

JULY 2006 www.moderncasting.com A Publication of the American Foundry Society letalcaster of the Year Dotson Iron Castings Gating Design p.24 **Diversifying Iron Plants p.33 Setting Up Rapid Prototyping Services p.37**

September 26, 2000 Brainstorming Session

Target Customers: Track Rail Manufacturers

Needed Capabilities: ADI, Design

Assistance, Quick Test Parts

Major Challenges: Bureaucracy,

Patience/Commitment, Better Knowledge of Ind.

Sales Strategies: Offer Test Parts, Become Involved Within Ind., Assign Ind. Team



Known Barriers

AAR Manual of Standards and Recommended Practices Couplers and Freight Car Draft Components

M-201

STEEL CASTINGS

Specification M-201-00

Adopted: 1923; Revised: 1984, 1993, 2000

1.0 SCOPE

These specifications cover carbon and alloy steel castings for locomotive and car equipment and for miscellaneous use graded as A, B, B+, C, D, and E. AAR Specification M-201 provides for all castings unless another AAR specification for a particular product provides for a variation.

2.0 BASIS OF PURCHASE

Grade A castings shall be furnished unannealed, annealed, or normalized unless otherwise specified by the purchaser. Grades B and B+ castings shall be furnished normalized or normalized and tempered. Grade C castings shall be furnished normalized and tempered or quenched and tempered. Grades D and E castings shall be furnished quenched and tempered.

2.1 At the purchaser's request, a certification will be made the basis of acceptance. The certification shall include a statement that the material has been manufactured, sampled, tested, and inspected in accordance with, and meets the requirements of, all applicable provisions of these specifications. Each certification furnished shall be signed by an authorized agent of the supplier or manufacturer.

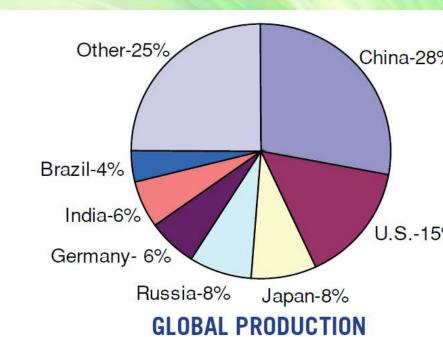
3.0 RECORDS

The manufacturer shall maintain for 15 years records of the mechanical and chemical test reports covering the heats representing the purchased castings. These records will be made available to the purchaser upon request.

MANUFACTURE

4.0 PROCESS

- **2,040**—Number of metalcasting facilities in the U.S. in 2011. This number is down from 3,300 in 1990 and 6,000 in 1955.
- **80%**—Percentage of metalcasting facilities with less than 100 employees.
- 200,000—Number of people employed by the U.S. metalcasting industry.
- 2nd—World ranking of the U.S. in terms of casting shipments. China is 1st.





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