Smithsonian Libraries

National Museum of American History Library
12th Street & Constitution Avenue, NW
Room 5016, MRC 630
Washington, DC 20013-7012
http://library.si.edu/libraries/national-museum-american-history-library

Trade Literature at the Smithsonian Libraries:

General copyright notice:

The copyright law of the United States (Title 17, United States Code) governs the making of photocopies or other reproductions of copyrighted materials. Under certain conditions specified in the law, libraries and archives are authorized to furnish a photocopy or other reproduction. One of these specified conditions is that the photocopy reproduction is not to be "used for any purpose other than private study, scholarship or research." If a user makes a request for, or later uses, a photocopy or reproduction for purposes in excess of "fair use," that user may be liable for copyright infringement. This institution reserves the right to refuse a patron the right to make photocopies if, in its judgment, fulfillment of the order would involve violation of copyright law.

Citation and publication:

The National Museum of American History Library's Trade Literature Collection is an exceptionally valuable resource for historical research on American business, technology, marketing, consumption, and design. The collection contains more than 500,000 catalogs, technical manuals, advertising brochures, price lists, company histories and related materials representing more than 30,000 companies, primarily covering the years 1880-1945.

When citing materials found in the Trade Literature Collection, please include:

> [Specific company name, i.e. Eastman Kodak Company], Trade Literature Collection, National Museum of American History Library, Smithsonian Libraries, Washington D.C. [date consulted]

If you intend to use images or materials from the Trade Literature Collection for publication, permission from the Smithsonian Libraries is required. Please contact SILimages@si.edu. Note that if work is protected by copyright, permission from copyright holder may also be required.

If you receive permission to use images from the Collection, please include the following credit line: Image courtesy of Smithsonian Libraries, Trade Literature Collection

REFERENCE
CATALOGUE LIBRARY
JUN 1 1949

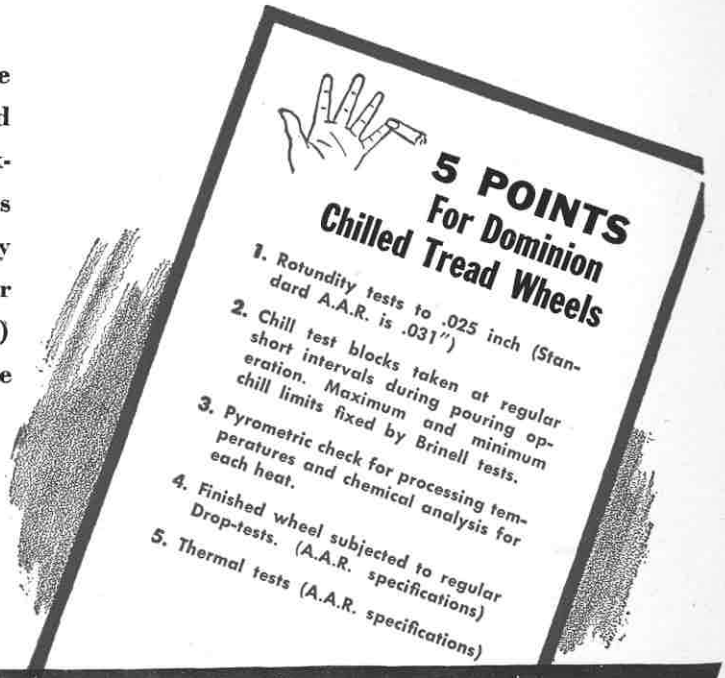
...in favour of Dominion Chilled Tread Wheels

FIVE POINTS FOR DOMINION WHEELS

POINT NUMBER ONE

ROTUNDITY test

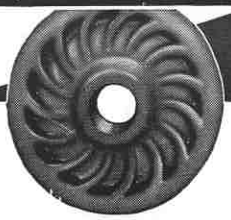
DOMINION chilled tread wheels are tested to .025 inches for rotundity. And note, the A.A.R. limits are .031 . . . This exceeding carefulness in rotundity limits is paralleled in all other phases of our railway wheel production. The "five points for Dominion chilled wheels" (noted at right) are the standards through which we have won our reputation for railway wheels.



