

Process Modeling for Metal Forming Die Stress Analysis

Industry leaders have learned that traditional methods of designing and troubleshooting tools and dies are becoming less competitive. The costs and lead times associated with die failures can no longer be tolerated as a 'cost of doing business'. Forging and heading tool and die costs typically range from 5 -15% of total sales when all of the cost elements are included. Improvements made in tooling performance go straight to the bottom line!

Simulation software is used to help 'connect the dots' between the science of tooling failure and the practical issues on the shop floor. Die life and failures are directly related to stresses. This workshop provides information on the fundamentals of stress, setting up computer models and interpreting the results. Information provided can help novice engineers or experienced designers improve tool life - before the dies are cut!

The details of stress interpretation and application to industrial problems will be emphasized. Each attendee will have ample opportunity to reinforce the concepts by reviewing specific cases using DEFORM™. A wide range of industrial examples involving significant cost savings will be presented.



Itinerary: - overview - industrial examples - stress and strain - elastic & plastic deformation - analysis methods - die failure fundamentals - interobject interactions - die wear - thermal fundamentals & applications - interference theory & applications - troubleshooting die problems - material selection - practical analysis considerations -

Logistics: - August 13 & 14, 2008 - Marquette University - Milwaukee, Wisconsin - 8:30 a.m. to 4:30 p.m. - \$775 / person - enrollment limited to first 20 applicants -



For additional information, contact:
Joe Domblesky at Marquette University
(414) 288-7832 joseph.domblesky@marquette.edu
~ or ~
John Walters at SFTC
(614) 451-8323 jwalters@deform.com



- ~ The fee of \$775 / person (including lunch) is payable prior to 8/11/08. Attendees are responsible for all travel expenses.
- ~ 100% refund will be made for cancellations on or before 8/1/07. A \$100 administrative fee will be deducted for cancellations on or before 8/8/08. No-shows or cancellations (after 8/8/08) are responsible for the full registration fee.
- ~ Marquette and SFTC reserve the right to cancel or reschedule this workshop without any penalty for travel or lodging cost penalties as a result of rescheduling/cancellation. In this event, you will be notified immediately. In this event, the course fees will be refunded.
- ~ Information on available lodging near the campus will be included with the registration confirmation.

Mail or fax registration to: **Dr. Joseph Domblesky**
Department of Mechanical and Industrial Engineering
Marquette University **Haggerty Engineering Hall**
P.O. Box 1881 **Milwaukee, WI 53201**
Tel: (414) 288-7832 **Fax: (414) 288-7790**

Registration Form

Company Name: _____

Attendee Name: _____

Title / Position: _____

Address: _____

Phone: (____)____-____ X-____ Fax: (____)____-____

e-mail: _____

Check Enclosed Total Amount Enclosed: \$ _____

Bill Company P.O. Number: _____

- credit card payment is not available at this time -