Corridor Maintenance

Track Welder Manual Bulletin

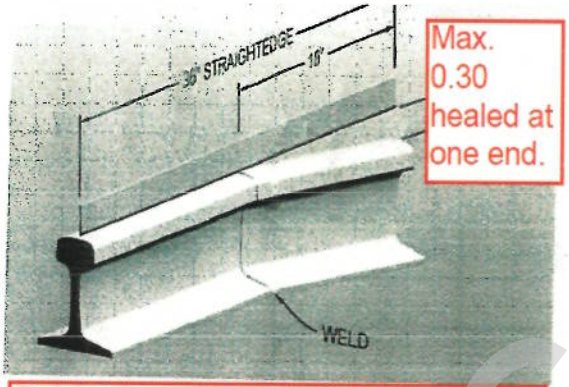
Corrected thermite welding tolerances, corrected fractions of an inch equivalency in millimeters, and tempeature values from °F to °C.

July 10, 2019

Bulletin No. 001

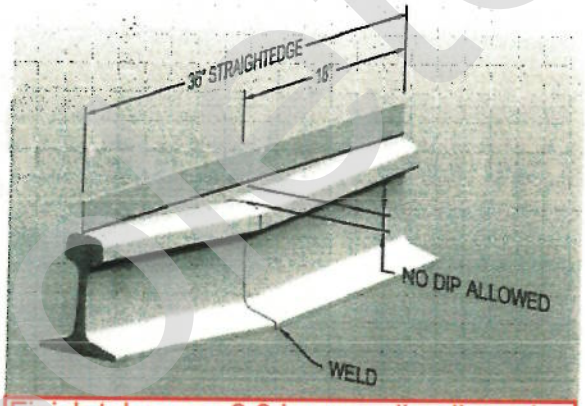
Existing Statement

In the GO Transit Track Welder Manual at the top of page 16-41 there are two elevation views of a rail showing weld final cold grinding misalignment tolerances in vertical alignment. The wrong tolerance values and no measurement units are presented.



Max. 0.30 healed at one end.

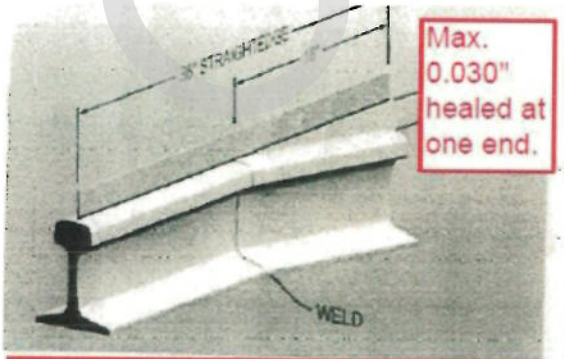
Finish tolerance 0.0 to 0.15 High. Maximum 0.30 healed at one end of 36" straight edge.



Finish tolerance 0.0 Low no dip allowed. Anything greater than 0.30 low is unacceptable.

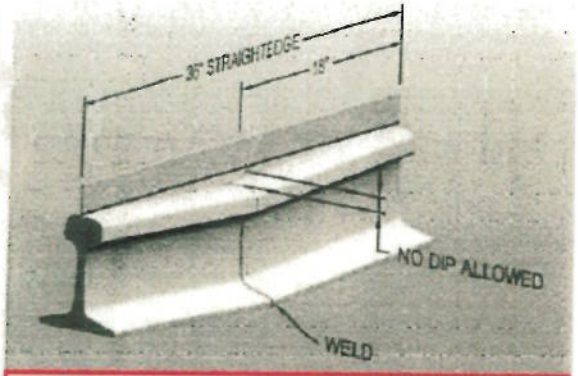
Correct Statement

The corrected tolerance values and units of measurement in inches are as follows.



Max. 0.030" healed at one end.

Finish tolerance 0.000" to 0.015" High. Maximum 0.030" healed at one end of 36" straight edge.