DOMINION
WHEEL & FOUNDRIES
LIMITED TORONTO

DOMITE ALLOY IRONS

SINGLE PLATE BRACKETED TYPE
CHILLED TREAD WHEEL

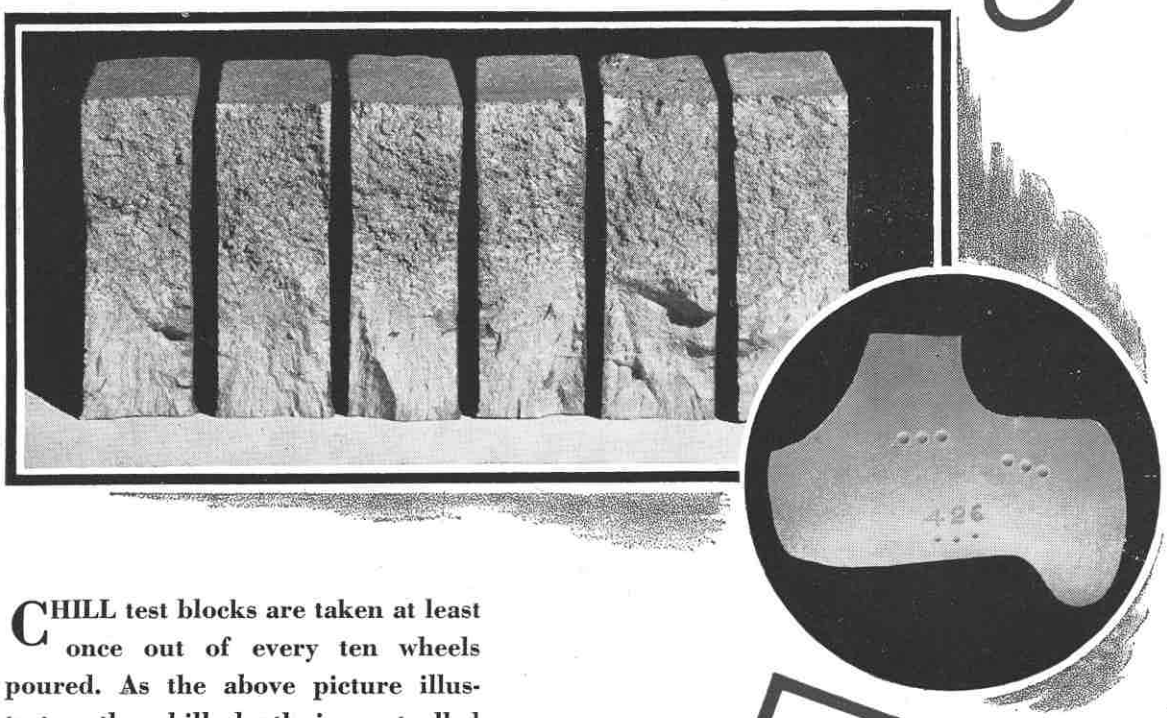


Plants: Toronto, Cobourg, St. Boniface, New Glasgow

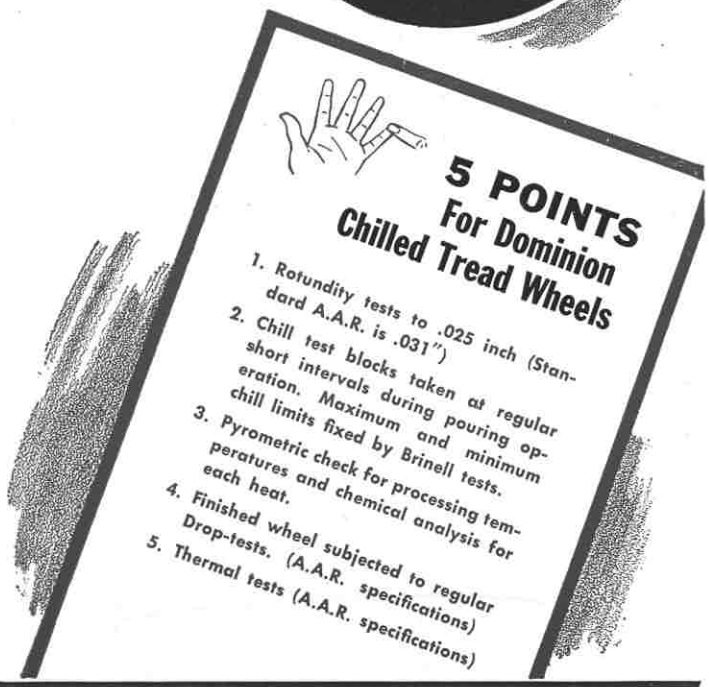
5 POINTS *for* DOMINION WHEELS

POINT NUMBER 2

Chill test



CHILL test blocks are taken at least once out of every ten wheels poured. As the above picture illustrates, the chill depth is controlled within narrow limits and around the periphery of the wheel (see insert), the chill is substantially uniform. Maximum and minimum chill limits are determined by Brinell tests and the chill on wheels tested is examined in at least four different locations. All tests are based on A.A.R. specifications.



