

FEATURES

12 Tech Service: Molding liquid silicone rubber

by Dan Laur and Mike Agodoa, *Laur Silicone*. A simple LSR molding system is reported to work well for short production runs or large parts.

13 Process Machinery: Rotor design - part 1

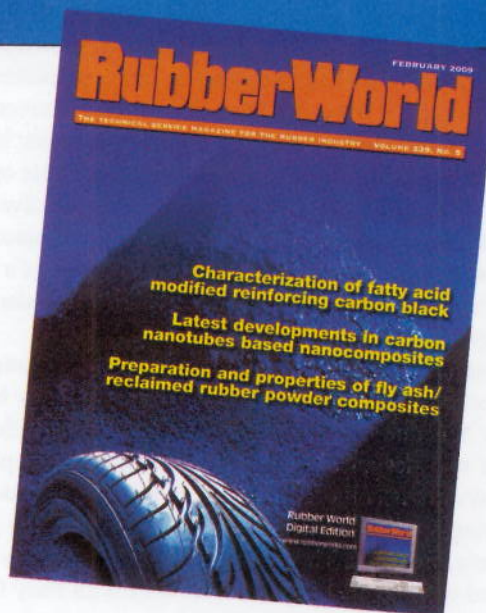
by Richard J. Jorkasky, II, *Kobelco Stewart Bolling*. Advanced design of the four-wing N rotor improves rubber mixing, including Mooney viscosity, batch temperature, and intra- and inter-batch temperature consistency.

16 Fly ash/reclaimed rubber powder composites

by Weili Wu, *Qiqihar University, China*. Fly ash combined with a coupling agent is utilized as a filler to reinforce reclaimed rubber powder composites.

20 Fatty acid modified reinforcing carbon black

by Abhijit Adhikary, *L&T e-Engineering Solution, Pranab K. Sengupta, University of Calcutta, and Rabindra Mukhopadhyay, Hasetri*. A simple laboratory technique can be used to attach a fatty acid by-product to the surface of carbon black to give an environmentally friendly modified black.



Cover photo: Courtesy of Zeppelin Systems USA.

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The advantages and material properties allow the One Part Easy Cure materials to be used in a wide range of applications, including standard automatic high volume LSR molding systems, or simple compression or transfer molding of just a few parts at a time. The system is also excellent for rapid prototyping. Part size can range from small, typical LSR type parts, to large parts that are typically molded with peroxide cure, high consistency rubber. The shelf life of One Part LSR is three months if stored at standard factory temperatures or under cool air such as an air conditioned room. Refrigeration is not required.

Simple compression molds were used for this demonstration. The molds were provided by Die Stampco (<http://www.diestampco.com>) and E&D Engineering (<http://www.eden-machine.com>). Because simple, one-sided compression molds were used, the mold costs were very low, ranging from \$350-\$450. Most standard rubber molds could be used with little or no modifications.