



July 2010

INTRODUCTION

The IDDRG, International Deep Drawing Research Group, was started in 1957 as an organization of national groups devoted to the study of sheet forming.

At this time, many types of sheet metal forming operations were well understood and, particularly, the differentiation between modes of deformation was already established: stretching, plane strain, shear and shrink drawing. However, the latter – fabrication of cups – was not so well understood and, particularly, the influencing mechanical characteristics were not identified.

Some thought that earing was detrimental, others that the yield point elongation had to be avoided (killed steels performed better than rimmed steels) but there were counter-examples and things were not so clear.

This is why English, Sweden and Netherland researchers had contact to gather their forces on this topic. They decided to meet in Amsterdam in March 1957, inviting representatives from Germany, Belgium, France and Chile. The only goal was to understand cup forming, hence the name of Deep Drawing Research Group that was chosen at the end of this event.

A first international conference was organised in Paris, May 1960, gathering 212 attendees from 15 nations. At the end of this conference, the initial purpose of the IDDRG was enlarged to consider more topics than initially proposed. It was to do cooperative research on tests, materials, and processes. Such work included methods for determining the strain-hardening exponent n , R -value, other tests for sheet metal formability and, later, forming limit curves.

Starting at this conference, a schedule was established for working group meetings every year with open Congresses in even numbered years. The working group meetings were closed sessions made up of delegations from the National Groups that comprised the IDDRG. The reason for these closed sessions was to allow experts to informally review critical issues related to materials, tests, and processes.

As some of the initial technical issues were resolved, the working groups became progressively more informal, and over the years became mini conferences. By 1998, it

had become obvious that the format of the IDDRG needed to be changed. This evolution took time, but starting in 2003, the meeting schedule shifted to yearly conferences with both regular papers and poster papers that are included in conference proceedings.

MISSION STATEMENT

The yearly conference of the IDDRG is devoted to experimental and computational papers with industrial relevance that are presented by academic and industrial researchers. The intent of the conference is to present new work that stimulates thinking and provides opportunities for informal discussion among researchers in sheet metal formability. Written proceedings, which include both the presentations and poster papers, are published. Now, CD-ROMs containing all papers are also produced for each conference. The IDDRG maintains a library of papers going back to 1960 (see website).

ACTIVITIES

Conferences are scheduled for May or June in Europe, North America or Asia. However, most conferences are held in Europe because the majority of the current membership resides in Europe. Conferences start with an informal reception on Sunday evening followed by two and a half days of technical sessions. Ample time is allowed for technical discussion, and various social events are scheduled in association with the conference.

In order to provide focus for the next conference, the Executive Committee of the IDDRG uses input from members attending the previous conference to select topics of interest in sheet metal forming that will provide new information and facilitate exchange of ideas on these topics. Typical topics include machinery and press-tools, new processes, new materials, experimental methods for evaluating formability and studying press operations, springback, constitutive equations, plasticity criteria, and friction and wear with attention to interface behaviour as characterized by topography and surface chemistry, lubrication, speed, and temperature.

Submissions are reviewed by a scientific committee to select the best papers. Papers that are not selected for presentation are automatically included as poster papers if they have acceptable technical quality. Also, commercial content is not acceptable in IDDRG papers.

While mathematical modelling is important in studies of sheet metal formability, for IDDRG papers, mathematical modelling should be a tool, not a topic in itself. Thus, topics such as new algorithms, innovative shell or solid elements, time integration schemes, etc are not considered for presentation or poster papers.

Paper proceedings are distributed to all attendees at the start of the Conference. Talks are scheduled for twenty minutes followed by ten minutes for questions and discussion. Furthermore, the conferences are organized so that there is ample time for further discussion. English is the official language of the IDDRG.

ORGANISATION

The officers of the IDDRG are the current President, Vice-Presidents, general Secretary, treasurer, and active past-presidents. The officers of the IDDRG comprise the Executive Committee. The vice-presidents are selected for their expertise and to represent, as far as possible, the geographic distribution of the member countries.

Specific responsibilities of vice-presidents are to contact and represent the National delegations in their geographic area and to chair technical sessions at conferences. Current members of the executive committee select new members.