DOMINION
WHEEL & FOUNDRIES
LIMITED TORONTO

SINGLE PLATE BRACKETED TYPE
CHILLED TREAD WHEEL

DOMITE ALLOY IRONS

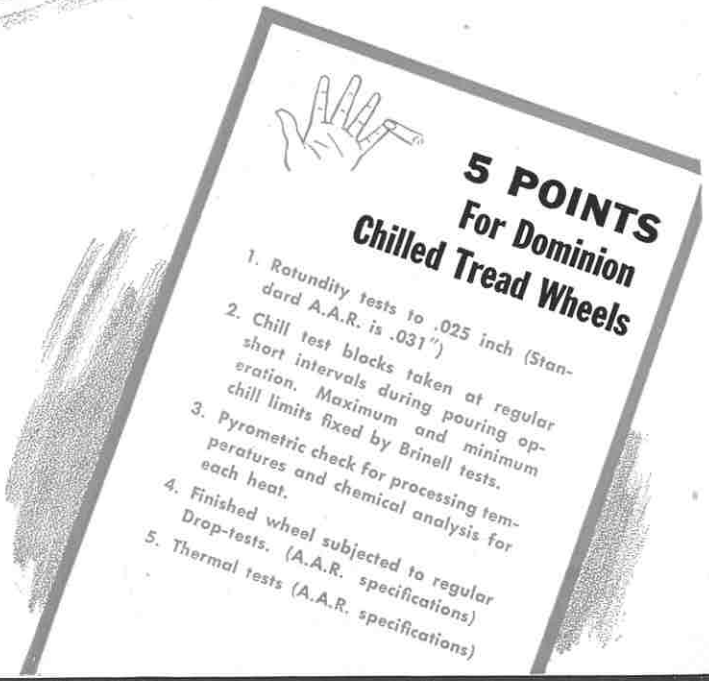
Plants: Toronto, Cobourg, St. Boniface, New Glasgow

FIVE POINTS FOR DOMINION WHEELS

POINT NUMBER 3

PYROMETRIC *test*

THE PYROMETER TEST is one of the most rigorous controls used in manufacturing Chilled Car Wheels. From cupola to mould, pyrometric tests are made at every stage of the molten metal. All pyrometric control equipment is periodically tested, to assure absolute accuracy at all times.

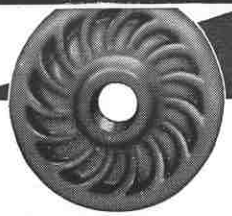


5 POINTS For Dominion Chilled Tread Wheels

1. Rotundity tests to .025 inch (Standard A.A.R. is .031")
2. Chill test blocks taken at regular short intervals during pouring operation. Maximum and minimum chill limits fixed by Brinell tests.
3. Pyrometric check for processing temperatures and chemical analysis for each heat.
4. Finished wheel subjected to regular Drop-tests. (A.A.R. specifications)
5. Thermal tests (A.A.R. specifications)

DOMINION WHEEL & FOUNDRIES LIMITED TORONTO

SINGLE PLATE BRACKETED TYPE CHILLED TREAD WHEEL



DOMITE ALLOY IRONS

Plants: Toronto, Cobourg, St. Boniface, New Glasgow

FIVE POINTS FOR DOMINION WHEELS

Point number 4

DROP *test*

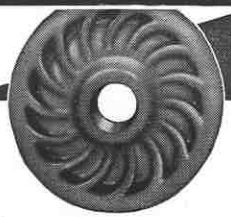
ONE WHEEL from every hundred manufactured by Dominion Wheel & Foundries Limited is subjected to regular Drop-tests. This test, to determine freedom from internal stresses in the plate of the wheel, is governed by A.A.R. specifications. Every wheel assures the railroads of dependability in safety, long life and economy. These are the basic factors of operation.