Finish tolerance 0.000" Low no dip allowed. Anything greater than 0.030" low is unacceptable.

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Updated Information

The complete manual was reviewed to confirm and correct when necessary other references made to tolerances in thousands of an inch.

The conversion of measurements from inches to millimeters (1 inch = 25 mm) was reviewed with minimal changes required, and the temperature values in °F was also reviewed and accepted as the correct value and then converted to °C temperature value using the formula (°F – 32)x 5/9 = °C. Thirty (30) locations in the manual required corrected temperature values in °C and a summary list is appended to this bulletin.

To address the above conversions the manuals "General Requirements" was updated and a new section 7 was inserted and the original "General Requirements" sections 7 and 8 renumbered 8 and 9.

New item 7 General Requirements

GENERAL REQUIREMENTS

7. In the manual welding temperatures are provided in both °F and °C, measurements in fractions of an inch and millimeters are also provided, examples 1 inch = 25 mm; 3/8" = 10 mm; 1/8" = 3 mm; 1/16" = 1.6 mm; 1/32" = 0.8 mm, and welding grinding tolerances are displayed as decimals of an inch rather than using the term thousands of an inch.

These changes are effective immediately.

Signed:

Alan Britton

Director, Corridor Maintenance, CPG, Metrolinx

Temperature Correction Table for the GO Transit Track Welders Manual

GO Transit Track Welders Manual		
Section	**PDF Page No.**	**Comments**
6-2 (Welding Current)	78	°F is right wrong °C values
9-2 (Preheating)	122	°F is right wrong °C values
9-4 (Surface grinding)	124	°F is right wrong ° C values
9-10 (Post-heating and control cooling)	130	°F is right wrong ° C values (Except for 32°F)
9-11 (Post-heating and control cooling)	131	°F is right wrong °C values
9-12 (Emergency repair of insulated joints in the field by electric arc-welding)	131	Number 6 °F is right wrong °C value
9-14 (Repair of rail end batter)	134	°F is right wrong °C values
11-1 (Preheating)	143	°F is right wrong °C values
11-3 (Post heating)	145	°F is right wrong °C values
12-2 (Electric arc procedure)	148	°F is right wrong °C values
12-3 (Electric arc procedure)	149	Number 6 °F is right wrong °C value
13-2 (Controlling distortion in switch point)	152	°F is right wrong °C value
13-3 (Electric arc method)	153	°F is right wrong °C values
13-4 (Electric arc method)	154	°F is right wrong °C value
13-5 (Post heating)	155	°F & °C cooling rates &°F right wrong °C values
13-6 (Welding Switch Points)	156	Number 2-a and 4-c °F right wrong ° C values
13-7 (Welding Switch Points)	157	Number 4-h,I °F right wrong °C value
14-2 (Stock rail welding preparation)	160	Number 1 °F is right wrong °C value
14-3 (Stock rail welding preparation)	161	Number 8 °F is right wrong °C value
14-4 (Stock rail welding procedure)	162	Number 1 and 4 °F is right wrong °C values
14-5 (Stock rail welding procedure)	163	Number 9 and 10 °F is right wrong °C values

14-8 (Electric arc method)	166	°F is right wrong °C values
14-9 (Stock rail engine burn repair)	167	Number 4-b °F is right wrong °C value
15-1 (General)	169	1900 °F is right wrong °C value
15-4 (Arc welding procedure)	172	°F values are right wrong °C values
15-7 (Maintenance of manganese diamonds using wire feed)	175	°F values are right wrong °C values
15-8 (Welding)	176	°F values are right wrong °C values
15-9 (Welding)	177	Number 4-vii °F values right wrong °C values
16-4 (Temperature Restrictions)	184	In table -5°C is wrong change to 5°C
18-13 (How oxy-fuel gas cutting works)	259	Figure 18.1 °F is right wrong °C value