Standards for the Plastics Industry and ASTM International Committee D20

New Member Orientation

Alyson Fick, Staff Manager – ASTM, Technical Committee Operations
History of ASTM

- Founded in 1898 by engineers and chemists
- Proud partner of industry and government for over 100 years
- Blending tradition with forward-thinking vision
The ASTM International Mission

- Promote public health, safety, and the overall quality of life
- Contribute to the reliability of materials, products, systems and services
- Facilitate national, regional and international commerce
WELCOME TO ASTM COMMITTEE D20 ON PLASTICS....

Quick Facts:
✧ Founded in 1937
✧ 23 Subcommittees
✧ 1,018 Members
✧ 35 Countries represented
✧ Responsible for nearly 500 ASTM Standards
Committee D20 - SCOPE

• The development of specifications, classifications, test methods, practices, terminology, and guides,

• Stimulation of research relating to plastics,
  – raw materials,
  – components,
  – compounding ingredients,
  – finished products made from plastics such as
    • sheets,
    • rods,
    • reinforced tubes and pipes,
    • cellular materials, and
    • molded or fabricated articles.

  – ASTM Committee D20 Bylaws – Section 2.1
ADVANTAGES TO ASTM STANDARDS

- Plastics frequently specified to ASTM materials standards
- Purchaser/Supplier can agree upon specification values
- Standards contain tutorials to guide users
- Standards contain P&B statements
- Written by experts in their field
- Reflect the needs of industry
- Recognized worldwide
D20 Structure

✓ Four “Families” if D20 Subcommittees

✓ Methods Committees
  Examples include: D20.10, 20.30, 20.50, 20.70

✓ Materials Committees
  Examples include: D20.15, 20.16, 20.18

✓ Products Committees
  Examples include: D20.20, D20.24, D20.95, D20.96

✓ Special Committees
  Examples include: D20.13, D20.90, D20.92, D20.93
# Main Committee Officers

<table>
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D20 Work Flow

D20
Main Committee

Subcommittee
Ex. D20.10
Mechanical Properties

Section of Subcommittee
Ex. D20.10.24
Engineering and Design Properties

Task Group
Ex. WK29277
D20 Task Groups

Fundamental Operating Unit of the Committee

- Ad hoc Group
- Develops an Idea or Executes a Specific Charge
- Generate a Work Item number
- Hold Task Group meetings
  - Informal
  - At Committee Weeks or between meetings
- Present and Discuss at Section level, if appropriate
- Recommend actions to Subcommittee Level
- Open Participation!
Possible Charges of Task Groups

• Develop a New Standard
• Revise an Existing Standard
• Conduct an Interlaboratory Study
• Review a standard
• Solve a specification problem
• Prepare a recommendation for the Subcommittee
• Review ISO activity
D20 MEMBERSHIP

😊 Plastics Producers - resin manufacturers, compounders, recyclers

😊 Plastics Converters - extruders, molders, film and sheet makers

😊 Equipment and Product Manufacturers

😊 General Interest - labs, gov’t, academia

😊 Users - wire and cable, packagers
D20 Bylaws – Section 4 on Classification

• Producer Classifications are an individual or company member (including consultants) who;
  – Represents an organization that produces a product or system covered in the scope of the Committee or subcommittee.
  – Supplies materials or services to those {defined above} whose business is significantly dependent upon those products.
  – Is a representative of a trade organization who represents producers

Note: If a member is classified on any subcommittee as a producer, the member shall be classified as a producer on the main committee (ASTM Regulations, Section 8.2)
D20 Bylaws – Section 4 Classification

• User Classifications are an individual or company member (including consultants) who;
  – Purchases or uses products or systems covered in the Committee or subcommittee scope
  – Represents an organization who purchases or uses products or systems covered in the Committee or subcommittee scope.

• General Interest Classifications are an individual or company member (including consultants) who;
  – Are not defined as a Producer or User
    • Examples include; Government Agencies, Academia, or Independent Testing Labs
Member Classification Process

- D20 is a Classified Committee –
  - ASTM Committee D20 on Plastics defines Member Classifications in Section 4 of the ASTM D20 Bylaws under Classification and Voting Interest.

- Step 1: Review of company and major product or service provided
  - Would the member be considered a producer, user, consumer (only on some committees), or a general interest according to the scope of the committee?

- Step 2: Your classification will be reviewed by the D20.93 Advisory Subcommittee

- Step 3: Advisory makes a recommendations to the D20.90 Executive Subcommittee

- Step 4: D20.90 is the final authority for approving classification assignments.
Balance of Interest

Classified Technical Committees are balanced. No excess influence by any interest group.
VOTING

• ASTM regulations Defines Voting Privileges as
  – *Section 6.2 Voting Privileges*—Every ASTM member is entitled to vote on all Society Review items as well as on each ballot of a main committee and subcommittee to which the member belongs. All negatives and comments received from all ballot returns, *including those from non-official voting members*, shall be considered in accordance with these regulations.