5 POINTS For Dominion Chilled Tread Wheels

1. Rotundity tests to .025 inch (Standard A.A.R. is .031")
2. Chill test blocks taken at regular short intervals during pouring operation. Maximum and minimum chill limits fixed by Brinell tests.
3. Pyrometric check for processing temperatures and chemical analysis for each heat.
4. Finished wheel subjected to regular Drop-tests. (A.A.R. specifications)
5. Thermal tests (A.A.R. specifications)

DOMINION WHEEL & FOUNDRIES LIMITED TORONTO

SINGLE PLATE BRACKETED TYPE CHILLED TREAD WHEEL

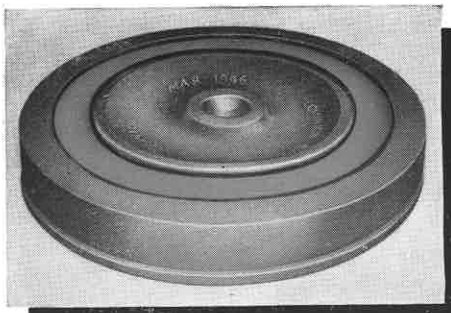


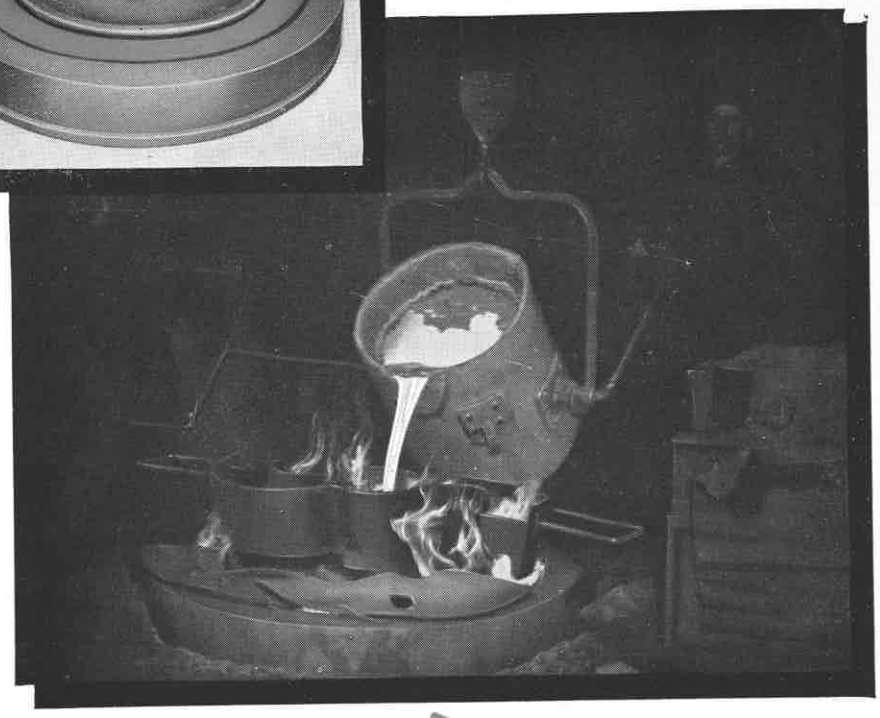
DOMITE ALLOY IRONS

Plants: Toronto, Cobourg, St. Boniface, New Glasgow

FIVE POINTS FOR DOMINION WHEELS

POINT NUMBER 5



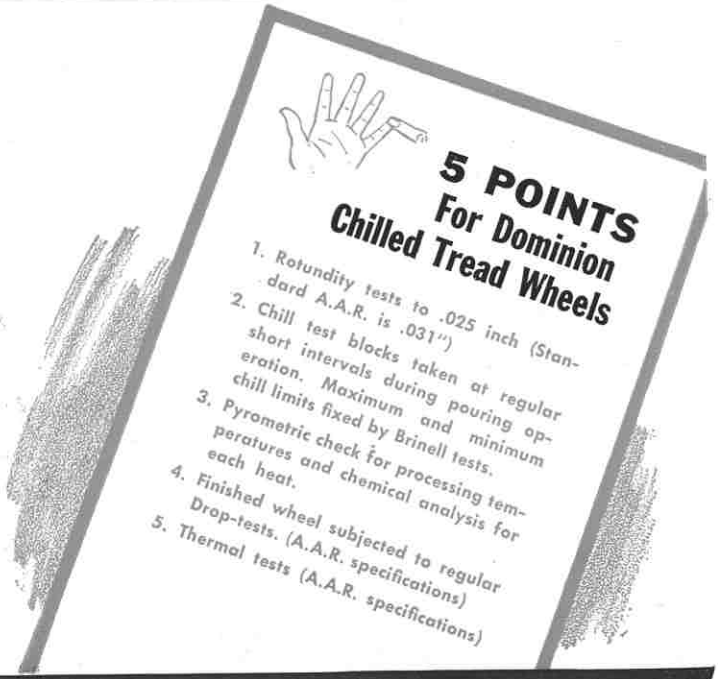


THERMAL test

THE OBJECT of the Thermal Test is to demonstrate the ability of the wheel to withstand temperature stresses encountered in service due to brake application.

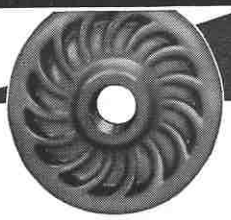
The finished wheel is placed in the centre of the thermal test unit. Around the wheel is poured a band of molten metal, which is then allowed to cool.

