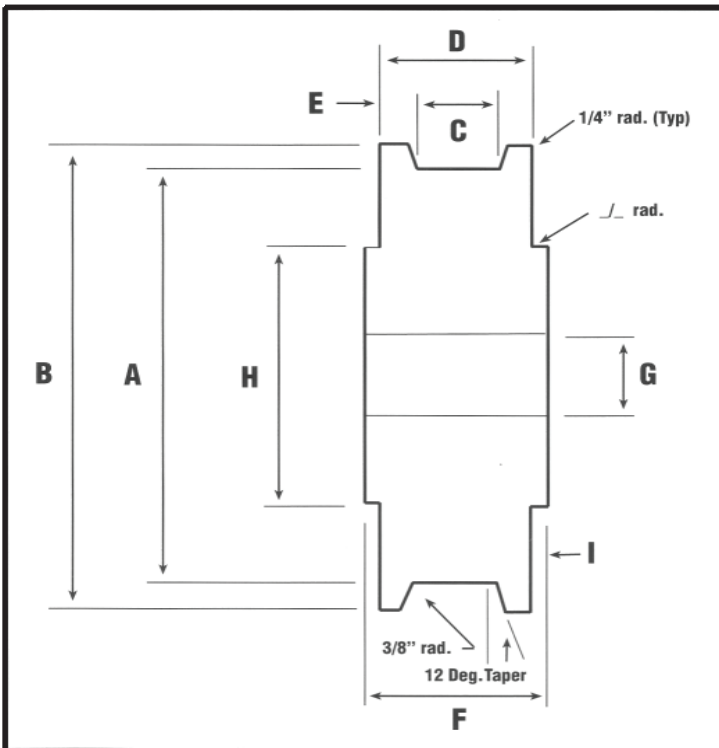


# CRANE WHEEL RAPID FAX QUOTE FORM

Please fill in the dimensions you require, the quantities, hardness, etc., and we will provide the specific wheel you require for your application.

Company Name \_\_\_\_\_ Contact Name \_\_\_\_\_

Phone \_\_\_\_\_ Fax \_\_\_\_\_ E-mail \_\_\_\_\_



### Dimensions (fill in the blanks)

A _____	F _____
B _____	G _____
C _____	H _____
D _____	I _____
E _____	J _____

### Irwin Crane Wheel & Steel Wheel Hardness Ranges

43 to 47 Rc (400 to 450 Bhn)

50 to 55 Rc (500 to 580 Bhn)

58 to 62 Rc (630 to 690 Bhn)

Quantity Required \_\_\_\_\_ Hardness Required \_\_\_\_\_

Tapered or Straight Tread \_\_\_\_\_ Bore Diameter \_\_\_\_\_ Keyway \_\_\_\_\_

## IRWIN CAR AND EQUIPMENT

9953 Broadway – Rt. 993 – PO Box 409 Irwin, PA 15642 USA

P: 724 – 864 – 8900 F: 724 – 864 – 8909

[www.irwincar.com](http://www.irwincar.com)

*"Moving heavy industry in the right direction and keeping our customers on track for over 100 years with quality engineered products and expert technical support & service."*





# Let us Maximize your Productivity and Keep your Operations On-Track!

Managing your operating costs, minimizing down time and maximizing your productivity remain the key to your success in any production environment.

Turn to the experts at Irwin Car and Equipment, where our 120+ years of experience in manufacturing the most rugged and reliable rail-based material handling equipment will keep you up and running and your operations on-track.

Put the Irwin Car advantage to work for you today:

- > **Crane Wheels and Sheaves from 6" to 40" and up**
- > **Capacities to 100 Tons per wheel and up**
- > **Complete Crane Wheel & Industrial Assemblies**
- > **Gantry Crane Bogies and Custom Equipment**
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