

Railroad Products Catalog



QUALITY • PRICE • SERVICE



LANIER STEEL PRODUCTS, INC.

www.laniersteel.com



CORPORATE MISSION STATEMENT

The mission of our organization is to provide a safe, secure and rewarding work experience to our employees, with good opportunity for personal growth and to improve the return on our shareholders' invested equity. We commit to our customers to supply top quality material and services at the most competitive price possible and to guarantee the reliability of our delivery promises and commitments. We also promise to maintain the highest standards of good corporate citizenship throughout our industry and country.



COMPANY PROFILE

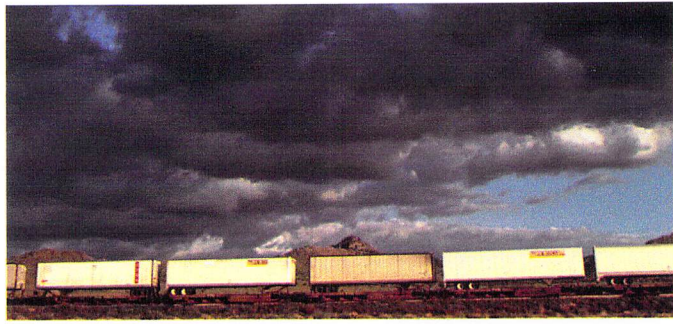
Started in 1985 in Gainesville, Georgia, Lanier Steel Products is now a leading distributor of new and used railroad material for the freight and transit industry. Lanier represents major manufacturers in the U.S., as well as quality relay track materials. We have gained an excellent reputation for our knowledge of the industry and products, as well as our ability to manage large and small projects.

Lanier Steel Products is unique because of the following:

- **Industry Experts** – extremely knowledgeable because of the number of years of successful experience that we have in the industry
- **Superior Customer Service** – knowledge and experience combine to provide the best service and the right products
- **Competitive** – pricing is always competitive
- **Project Management** – offer expert project management to facilitate completing projects on time
- **Guaranteed** – all relay materials which are not as represented, are returnable with freight paid both ways, at our expense.



800-535-7679 • www.laniersteel.com



We carry many more items than can be shown here so please call us and we'll be glad to provide personalized service for all of your tracking needs. Use this catalog as your "guide" for ordering track materials.

We'll be glad to provide detailed information, help with sizes, other specifications, and anything else you may need even if it isn't in the catalog.



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NOTES



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HOW TO ORDER RAIL

Furnish the following

Rail Section Identity

Weight – lbs. per yard

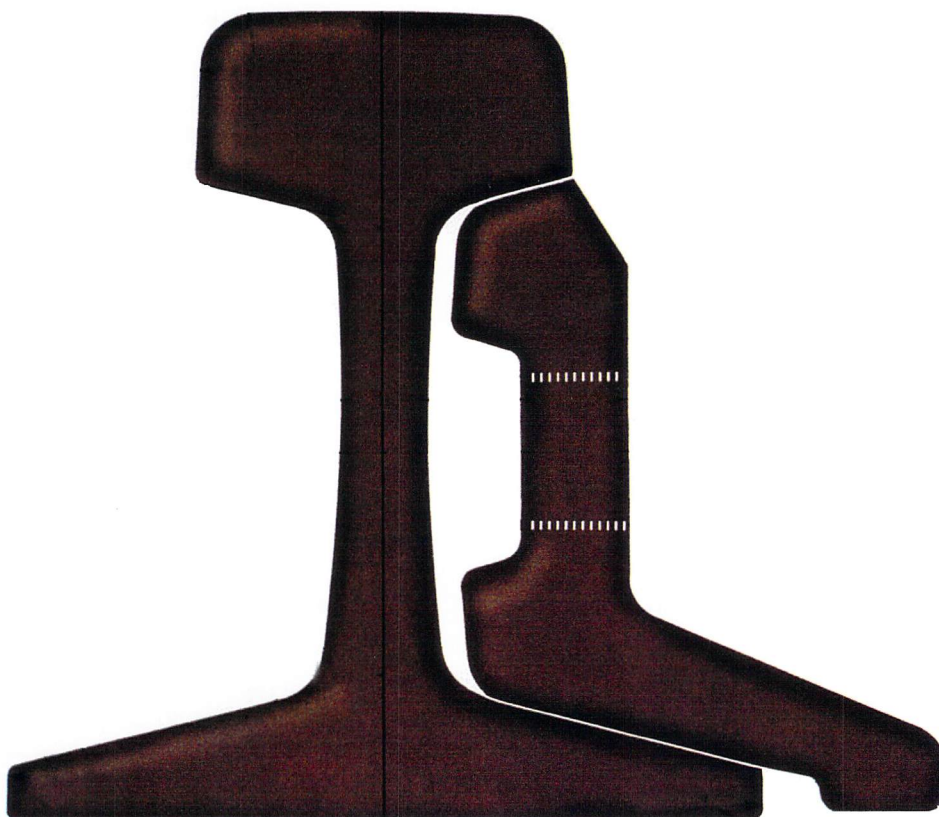
Section – A.S.C.E., A.R.A., A.R.E.A., etc.

