ASPPRC
Meeting the Challenge
of Self-Sufficiency

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NSF I/UCRC Meeting
January 8, 2009

www.mines.edu/research/aspprc
Concentrate on research at the interface between producers and users of steel

Sponsors: Steel Companies, Automotive and Heavy Equipment Manufacturers, Suppliers, Other
New Steels for Energy, Transportation, …

- Automotive
- Heavy Equipment
- Energy Development
  - Conventional
  - Nuclear
  - Renewable


Steels for Wind Generation

Fatigue-resistant high strength towers – ease of installation

Long-life, low-maintenance gear boxes and transmissions

Current Center Status: ASPPRC

- Established 1984 – currently 25<sup>th</sup> FY
- Single-University Center
- Major Operational Procedures – *Unchanged*
  - Director = Faculty member
  - Industrial Advisory Board
  - Semi-annual meetings and reports
  - Student-oriented research
    - >160 Graduates
    - >385 publications
- Major Center Objectives – *Unchanged*
- Funding Source – *Unchanged (Corporate)*
- Fee Structure – *Unchanged*
  - All companies pay same annual fee
**Current Center Status: ASPPRC**

- **University support**
  - Reduced overhead - *Unchanged*

- **Evaluator**
  - No longer involved - *Changed*

- **Staff**
  - Faculty, students, post docs, visitors
  - Director – *Changed* – 1993
  - Principal co-founder, George Krauss - *retired* – 1997

- **Challenges for the Future**
  - Research Funding
    - Federal opportunities in steel are limited!
    - Economic pressures on manufacturing companies
  - Planning for next major staff changes
  - Industrial Globalization – *most significant change* impacting ASPPRC operations
Research Operations

- Research divided into three product groups, to respond to needs of different companies
  - Bar, Sheet, Plate
- Steering committees
  - Research definition
- Semi-annual reports and meetings
  - Research review & development
- Leveraging Activities
  - Use of Corporate and National Laboratories
  - Coordinate other programs with ASPPRC
    - NSF/DOE on Advanced High Strength Steel
    - AISI/DOE programs
- Technology Transfer – Critical for success
Historical Perspective - Sponsorship

Number of Sponsors

1984 | 3 | 1 |
1990 | 5 | 7 |
ASPPRC Fiscal Year | 9 | 11 |
2002 | 13 | 15 |
2006 | 17 | 19 |
2008 | 21 | 23 |
2010 | 25 | 25 |
Historical Perspective – NSF Funding

NSF Funding of ASPPRC

Self Sufficient after 5 years
Industrial Globalization, Consolidation, and the Global Steel Market

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Impact on ASPPRC Operations
Many international facilities of corporate participants not shown
Summary and Recommendations

- Obtaining self sufficiency starts from “day one”
  - Clearly identify center focus
- Requirements to achieve self sufficiency
  - Satisfy initial client group
  - Develop new supporters
- Concentrate on individual contacts with champion and others within the companies
  - *Multiple supporters within a company are critical!!*
- Learn business aspects of the industry served by the center – *be sensitive to business issues*
- Develop center operations that can be flexible to changing industry needs (*consolidation and globalization in the case of ASPPRC*)