This test provides a much greater temperature change than the wheel will ever be subjected to in actual operation.



DOMINION WHEEL & FOUNDRIES LIMITED TORONTO

SINGLE PLATE BRACKETED TYPE CHILLED TREAD WHEEL

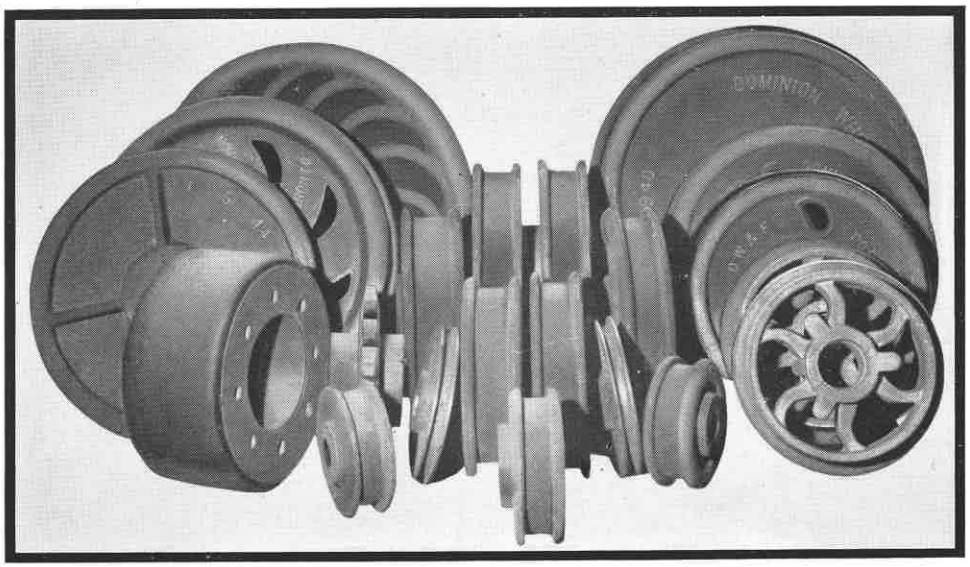


DOMITE ALLOY IRONS

Plants: Toronto, Cobourg, St. Boniface, New Glasgow

Wheels

DESIGNED AND MANUFACTURED FOR EVERY PURPOSE WHERE CHILLED TREAD WHEELS ARE USED



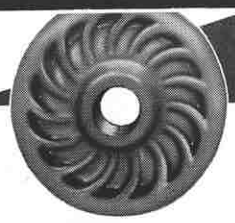
●Scores of industries across Canada use standard (or custom built) wheels from Dominion Wheel & Foundries for many transportation purposes—including railway freight car, street car and mine car wheels. We also manufacture chilled iron crane wheels, crusher rolls, sprockets, sheave wheels, etc. All Dominion Wheels are subjected to the same rigid tests described in the preceding pages.

We invite your enquiries on any type of chilled tread wheels.

DOM ITE
ALLOY IRONS

DOMINION
WHEEL & FOUNDRIES
LIMITED TORONTO

SINGLE PLATE BRACKETED TYPE
CHILLED TREAD WHEEL



Plants: Toronto, Cobourg, St. Boniface, New Glasgow