Length

Drilling – measure from end of rail to center line of first hole, center line of first hole to center line of second hole for 4-hole bars, for 6-hole bars measure from center line of second hole to center line of third hole.

Bolt Size or Bolt Hole Diameter

Full or Short Toe Joint Bars



80 lb. A.S.C.E. Rail

80 lbs. per yard
 140.8 net tons per mile of track
 37.5 feet of track per net ton
 Stock length 30' & 33'
 AREA In 7.86
 Sec. Modulus In Head 10.07
 Sec. Modulus In Base 11.08
 Mom. Inertia In 26.38

Angle Bars
 24" length 46.0 lbs. per pair

90 lb. A.R.A.-A. Rail

90 lbs. per yard
 158.4 net tons per mile of track
 33.3 feet of track per net ton
 Stock lengths 30' & 33'
 AREA In 8.82
 Sec. Modulus In Head 12.56
 Sec. Modulus In Base 15.23
 Mom. Inertia In 38.70

Angle Bars
 24" length 66.6 lbs. per pair
 (Toeless and Headfree bars also available)

100 lb. A.R.E.A. Rail

100 lbs. per yard
 176 net tons per mile of track
 30 feet of track per net ton
 Stock length 33' & 39'
 AREA In 9.95
 Sec. Modulus In Head 15.10
 Sec. Modulus In Base 17.80
 Mom. Inertia In 49.00

Angle Bars
 24" length 69.5 lbs. per pair



HOW TO ORDER RAIL – cont'd

100 lb. ARA-A & ARA-B Rail

100 lbs. per yard
176 net tons per mile of track
30 feet of track per net ton
Stock length 33' & 39'
AREA In 9.95
Sec. Modulus In Head 15.10
Sec. Modulus In Base 17.80
Mom. Inertia In 49.00

Angle Bars
24" length 69.5 lbs. per pair

105 lb. Dudley Rail

105 lbs. per yard
184.8 net tons per mile of track
28.5 feet of track per net ton
Stock length 33' & 39'
AREA In 10.26
Sec. Modulus In Head 15.96
Sec. Modulus In Base 17.31
Mom. Inertia In 49.86

Angle Bars
24" length 61.7 lbs. per pair

110 lb. A.R.E.A. Rail

110 lbs. per yard
193.6 net tons per mile of track
27.3 feet of track per net ton
Stock length 33' & 39'
AREA In 10.82
Sec. Modulus In Head 16.70
Sec. Modulus In Base 20.10
Mom. Inertia In 57.00

Angle Bars
24" length 71.6 lbs. per pair

112 lb. A.R.E.A. Rail

112 lbs. per yard
197.1 net tons per mile of track
26.8 feet of track per net ton
Stock length 39'
AREA In 11.01
Sec. Modulus In Head 18.1
Sec. Modulus In Base 21.8
Mom. Inertia In 65.5

Angle Bars
24" length 77.24 lbs. per pair

115 lb. A.R.E.A. Rail

115 lbs. per yard
202.4 net tons per mile of track
26.1 feet of track per net ton
Stock length 39' & 80'
AREA In 11.26
Sec. Modulus In Head 18.53
Sec. Modulus In Base 22.0
Mom. Inertia In 65.6

Angle Bars
36" length 107 lbs. per pair

119 lb. A.R.E.A. Rail

118.8 lbs. per yard
209.1 net tons per mile of track
25.25 feet of track per net ton
Stock length 39' & 80'
AREA In 11.65
Sec. Modulus In Head 19.4
Sec. Modulus In Base 22.9
Mom. Inertia In 71.4

