

2nd JSTP International Seminar on Precision Forging

Organized by Japan Society for Technology of Plasticity

PROGRAM (1/2) [May 15 - 18, 2000]

May 14, 2000: Registration at Senri Hankyu Hotel
(Shinsenrihigashimachi 2-1-D-1, Toyonaka, 565-0082, JAPAN, Tel:+81-6-6872-2211)

May 15, 2000: Keynote Lectures in Osaka University, School of Engineering Science
(Machikaneyama 1-3, Toyonaka, 560-8531, JAPAN, Tel: +81-6-6850-6195)

8:30 - 8:45	Opening Ceremony	
8:45 - 9:30	Basic Concepts for the Improvement of Product Accuracy in Forging	<i>Prof. K. Kondo (Toyota Technological Institute)</i>
9:30 - 10:00	Special Lecture	<i>Prof. Dr. K. Lange</i>
10:00 - 10:30	Break	
10:30 - 11:00	Special Lecture	<i>Dr. H. Pugh</i>
11:00 - 11:30	Tribo-Test in Die Forging	<i>Prof. H. Saiki (Kumamoto University)</i>
11:30 - 12:00	Process Development in Warm and Hot Forging	<i>Prof. T. A. Dean (University of Birmingham)</i>
12:00 - 13:30	Lunch	
13:30 - 14:00	Precision Forging of Gears	<i>Mr. H. Yoshimura (Nichidai)</i>
14:00 - 14:30	Application of the Digital Engineering to the Forging Process Design	<i>Mr. H. Yano (Toyota)</i>
14:30 - 15:00	Finite Element Analysis of Precision Forging Processes	<i>Prof. D-Y. Yang (KAIST)</i>
15:00 - 15:30	Break	
15:30 - 16:00	Hot Forming	<i>Prof. R. Shivpri (Ohio State Univ.)</i>
16:00 - 16:30	Current Trends in Materials for Cold Forging	<i>Mr. T. Kimura (Daido Steel)</i>
16:30 - 17:00	Current Trends in Forging Presses	<i>Mr. S. Takemura (Komatsu)</i>
17:00 - 18:00	Free	
18:00 - 20:00	Welcome Party & Self Introduction of the Invited Attendants	

May 16, 2000: Presentations in Osaka University. School of Engineering Science

8:30 - 17:00	Presentation by the Invited Attendants and Discussion	See PROGRAM (2/2)
18:00 - 19:00	Supper	
19:00 - 21:00	Panel Discussion -Future of Precision Forging-	<i>Prof. H. Kudo & Prof. K. Osakada (Osaka Univ.)</i>

May 17, 2000: Visit to Denso Corp.(Cold Forging) & Toyota Motor Corp.(Hot Forging)

7:30	Leave Osaka for Anjo (Aichi)
11:30	Arrive at Denso Corp., plant tour
13:00	Lunch
14:00	Leave for Toyota
14:30	Arrive at Toyota Motor Corp., plant tour
16:00	Leave Toyota for Osaka
20:00	Arrive at Senri Hankyu Hotel

May 18, 2000: Visit to Metal Art Corp. (Hot/Cold Forging) & Nichidai Corp.(Die Making and Precision Forging)

8:00	Leave Osaka for Kusatsu
10:00	Arrive at Metal Art Corp., plant tour
12:00	Lunch

13:30	Leave for Kyoto
14:30	Arrive at Nichidai Corp., plant tour
17:30	Farewell Party at Nichidai Corp.
20:00	Leave Kyoto for Osaka
21:00	Arrive at Senri Hankyu Hotel

May 19, 2000: Check out

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8:30 – 9:50

1. Flexible Near-Net Shape Forging
RAUFOSS TECHNOLOGY *Axel KOLSGAARD (NORWAY)*
2. Challenge with New Opportunities for Net Shape Cold Forging Technology
KRUPP PRESTA AG *Matthias HAENSEL (LIECHTENSTEIN)*
3. General Overview of Research Activities in Cold Forging at the LET
University of Erlangen-Nuremberg *Bernd FALK (GERMANY)*
4. Development of Closed Die Forging Process for Crank Shaft
Metal Industry R&D Center *Yiin-Kuen FUH (TAIWAN)*

9:50 – 10:10 Break

10:10 – 11:50

5. Cold Extrusion Process of Gas Generator of Car Driver Airbag
Beijing Research Inst. of Mech. and Elect. Tech. *Tan XIE (CHINA)*
6. Net-Shape Forging of Gears
University of Birmingham *Zhongmin HU (U K)*
7. The Development of Femoral Hip Stem Forging Technology
National Kaohsiung Institute of University *Yung-Chou KAO (TAIWAN)*
8. General Manufacturing System for Die Forging
Hitachi Zosen Information Systems *Rika TATEIWA (JAPAN)*
9. Orbital Forging - The Present State and Future Prospects
Metal Forming Institute *Andrzej PLEWINSKI (POLAND)*

11:50 – 13:00 Lunch

13:00 – 15:00

10. Simulation of Precision Forging Process
Technical University of Budapest *Robert BOGAR (HUNGARY)*
11. Forging Preform Design using a Reverse Simulation Approach with the Upper Bound Finite Element Procedure
University of Bath *Chao-Cheng CHANG (U K)*
12. Application of 3D Forging Analysis to Optimize Forging Die Parameters for Helical Gear Forming
Nissan Motor *Shin-ichiro FUJIKAWA (JAPAN)*
13. Effective Use of CAE in Cold Forging
Asahi Sunac *Makoto MORITA (JAPAN)*
14. Evaluation of Punch Force and Maximum Pressure for Tube Extrusion
NERC-Institute of Metal Research *Shi-Hong ZHANG (CHINA)*
15. Plastic Flow in Extrusion of Metals by Experimental Investigations and Analytical Approach
University of Galati *Nicolae SOLOMON (ROMANIA)*

15:00 – 15:20 Break

15:20 – 18:00

16. An Expert System for Cold Forging Process Design Based on a Depth-First Search
Hyundai Electronics Industries *Hong-Seok KIM (KOREA)*
17. Influence of the Stiffness Stripwound Containers on the Life Deformation Behavior of Cold Forging Dies
DANFOSS A/S *Anders BISGAARD (DENMARK)*
18. Damage and Fatigue Fracture Analysis of Cold Forging Dies Based on Local Approach
Sizuoka University *Kunio HAYAKAWA, T. NAKAMURA & S. TANAKA (JAPAN)*
19. Fatigue Dependent Design of Hard Coated Cold Forging Tools
DANFOSS A/S *Christian HINSEL (DENMARK)*
20. Prediction of Tool Wear in Precision Forging
The Ohio State University *Gracious NGAILE (USA)*
21. Controlling of Microstructure in Forging using Thermo-Mechanical Treatment

