

Reference Handbook for EOT Cranes

Volume I - Mechanical

Collection of Previously Published Papers
From *IRON AND STEEL ENGINEER*

- 1 **Crane Wheel Tread Contours**
1952 - John J. Stolz

- 7 **Taper vs. Straight Tread Crane Wheels**
1955 - J.A. Bell

- 16 **Correct Crane Runway Design - Minimizes Maintenance**
1956 - James A. Evans

- 21 **Dual Bridge Drives For Overhead Traveling Cranes**
1958 - W.J. Tunny

- 24 **Standardized Component Parts For Heavy Duty Mill Type Cranes**
1958 - Myron R. Bowerman and Elvin R. Madison

- 32 **Application of Cushioning Material Under Crane Rails**
1959 - K.D. Cunningham

- 34 **Crane Bridge Drive and Wheel Combinations**
1960 - Roy F. Dehn

- 37 **The Selection of Crane Wheels**
1960 - Ross B. McCready

- 39 **Crane Rail Lubrication**
1962 - Elmer E. Fleck and Hugh L. Davis

- 43 **Research on Shelling of Crane Wheels**
1966 - T. Mitsuda and Dr. F.G. Bauling

- 53 **Prediction and Analysis of Crane Wheel Service Life**
1971 - Stan Neumann and Lynn E. Arnold

- 62 **Newest Methods Applied to Crane Wheel Calculations in Europe**
1977 - Marcel LeMeur, Gerard Richter, Leo Hesser

- 67 **Thermite Welding of Crane Rails at Kaiser Steel**
1977 - Gerald A. Park, Dean D. Domonoske, Ronald P. Faherty

- 73 **Crane Rails and Their Installation**
1978 - George Molyneux and Godfrey M.O. Molyneux

- 77 **Design of Industrial-Type Overhead Cranes**
1978 - Edward M. Jagodzinski
- 82 **Fatigue Cracking in Welded Crane Runway Girders:
Causes and Repair Procedures**
1978 - Harold S. Reemsnyder and David A. Demo
- 87 **Cracking of Welded Crane Runway Girders:
Physical Testing and Computer Simulation**
1985 - Anthony R. Ingraffea, Walter H. Gerstle, Kirk I. Mettam,
Paul Wawrzynek, Alan K. Hellier
- 94 **Designing Overhead Cranes For Nonflat Runways**
1985 - Felim P. McCaffrey
- 98 **Reducing Crane Wheel Failures by 50%**
1985 - Charles A. Totten
- 102 **Crane Girder Tie-Back Connections**
1989 - John C. Rowswell and Jeffrey A. Packer
- 107 **Flash Butt Welding of Crane Rails at Burns Harbor**
1989 - Charles A. Totten
- 111 **Vibration in Trolley-Mounted Crane Cabs**
1990 - Alan H. Jones, Felim P. McCaffrey, Otakar Urban, Richard J. Clayton
- 114 **10-Year History of Crane Wheel Assembly Maintenance at
Bethlehem's Burns Harbor Plant**
1991 - Charles A. Totten
- 118 **Knee Braced Crane Girders—Problems and Solutions**
1993 - Raymond S. Milman and David J. Hanson
- 123 **Profile Grinding of Crane Rail at Bethlehem's Burns Harbor Plant**
1993 - Charles A. Totten
- 127 **Fatigue Life Analyses of Crane Runway Girders**
1996 - Raymond S. Milman
- 132 **Economics of Crane Runway Rerailing**
1996 - Charles A. Totten
- 135 **Flash butt welding of crane rail**
1996 - Ruben Trompler, Jr.
- 138 **Hydraulic Bumpers to Protect Buildings, Cranes and Operators
from Impact Damage**
1997 - Paul G. Kit
- 146 **Automating Cranes for Storage and Retrieval Operations**
1998 - Gary Sonnenberg, Jay A. Denny, Rob McFarlan

- 151 Preventing Overhead Crane Load Drops**
1998 - James E. Nelson
- 153 No Cables Out of Crane Sheaves at Bethlehem's Burns Harbor Div.**
1998 - Charles A. Totten
- 157 Inspection, Analysis, Repair and Redesign of 32-Ton Stacker Cranes at Dofasco's Central Shipping Complex**
1999 - Michael A. Gulas, Douglas P. Brignull, Todd Stewart, and Frank L. Cristan
- 163 Crane Wheel and Rail Interface**
1999 - Boris M. Kivenson and William A. Ewing