Angle Bars
36" length 107 lbs. per pair

127 lb. Dudley Rail

127 lbs. per yard
223.87 net tons per mile of track
23.58 feet of track per net ton
Stock length 39'
AREA In 12.5
Sec. Modulus In Head 20.9
Sec. Modulus In Base 26.4
Mom. Inertia In 71.4

Angle Bars
36" length 118.3 lbs. per pair

131 lb A.R.E.A. Rail

131 lbs. per yard
230.5 net tons per mile of track
22.9 feet of track per net ton
Stock length 39'
AREA In 12.82
Sec. Modulus In Head 22.53
Sec. Modulus In Base 27.6
Mom. Inertia In 88.5

Angle Bars
36" length 113.0 lbs. per pair

132 lb A.R.E.A. Rail

132 lbs. per yard
232.3 net tons per mile of track
22.7 feet of track per net ton
Stock length 39' & 80'
AREA In 12.95
Sec. Modulus In Head 22.5
Sec. Modulus In Base 27.6
Mom. Inertia In 88.2

Angle Bars
36" length 115.40 lbs. per pair

133 lb A.R.E.A. Rail

133.4 lbs. per yard
234.8 net tons per mile of track
22.48 feet of track per net ton
Stock length 39' & 80'
AREA In 13.10
Sec. Modulus In Head 22.3
Sec. Modulus In Base 26.9
Mom. Inertia In 86.3

Angle Bars
38" length 121.70 lbs. per pair

136 lb A.R.E.A. Rail

135.8 lbs. per yard
239.7 net tons per mile of track
22.03 feet of track per net ton
Stock length 39' & 80'
AREA In 13.41
Sec. Modulus In Head 23.70
Sec. Modulus In Base 28.20
Mom. Inertia In 94.20

