

Table of Contents

Summer 2008

Vol. 11, No. 3

Wire Forming Technology

International

Torsion
tester used
in measuring
helical spring
torsional yield
point....37



Programmable rotary wire
straightener....42



7-axis wire forming
machine....48



Feature Articles

36 Important Wire Parameters for Producing Highly Loaded Helical Springs

Kersten Liebermann/Veronika Geinitz/Hans-Jürgen Schorcht/Mathias Weiß/Ulf Kletzin - It is important to know how to measure material properties when making helical compression springs.

40 Opportunities in India's Spring Industry

P. K. Bansal - There are challenges and some concerns, however, the future looks bright for the spring industry in India.

42 Meeting New Challenges

Sherwood Griffing - A look at two efficient and effective solutions related to the processes of wire straightening and medical spring coiling.

46 Wire Forming & Bending Roundup

Editorial Staff - Suppliers have responded to our call for the state-of-the-art in wire forming and bending equipment and technology.

51 Tool Steels

Dr. Roger N. Wright - Part 9 of the multi-part series, *The Strength of Steel*, dedicated to the metallurgy of spring making and wire formed parts manufacturing.

54 Spotlight On Heat Treatment

Michael McNulty - A look at two long-term trends in the wire forming industry: induction hardening/tempering of spring wire and in-line conveyor furnace stress relieving of springs.

56 No Spring End Grinding Without a Dust Extraction System

Metin Sari - A conversation describing the need for dust extraction system efficiency and performance in the grinding of pressure springs and pressure spring elements.

58 Here's How to Check Your Vulnerability to Unionization

Mariah deForest - Assessing your vulnerability to unionization is a complicated, but necessary undertaking to preserve your company's well being, especially in light of pending legislation.

61 Spring CAD Programs—Key Features

Dr. Richard Dignall/Mark Hayes - "Technically Speaking" column.

Industry Events

18 SPRING WORLD® 2008 Preview

Preview of the premier marketplace for the spring and wire form industry's leading suppliers, SPRING WORLD® 2008, being held October 15 to 17, 2008, in Rosemont, IL, USA.

52 wire China 2008 Preview

Preview of wire China 2008, being held September 23 to 26, 2008, in Shanghai, China (compiled from information obtained at the wire china 2008 website).

Departments

Wire Forming Events.....	4
Editorial.....	6
News Wire	8
Product Showcase.....	62
Advertisers' Index	63
Editorial Index.....	64

Next Issue: Fall 2008

Technical Achievement Awards
Emphasis: Surface Treatment & Cleaning
Roundup: Spring Grinding
Spotlight: Testing
Company Profiles