

Process Modeling for Metal Forming Die Stress Analysis

Industry leaders have known for years that traditional methods of designing and troubleshooting tools and dies are not competitive. The cost and time associated with die failure is not a “cost of doing business”. Hot forging and cold forming tool and die costs typically range from 5-15% of total sales, when all cost elements are included. Improvements in tooling performance go straight to the bottom line!

Simulation is used to help “connect the dots” between the theory of tool failure and practical production issues. Die life is related to stresses. This workshop teaches the fundamentals of stress analysis, failure modes and interpreting simulation results. This will help engineers and designers improve tool life before the dies are manufactured.

The 24th annual workshop will be held at Scientific Forming Technologies Corp. (SFTC), located in Columbus, OH. Professor Joe Domblesky and James Miller are the instructors. Fundamentals and their application to industrial problems are emphasized. A wide range of cases involving significant life improvement are discussed. An optional third day offers a DEFORM training course on die stress analysis simulation setup.



Itinerary: overview • industrial examples • stress and strain • analysis methods • die failure fundamentals • die wear theory • die wear example • thermal fundamentals • practical thermal considerations • interference theory • practical shrink fit considerations • troubleshooting die problems • tool material selection • industrial case studies

Logistics: Die Stress Analysis Workshop August 18-19, 2020 8:30 a.m. to 4:30 p.m.
 DEFORM Die Stress Training August 20, 2020 8:30 a.m. to 4:00 p.m.

• Enrollment limited to first 20 applicants • Lunch will be provided • DEFORM training presented by SFTC staff •

For **registration information**, contact:

Caryl Gatton; SFTC (614) 451-8330 x100; cgatton@deform.com

For **technical information on course content**, contact:

James Miller; SFTC (614) 451-8330 x108; sales@deform.com
 Prof. Joe Domblesky; Marquette Univ. (414) 288-7832; joe.domblesky@marquette.edu

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- Die Stress Analysis Workshop fee: \$875 per person (prepaid)
- DEFORM Die Stress Training fee: \$250 per person (prepaid)
- The workshop fee is \$950 per person if payment is made after the workshop starts.
- A \$50 per person credit is offered for two or more attendees from the same company.
- Attendees are responsible for all travel expenses.
- Cancellations made at least 2 weeks prior to the workshop receive a 100% refund. A \$100 administrative fee applies for cancellations within 2 weeks of the event. No refunds for no-shows or cancellations after the workshop starts.
- SFTC reserves the right to cancel or reschedule the event without any penalty for travel or lodging costs. If cancelled, workshop and training fees will be refunded.
- Information on area lodging options will be included with the registration confirmation.

Mail, email or fax registration to:

**Caryl Gatton, Scientific Forming Technologies Corp.,
 2545 Farmers Dr Ste 200, Columbus, OH 43235
 Phone & email: see above Fax: (614) 451-8325**

Registration Form

Company: _____

Name: _____

Title: _____

Address: _____

Phone: _____ Fax: _____

Email: _____

Check enclosed Total amount enclosed: \$ _____

Bill company P.O. number: _____

Credit card (instructions will be provided)

Attending: Die Stress Analysis Workshop DEFORM Training