Angle Bars
36" length 115.40 lbs. per pair



TEE RAIL SECTIONS - DATA

Nominal Weight Per Yard	Type of Rail	DIMENSIONS IN INCHES								SECTION DESIGNATION			
		HT	BW	HW	W	HD	FD	BD	E				
80 lb.	ASCE DUDLEY	5	5	2 1/2	35/64	1 1/2	2 5/8	7/8	2 3/16	8040	80 AS	800	
		5 1/8	5	2 21/32	17/32	1 1/2	2 3/4	7/8	2 1/4	8022	80 DY	—	
85 lb.	ASCE	5 3/16	5 3/16	2 9/16	9/16	1 35/64	2 3/4	57/64	2 17/64	8540	85 AS	851	
	CAN. PAC.	5 1/8	5	2 1/2	9/16	1 7/16	2 11/16	1	2 11/32	8524	85 CP	—	
	CB&Q	5 3/16	5 3/16	2 21/32	9/16	1 35/64	2 3/4	57/64	2 17/64	8543	85 CB	852	
	MO. PAC.	5 7/32	5 1/4	2 15/32	75/128	1 3/4	2 39/64	57/64	2 23/128	8550	—	—	
	PS	5 1/8	4 5/8	2 1/2	17/32	1 21/32	1	2 15/64	2 15/32	8531	85 PS	—	
	PRR	5	5	2 9/16	17/32	1 3/4	2 3/8	7/8	2 1/16	8533	85 PR	—	
	SOO LINE	5 3/8	4 7/8	2 1/2	9/16	1 15/32	2 29/32	1	2 29/64	8520	—	—	
90 lb.	ASCE	5 3/8	5 3/8	2 5/8	9/16	1 19/32	2 55/64	59/64	2 45/128	9040	90 AS	—	
	ARA-A	5 5/8	5 1/8	2 9/16	9/16	1 15/32	3 5/32	1	2 37/64	9020	90 RA	902	
	ARA-B	5 17/64	4 49/64	2 9/16	9/16	1 39/64	2 5/8	1 1/32	2 11/32	9030	90 RB	905	
	AT&SF	5 5/8	5 3/16	2 9/16	9/16	1 15/32	3 5/32	1	2 37/64	9021	90 SF	903	
	C&NW	5 17/32	5 3/32	2 1/2	1/2	1 17/32	2 31/32	1 1/32	2 23/64	9035	90 OM	—	
	D&RG	5 1/2	5 1/8	2 9/16	9/16	1 5/8	2 7/8	1	2 5/8	—	—	906	
	GRT.NO.	5 3/8	5	2 5/8	9/16	1 15/32	2 7/8	1 1/32	2 15/32	9024	—	—	
	INTRBGH	5	5	2 7/8	11/16	1 25/32	2 11/32	7/8	2 3/64	9050	90 RT	—	
	U. PAC.	5 3/4	5 3/8	2 3/4	17/32	1 1/2	3 3/8	7/8	29/16	9023	—	901	
	DUDLEY	5 1/2	5	2 21/32	9/16	1 1/2	3 1/32	31/32	2 3/8	—	90 DY	—	
	100 lb.	ASCE	5 3/4	5 3/4	2 3/4	9/16	1 45/64	3 5/64	31/32	2 65/128	10040	100 AS	—
PS		5 11/16	5	2 43/64	9/16	1 13/16	2 25/32	1 3/32	2 31/64	10031	100 PS	—	
PRR		5 1/2	5 1/2	2 13/16	5/8	1 7/8	2 11/16	15/16	2 9/32	10033	100 PR	—	
ARA-A		6	5 1/2	2 3/4	9/16	1 9/16	3 3/8	1 1/16	2 3/4	10020	100RA	1003	
ARA-B		5 41/64	5 9/64	2 21/32	9/16	1 45/64	2 55/64	1 5/64	2 65/128	10030	100 RB	1002	
AREA		6	5 3/8	2 11/16	9/16	1 21/32	3 9/32	1 1/16	2 45/64	10025	100 RE	10025	
C&NW		5 45/64	5 9/64	2 9/16	9/16	1 39/64	2 61/64	1 9/64	2 79/128	10035	100 DM	—	
GRT. NO.		5 3/4	5	2 3/4	9/16	1 5/8	3	1 1/8	2 5/8	10036	100 GN	—	
INTRBGH		5 3/4	5 3/4	2 7/8	9/16	1 45/64	3 5/64	31/32	2 65/128	10005	100 RT	—	
NY.NH&H		6	5 1/2	2 3/4	19/32	1 23/32	3 11/32	15/16	2 39/64	10034	100 NH	—	
READING		5 5/8	5 3/8	2 21/32	9/16	1 45/64	2 55/64	1 1/16	2 63/128	10032	100 RG	—	
101 lb.		DL&W	5 7/16	5 3/8	2 3/4	5/8	1 23/32	2 11/16	1 1/32	2 3/8	10133	101 DL	—
105 lb.		DL&W DUDLEY	6	5 3/8	2 3/4	5/8	1 23/32	3 1/4	1 1/32	2 21/32	10533	105 DL	—
	6		5 1/2	3	5/8	1 5/8	3 13/32	31/32	2 43/64	10524	105 DY	—	
110 lb.	AREA	6 1/4	5 1/2	2 25/32	19/32	1 23/32	3 13/32	1 1/8	2 253/64	11025	110 RE	1100	
	GR. NO.	6 1/2	5 1/2	2 1/4	19/32	1 5/8	3 3/4	1 1/8	3	11036	110 GN	—	
	LE. VAL.	6	5 1/2	2 7/8	19/32	1 7/8	3 1/16	1 1/16	2 19/32	11033	110 LV	—	
112 lb.	AREA TR.	6 5/8	5 1/2	2 23/32	19/32	1 11/16	3 13/16	1 1/8	2 7/8	11228	112 RE	1121	
		6 3/4	5 1/2	2 1/2	5/8	1 3/4	3 7/8	1 1/8	3 1/8	11229	—	1122	
113 lb.	SO. PAC.	6 13/16	5 1/2	2 11/16	19/32	1 7/8	3 13/16	1 1/8	3 3/4	—	—	1130	
115 lb.	AREA DUDLEY	6 5/8	5 1/2	2 23/32	5/8	1 11/16	3 13/16	1 1/8	2 7/8	11525	115 RE	1150	
		6 1/2	5 1/2	3	5/8	1 11/16	3 3/4	1 1/16	3 3/8	11522	115 DY	—	
119 lb.	AREA	6 13/16	5 1/2	2 21/32	5/8	1 7/8	3 13/16	1 1/8	2 7/8	11937	119 RE	1190	
127 lb.	DUDLEY	7	6 1/4	3	21/32	1 11/16	4 5/32	1 5/32	3 1/8	12723	127 DYM	—	
130 lb.	PS AREA	6 5/8	5 1/2	3	11/16	2	3 13/32	1 7/32	2 3/4	13031	130 PS	—	
		6 3/4	6	2 15/16	21/32	1 27/32	3 11/16	17/32	3 1/16	13025	130 RE	1300	
131 lb.	AREA	7 1/8	6	3	21/32	1 3/4	4 3/16	1 3/16	3 1/4	13128	131 RE	1311	
132 lb.	AREA	7 1/8	6	3	21/32	1 3/4	4 3/16	1 3/16	3 3/32	13228	132 RE	1321	
133 lb.	AREA	7 1/16	6	3	11/16	1 15/16	3 15/16	1 3/16	3	13331	—	1330	
136 lb.	LE. VAL. AREA	7	6 1/2	2 15/16	21/32	1 7/8	3 7/8	1 1/4	3 3/16	13633	136 LV	—	
		7 5/16	6	2 15/16	11/16	1 15/16	4 3/16	1 3/16	3 3/32	13622	136 RE	—	
140 lb.	AREA PS	7 5/16	6	3	3/4	2 1/16	4 1/16	1 3/16	3	—	140 RE	—	
		7 5/16	6	3	3/4	2 1/16	4 1/16	1 3/16	3	14031	140 PS	—	



