Gain Real-World Insight Based on Hard-Won Experience New! Manufacturing Engineering and Materials Processing

Edited by

George T. Halmos

Delta Engineering Inc., Toronto, Ontario, Canada

Practical Knowledge for Immediate Implementation

Roll forming is one of the most widely used processes in the world for forming metals. Most of the existing knowledge resides in the minds of those who have learned from experience or in various journal articles. Providing a vehicle to systematically collect and share this important knowledge, the Roll Forming Handbook presents the first comprehensive, dedicated treatment to all facets of roll forming, supplying references to more in-depth information to fill in the gaps.



This book spans from conception of the roll forming operation, purchasing and specifying equipment, and roll design to maintenance, troubleshooting, safety, and operator training. Detailed discussions reveal how material, equipment, tooling, and operator factors affect overall efficiency and product quality. Expert contributors share insights based on many years of hard-won experience, including effects of secondary operations such as punching, embossing, curving and cutting in the line; designing products for efficient roll forming; mechanical properties of metals, lubrication and the influence of coatings on roll design and forming; and mathematical simulations of various deformations that occur during processing to determine their causes and find a solution.

Outlining a practical approach to select, set up, and operate roll forming lines, the Roll Forming Handbook combines scientific background and practical know-how that enables you to set up cost-effective and high-quality roll forming lines with confidence.

<u>FEATURES</u>

- Includes real-world case studies, recommendations for efficient plant layout and material handling as well as hundreds of illustrations and references
- Explains the principles and methods of manual and computer-aided roll design and tool setup
- Supplies equations to calculate number of passes, shaft diameters, and bending factors, published here for the first time
- Presents guidelines for training personnel as well as for performing troubleshooting and maintenance



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