

Table of Contents

Fall 2011

Vol. 14, No. 4

Wire Forming Technology

International

WFTI EMPHASIS: Testing



Spring testing equipment...27



Alternative to zinc plating...28



Electric
conveyor
oven...42



Self-aligning tilting
unwinder...55

Feature Articles

18 WFTI Technical Achievement Awards – Class of 2011

Wire Forming Technology International (WFTI) Technical Achievement Awards are given out to industry individuals for major technical developments related to equipment, materials or accessories for making springs, wire formed parts, wire mesh or rebar products.

22 Accurate Spring Testing

Chris Wilson/Michael Boyd/Patty Hartzell - The features of an accurate spring testing machine all have an impact on accuracy, convenience and efficiency. And all ensure product quality.

28 Alternative to Zinc Plating Offers Environmental Protection & Enhanced Properties

Phil Dhake - New chromium-free, water-based finish provides cost-effectiveness and significantly better corrosion protection.

30 Velocity Manufacturing

"Dr. Lisa" Lang - Stop focusing on efficiency and focus on velocity to reduce lead and queue times, and to increase lead-time predictability, on-time deliveries, quality and cash flow.

34 Advanced Nanotechnology Material

Ulrika Porath - Company's pioneering material is the result of a Nobel Prize-Winning discovery.

36 Automotive Suspension Springs Cold Formed Using Pre-Hardened Wire — Part 1: The Industrial Case

Guido Berti/Manuel Monti - When reducing spring wire diameter via cold forming for automotive applications, it is necessary to use high-strength spring material to maintain mechanical properties.

40 Heat Treatment Roundup

Editorial Staff - Suppliers have responded to our call for the state-of-the-art in heat treatment technology.

44 Importance of Material Certification Sheets

Daniel H. Herring - By using materials certification sheets, recipes and cycles can be optimized to take into account the factors surrounding how the steel was specified and produced.

48 Spotlight On Spring Grinding

Michael McNulty - Efficient spring grinding requires optimized grinding time and long wheel life.

50 Hounds, Ham Bones & the National Labor Relations Board

Woodruff Imberman - It is better to avoid a union election entirely, rather than merely winning it.

53 Company Profiles

Information of value to the international spring and wire formed parts industry.

Columns

14 Bright Ideas: Marketing Strategies for the Wire Forming Industry

Joe Cappello - SNAIL MAIL: "Drop Your Customers a Line".

16 All Things Springs

Randy DeFord - Spring Rate — The Boss & Spring Fundamentals.

29 Technically Speaking

Mark Hayes - Spring Design Stresses.

47 The Strength of Steel

Dr. Roger N. Wright - Working the Metal – Part 1: Basic Concepts.

Industry Events

52 Straight From The Show

Images, facts and news from *wire Southeast 2011*, September 13-15, 2011, in Bangkok, Thailand.

Departments

Wire Forming Events.....	4
Editorial.....	6
News Wire.....	8
Product Showcase.....	55
Advertisers' Index.....	71
Classified Advertising.....	71
Editorial Index.....	72

Next Issue: Winter 2012

Top Products of 2011

wire 2012 Preview

Roundup: Wire, Strip, Bar & Coatings

Spotlight: Mesh Welding