Specs for Relay Rail

Class 1 & 2

- Conditions:** Rail will have no known interior defects (transverse fissures, compound fissures, detail fractures, vertical or horizontal split heads, etc.) Rail shall be free of wheel burns, corrugation, shelling, surface nicks, cracks and/or head crushing. Head checking shall not exceed 3/8" in length. Head flaking shall not be greater than 1/16" in depth. Base pitting/corrosion shall be not larger than 3" across and not exceeding 1/8" in depth. Tie plate wear shall not be greater than 1/16".
- CWR Source:** Rails shall be cut on existing welds when dismantling recovered CWR in order to not increase number of welds for re-use. Plant welds can remain to minimize the number of welds for relaying if the pieces are suitable for handling and meet length requirements. The plant welds must meet the minimal standards of plant weld parameters and be located a minimum of 36" from the ends after processing (cropping, drilling, or welding). All thermite welds must be removed during classification/processing.
- Jointed Source:** Rail end drilling must be compatible with current BNSF standards. Predecessor railroad standard drillings are acceptable as an alternative depending on regional qualification (i.e. end drilling must be same as those in the territory that rail will be utilized for). Bolt holes must be free of cracks and not have elongation exceeding +/- 1/16". Joint bar contact areas must be in good shape (having no corrosion and wear not exceeding 1/32" depth). Rail head ends must be free of battering, crushing or chipping.
- All Sources:** All rails may be shortened by cropping to remove bad or defective sections/ends if the remainder is suitable for use and meets the accepted length parameters.

Class 3

- Wear:** Less than 5/16" vertical head loss and gauge face loss (1/4" for 115# sections or lighter).
- Alignment:** Rails will be free of sharp bends or kinks. Uniform upsweep or downsweep/droop (vertical) will be accepted if the maximum ordinate does not exceed 1" in 39 ft. Uniform lateral (horizontal) sweep will be accepted if the maximum ordinate does not exceed 1 1/2" in 39 ft.
- Condiitons:** Rail will have no known interior defects (transverse fissures, compound fissures, detail fractures, vertical or horizontal split heads, etc.). Wheel burns shall only have slight discoloration, no chipping or spalling greater than 3/4" diameter and each rail shall have no more than six burns. Corrugation shall be less than 0.025" in depth or no more than 18" in length. Head crushing shall have a 1/4" maximum protrusion over sides and no spalling extending into the head. Shelling shall have no black spots or breakouts extending more than 1/4" into the head. Rail will be free of surface nicks or cracking. Head checking shall not exceed 3/8" in length. Head flaking shall not be greater than 3/32" in depth. Base pitting/corrosion shall be no larger than 4" across and no greater than 3/16" in depth. Tie plate wear shall be no greater than 1/8" in depth. Any rail that has an excess of one or more of the above acceptable conditions shall be scrapped.
- CWR Source:** Rails shall be cut on existing welds when dismantling recovered CWR in order to not increase number of welds for re-use. Plant welds can remain to minimize the number of welds for relaying if the pieces are suitable for handling and meet length requirements. The plant welds must meet the minimal standards of plant weld parameters and be located a minimum of 36" from the ends after processing (cropping, drilling, or welding). All thermite welds must be removed during classification/processing.
- Jointed Source:** Rail end drilling must be compatible with current BNSF standards. Predecessor railroad standard drillings are acceptable as an alternative depending on regional qualification (i.e. end drilling must be same as those in the territory that rail will be utilized for). Bolt holes must be free of cracks and not have elongation exceeding +/- 1/8". Joint bar contact areas must be in good shape (having no corrosion and wear not exceeding 1/16" depth). Rail head ends must not have battering or crushing exceeding 1/8" in depth. Rail head chipping shall be no greater than 3/4" long by 3/8" depth for the previous gauge side or 1/4" long by 1/4" depth on field side (the new gauge side for future use).
- All Sources:** All rails may be shortened by cropping to remove bad or defective sections/ends if the remainder is suitable for use and meets the accepted length parameters.



