

Editor's Corner

Jack Detweiler

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The 2006 Supplier Directory

In 2005, 50 new Suppliers appeared in OrthoSupplier (see www.orthosupplier.com), bringing the total to 225 Suppliers and Consultants that have Members in the Institute for Orthopaedics™. Be sure to check out their profiles in this issue. Sixty suppliers have already committed to making themselves available to meet with you at OMTEC 2006 next June. A complete list of exhibitors will appear in the next issue.

The Big Picture

John Engelhardt, Chief Executive Officer of Knowledge Enterprises Inc., summarizes the evolution of OEM/Supplier relationships through the past decade and suggests that recent history could portend future developments.

Product Development

Whether for showing proof of concept, assessing or validating user requirements or system specifications, training users or exploring design problem solutions, Larry James of New Concepts Prototyping avows the value of iterative prototyping—before, during and after the beginning, middle and latter stages of development.

Susan Capps summarizes the design considerations for several categories of spinal repair devices, the reasons for their use and the biomechanical considerations that drive the design parameters of each.

Logistics

Barbara Lyons of Precimed reassures us that RFID is no longer a pie-in-the-sky concept within our industry. The use of RFID may have more positive implications—both direct and indirect—than many of us have imagined, and its benefits are being employed and enjoyed “here and now” to the benefit of patient, surgeon, hospital and OEM alike.

Technology

Have no fear—OEMs can do it. Neil Ryall of Kays Engineering suggests that, owing to the high costs associated with contract manufacturing services and with the procurement of cannulated raw materials, OEMs may find value in incorporating gundrilling as one of their in-house manufacturing processes.

Similarly, Kyle Elmlblad of Hammond Roto-Finish proposes that mass finishing processes—in some quarters perhaps unrecognized and undervalued as being applicable to the finishing of orthopaedic implants—deserve more than cursory acknowledgement when pursuing product improvement in terms of appearance and function.

Tom Neuenschwander of LH Industries Corp. highlights a 3D stamping technology that is purported to offer medical design engineers a geometric freedom that was previously unattainable. Apparently, the fundamental geometric rules of lamination stamping have changed and now offer new opportunities for application in the manufacture of medical devices.

Tom Whitton of Advanced Powders and Coatings touts plasma atomization as a process that offers superior performance levels for production of titanium powder used in metal injection molding applications. The sphericity and purity characteristics of powders created by this process reportedly generate a more favorable response to the demands posed by our industry.

Testing

Jennifer Robertson of Polymer Solutions describes a testing protocol designed to examine the interaction between bone cement and cement mixers, with the intent of determining whether the use of a particular mixer has any effect on a broad range of bone cement properties.

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