Current members of the Executive Committee include:

- N. Langerak, Netherlands, (President)
- A. Col, France, (Past President)
- B. Levy, United States, (Past President)
- C. Van Tyne, United States, (General Secretary)
- A. Santos, Portugal, (Treasurer)
- H. Hayashi, Japan, (Vice-President)
- R. Kergen, Belgium, (Vice-President)
- F-J. Lenze, Germany, (Vice-President)
- A. Ranta-Eskola, Finland, (Vice-President)
- E. Till, Austria, (Vice-President)
- M. Tisza, Hungary, (Vice-President)
- N. Asnafi, Sweden, (Vice-President)

MEMBER COUNTRIES

Australia
Austria
Benelux (Belgium, Luxemburg and The Netherlands)
Brazil
Czech Republic
China

Denmark
Finland
France
Germany
Hungary
Italy
Japan
North America (USA and Canada)
Norway
Portugal
Slovakia
Slovenia
Spain
Sweden
Switzerland

PAST MEETINGS

| | Presidents |
|--|------------------|
| 1957 Foundation IDDRG | Dr. G. de Witte |
| 1960 Paris (France) | Pr. C. Crussard |
| 1961 Baarn / Hilversum (Netherlands) | |
| 1962 Düsseldorf (Germany) | |
| 1963 Stockholm (Sweden) | |
| 1964 London (England) | Pr. A. J. Murphy |
| 1965 Philadelphia (USA) | Pr. G. A. Homes |
| 1966 Liège (Belgium) | |
| 1967 St Germain en Laye (France) | |
| 1968 Turin (Italy) | Pr. O. Masi |
| 1969 Madrid (Spain) | |
| 1970 Tokyo (Japan) | Pr. S. Fukui |
| 1971 London (England) | |
| 1972 Amsterdam (Netherlands) | Dr. C. Veerman |
| 1973 Zürich (Switzerland) | |
| 1974 Göteborg (Sweden) | Pr. O. Svahn |
| 1975 Düsseldorf (Germany) | |
| 1976 Ann Arbor (USA) | Dr. S.P. Keeler |
| 1977 Warsaw (Poland) | |
| 1978 Warwick (England) | Pr. D.V. Wilson |
| 1979 Liège (Belgium) | |
| 1980 Metz (France) | Dr. G. Pomey |
| 1981 Tokyo (Japan) | |
| 1982 Santa Margherita Ligure (Italy) | Mr. P. Timossi |
| 1983 Helsinki (Finland) | |
| 1984 Melbourne (Australia) | Dr. I. Brammar |
| 1985 Amsterdam (Netherlands) | |
| 1986 Cologne / München (Germany) | Dr. C. Schneider |
| 1987 Schaffhausen (Switzerland) | |
| 1988 Dearborn (USA) / Toronto (Canada) | Dr. S. P. Keeler |
| 1989 Budapest (Hungary) | |
| 1990 Borlänge / Göteborg (Sweden) | Dr. Y. Bergström |
| 1991 Pisa (Italy) | |

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|------|------------------------|-----------------------|
| 1992 | Shenyang (China) | Pr. Shi Changxu |
| 1993 | Linz (Austria) | |
| 1994 | Lisbon (Portugal) | Pr. M. Barata Marques |
| 1995 | Colmar (France) | |
| 1996 | Eger (Hungary) | Pr. M. Tisza |
| 1997 | Haugesund (Norway) | |
| 1998 | Genva (Belgium) | |
| 1999 | Birmingham (England) | Dr. B. Levy |
| 2000 | Ann Arbor (USA) | |
| 2001 | Espoo (Finland) | |
| 2002 | Nagoya (Japan) | |
| 2003 | Bled (Slovenia) | Dr. E. Kleemola |
| 2004 | Sindelfingen (Germany) | |
| 2005 | Besançon (France) | Mr. A. Col |
| 2006 | Porto (Portugal) | |
| 2007 | Győr (Hungary) | |
| 2008 | Olofström (Sweden) | |
| 2009 | Golden (USA) | Dr. N Langerak |
| 2010 | Graz (Austria) | |

And coming:

2011 Bilbao (Spain)