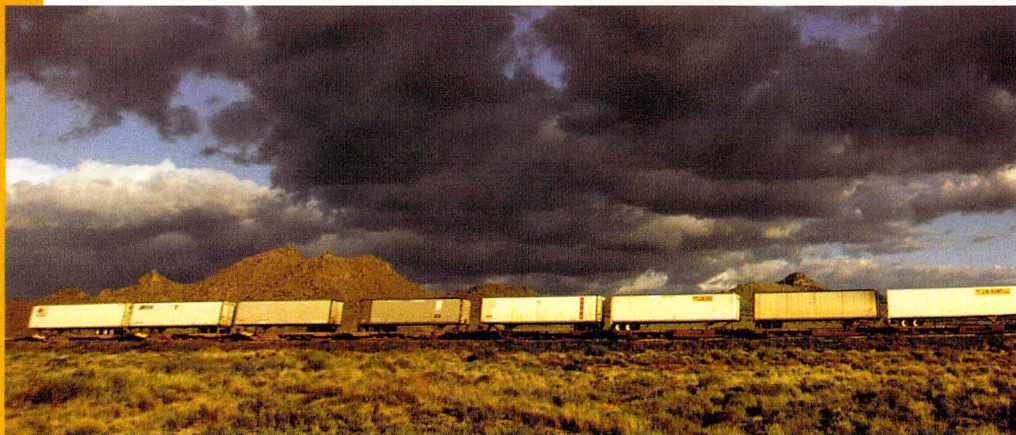
Class 4

- Wear:** Less than or equal to 1/2" vertical head loss and gauge face loss (5/16" for 115# sections or lighter).
- Alignment:** Rails will be free of sharp bends or kinks. Uniform upsweep or downsweep/droop (vertical) will be accepted if the maximum ordinate does not exceed 1" in 39 ft. Uniform lateral (horizontal) sweep will be accepted if the maximum ordinate does not exceed 1-1/2" in 39 ft.
- Conditions:** Rail will have no known interior defects (transverse fissures, compound fissures, detail fractures, vertical or horizontal split heads, etc.). Wheel burns shall only have slight discoloration, no chipping or spalling greater than 1" diameter and each rail shall have no more than six burns. Corrugation shall be less than 0.035" in depth or no more than 12" in length. Head crushing shall have a 3/8" maximum protrusion over sides and minimal spalling extending into the head. Shelling shall have no black spots or breakouts extending more than 1/4" into the head. Rail will be free of surface nicks or cracking. Head checking shall not exceed 3/8" in length. Head flaking shall not be greater than 3/32" in depth. Base pitting/corrosion shall be no larger than 4" across and no greater than 3/16" in depth. Tie plate wear shall be no greater than 1/8" in depth. Any rail that has an excess of one or more of the above acceptable conditions shall be scrapped.