• *All* members may vote on *All* ballots

• *All* negative votes/comments are considered

*Caution! - Failure to return 3 consecutive ballots at the same level may result in a loss of vote*
Voting Interest Assignment Process

- ASTM regulations Define Voting Interest as:
  - Section 6.1.2 voting interest, n—an organization, a subsidiary of an organization, or an unassociated individual member having a distinctly separate interest from any other interest with regard to the scope of a committee or subcommittee

- Step 1: Membership Secretary Review of roster
  - Is there a member from this same voting interest already on the committee with a vote?
  - Subsidiaries, Multi-divisional units, and separate interest considerations

- Step 2: Any individual within a particular voting interest may hold the official vote;
  - Those representing the interest decide among themselves who should hold that vote.
  - Voting interest’s official voter may vary among subcommittees and between subcommittee and main committee.
  - In all cases, ballot returns among members need not agree with each other. People from the same voting interest may hold differing opinions about a particular ballot item.

- Step 3: Your voting interest assignment will be reviewed by the D20.93 Advisory Subcommittee

- Step 4: Advisory makes a recommendations to the D20.90 Executive Subcommittee

- Step 5: D20.90 is the final authority for approving classification assignments.
Official Voter Status

- A Main Committee or Subcommittee Member shall be given an official voting status unless:
  - ASTM Regulations Section 6.3
  - The member’s voting interest already has been granted one official vote.
  - Acceptance will create an imbalance on classified committees or subcommittees.
    - i.e. The number Users and General Interest Members must exceed the number of Producers on the Committee
  - The member’s vote has been terminated as a result of Not-Returned Ballots
    - ASTM Regulations Section 5
Importance of the Official Vote

• Official Voter Distinction Creates a Valid Ballot
  – 60% ballot return of official voters.
  – 67% (two-thirds) affirmative official votes at the subcommittee level
  – 90% affirmative official votes at the main committee level.
    • ASTM Regulations Sections 11.2.1 and 12.2.1

• Official Voter Distinction is used to Resolve Negatives
  Actions as *Not Persuasive or Not Related*
  – 67% (two-thirds) affirmative official votes at the subcommittee level
    • ASTM Regulations Section 11.4.3.3
  – 67% (two-thirds) affirmative official votes at the main committee level.
    • ASTM Regulations Section 12.4.2.1
Parliamentary Procedure

• Robert’s Rules of Order
  – Structure and Order to Meetings
  – Helps protect Member rights and privileges

• General Meeting Structure
  – Call to Order
  – Approval of Minutes and Agendas
  – Officer and Task Reports
  – Old Business
  – New Business
  – Adjournment
STANDARDS DEVELOPMENT

- The 5 Types of ASTM Standards:
  - Test Method
  - Specification
  - Practice
  - Guide
  - Terminology
  - Classification
D20 Areas of Work

• Test methods
  – measurement of mechanical, thermal, optical, permanence and analytical properties

• Material Specifications
  – thermoplastics, thermosets, cellular, film, sheeting

• Products
  – building products, recycled and environmentally degradable plastics

• Support
  – terminology, statistics
STANDARDS DEVELOPMENT

• 2 levels of technical balloting:
  • Subcommittee
  • Main committee/Society review

• Initial ballots of new standards and major revisions - ballot subcommittee first!

• All negative votes MUST be considered
Beyond Standards Development

• Proficiency Test Programs – mechanical properties of ASTM/ISO standards for plastics; flammability of plastics; olefins

• Training Courses – Introduction to Major Testing Techniques of Plastics

• Technical Seminars – at each D20 meeting
Recent Innovations
D20.70 on Analytical Methods

• D7823 Test Method for Determination of Low Level, Regulated Phthalates in Poly (Vinyl Chloride) Plastics by Thermal Desorption — Gas Chromatography/Mass Chromatography

• Used to determine if a product meets regulatory requirements for levels of phthalates, including:
  - DBP, 1,2-benzenedicarboxylicacid;
  - BBP, benzyl butyl phthalate;
  - DEHP, bis(2-ethylhexyl) phthalate;
  - DNOP, di(n-dioctyl) phthalate;
  - DINP, 1,2-benzenedicarboxylicacid, di-C8-10-branched alkyl esters; and
  - DIDP, 1,2-benzenedicarboxylicacid, di-C9-11-branched alkyl esters.
Recent Innovations
D20.24 on Plastic Lumber

• D7568 Specification for Polyethylene-Based Structural-Grade Plastic Lumber for Outdoor Applications

• Presents requirements needed to demonstrate that plastic lumber materials can be specified for use in commercial and residential construction.
Recent Innovations
D20.95 on Recycled Plastics

• D7611 Practice for Coding Plastic Manufactured Articles for Resin Identification

• Update to the identification symbol to disconnect Resin Identification from Recycling
  – No Chasing Arrows!
D20.61/ISO TC 61 RELATIONSHIP

- Operates within ASTM as Subcommittee D20.61

- All ISO TC 61 Plastics standards are reviewed by D20.61 members and technical advisors

- US develops position on ISO standards and advocates it in ISO

- ASTM/ISO Internationalization Effort
HOW TO PARTICIPATE

😊 VOTE!
😊 Join a task group or subcommittee
😊 Become a task group chairman
😊 Participate in round robin programs
😊 Attend workshops
Committee Documents

- Important Information is available on your MyASTM page under D20 Committee Documents section!
  - Meeting Staff Report
  - Administrative Deadline Notice
  - Committee D20 Bylaws
  - D20 Seminar or Workshop Presentations
  - Complimentary copy of
    - D4968 Standard Guide for Annual Review of Test Methods and Specifications for Plastics
Questions?
Contact

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