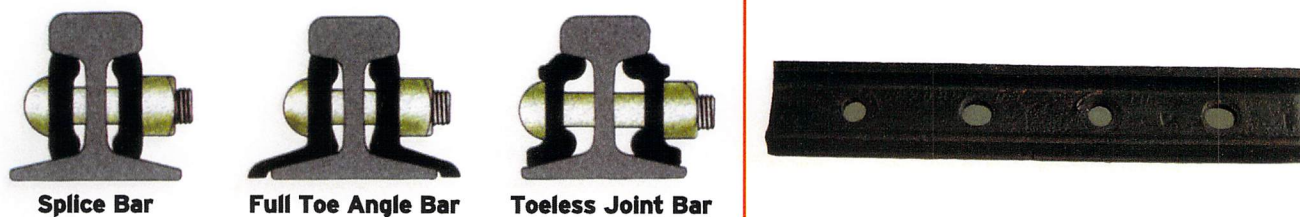


RECOMMENDED RELAY RAIL GRADING CLASSIFICATION

Rail Weight	Maximum Rail Wear - Inches		General Rail Use And Rail Condition
	Top	Gage	
Class I			
140	1/4	1/2	Main Line use – very minor engine burns and corrugation
132-131	3/16	1/2	
122	5/32	7/16	
115	1/8	3/8	
112	1/8	1/4	
100	1/8	1/8	
90	1/8	1/8	
Class II			
140	3/8	3/4	Branch Lines – small engine burns and corrugation
132-131	5/16	3/4	
122	5/16	3/4	
115	5/16	3/4	
112	5/16	1/2	
100	3/16	1/4	
90	1/4	3/16	
Class III			
140	5/8	7/8	Light Branch Lines – Medium engine burns and corrugation, may be pitted and show some oxidation
132-131	7/15	7/8	
122	1/2	7/8	
115	3/8	3/4	
112	3/8	3/4	
100	1/4	1/4	
90	5/16	5/16	
Class IV			
140	3/4	1	Yards – any burns not mashed or fractured
132-131	9/16	1	
122	11/16	1	
115	1/2	7/8	
112	1/2	7/8	
100	7/16	7/8	
90	3/8	3/8	



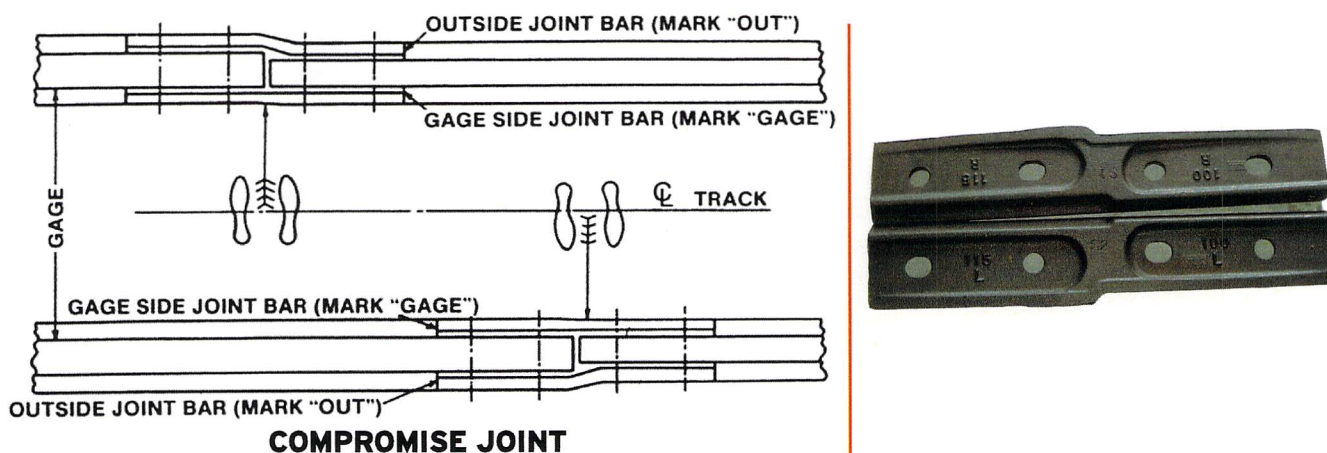
JOINT BARS



Angle Bars and Splice Bars must be punched to match rail drilling accurately to insure proper rail alignment. Give us the following dimensions:

- Size of bolt hole (or bolt diameter)
- Center-line of first hole, to center-line of second hole
- Center-line of second hole, to center-line of third hole
- Distance between center-lines of two center holes

COMPROMISE JOINT BARS connect rails of different sizes and drillings. Compromise bars are available in cast or forged steel with 4, 5 or 6 hole drillings.



Compromise bars are supplied in pairs (one pair per joint). To determine whether joint is right hand or left hand: stand in center of track facing field side (outside)
 If larger of the two rails is to the left, the joint is left hand
 If larger of two rails is to the right the joint is right hand

How to Order

Stand in center of track as described above. Describe left hand rail first and then right hand rail.

Determine the following:

1. rail section
2. rail drilling
3. bolt diameter
4. length of bars
 - 36" for 6-hole bars
 - 30" for 5-hole bars
 - 24" for 4-hole bars



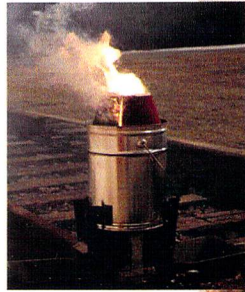
WELD KITS

SINGLE USE CRUCIBLE WELD KIT 40-25-101

Includes: Single-use crucible with cap,
1 pair of molds, 1 bag of Thermit portion,
1 bag of luting sand, 1 plug and 1 igniter

HOW TO ORDER:

- Specify weight and section of rail
- Confirm if rail is standard or premium quality



SINGLE USE CRUCIBLE TOOL KIT 40-25-101



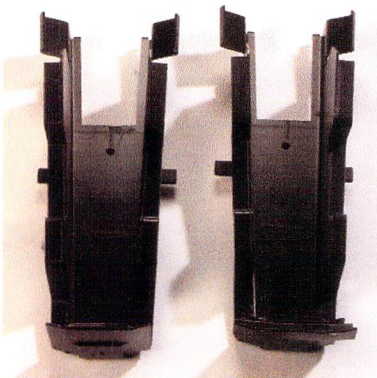
Burner Saddle
50-20-100



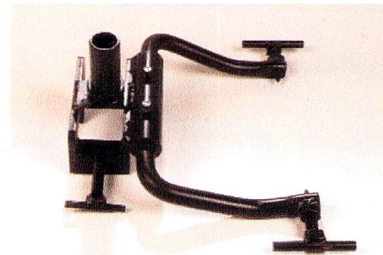
Preheating Burner SKV-5 Minute
50-20-102 (2 roles of holes)



Burner Stem
50-20-103



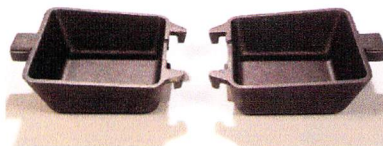
SU Mold Shoes
50-30-1020 SkV4 80# - 100#
50-30-101 SkV0 112# - 141#
50-30-103 SkVS Compromise



Lightweight Universal Clamping Device 55-40-102



Gap Gauge
50-50-101



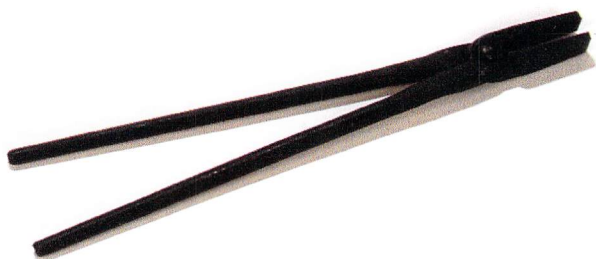
Slag Pans
50-30-106L



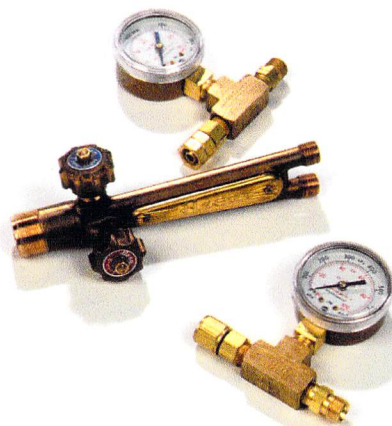
Demolding Multi-Purpose Tool
1" Gap
50-50-101



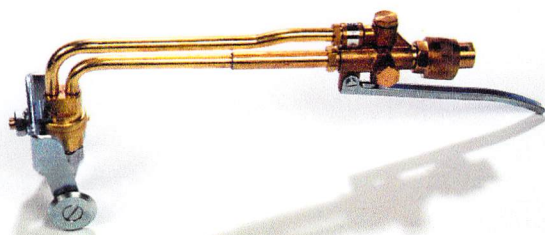
ADDITIONAL TOOLS/EQUIPMENT



Fire Tong
50-50-104



Oxygen Check Gauge 50-20-124 & Propane Check Gauge 50-20-125
(shown with Burner Stem 50-20-103)



Lever Style Cutting Torch
50-20-112



Rail Thermometer
50-20-114



Setting Gauge 2.75" Wide Gap
50-50-120



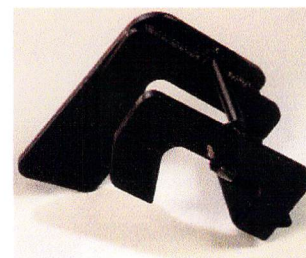
Straight Edge, 36" Long Beveled
50-50-105



Chisel Hot Set with Handle
50-50-109



Small Steel Wedges
50-50-106



Rail Burner Cutting Gauge
50-20-115



NOTES



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