United States
Consumer Product Safety Commission

MEETING LOG

SUBJECT: ASTM F08.30 Fitness Products Subcommittee

FY 25 OP PLAN ENTRY: Treadmills

DATE OF MEETING: 5/7/2025

LOCATION OF MEETING: Sheraton Centre Toronto Hotel (Toronto, CA) and Virtual/Teleconference

CPSC STAFF FILING MEETING LOG: Frederick deGrano (ESMC)

FILING DATE: 5/21/2025

CPSC ATTENDEE(S): Virtual: Frederick deGrano (ESMC)

NON-CPSC ATTENDEE(S): Contact ASTM for the attendee list.

Summary of Meeting:

The subcommittee chair reviewed the results of several ballots completed since the previous subcommittee meeting. The subcommittee approved ballots F08 (24-06) Item 3 and Item 4 pertaining to ASTM standards F2216 *Standard Specification for Selectorized Strength Equipment* and F2277 *Standard Test Methods for Evaluating Design and Performance Characteristics of Selectorized Strength Equipment*, respectively. Ballots F08 (25-01) Item 4 and Item 5 pertaining to ASTM standards F2106 *Standard Test Methods for Evaluating Design and Performance Characteristics of Motorized Treadmills* and F2115 *Standard Specification for Motorized Treadmills*, respectively, received one administrative negative vote each from the subcommittee chair to give the subcommittee an opportunity to address comments from voting members in future subcommittee work items. Lastly, the subcommittee approved ballots F08 (24-06) Item 2 and Item 5 pertaining to F1250 *Standard Specification for Stationary Upright and Recumbent Exercise Bicycles and Upper and Total Body Ergometers* and F3023 *Standard Test methods for Evaluating Design and Performance Characteristics of Stationary Upright and Recumbent Exercise Bicycles and Upper and Total Body Ergometers*, respectively.

The subcommittee discussed the status of other work relevant to fitness products outside of the F08.30 subcommittee. A subcommittee member provided an update on international standards development and stated that the European Committee for Standardization (CEN) is planning on initiating work to update their treadmill standards in response to ASTM's ongoing work for requirements addressing pull-in hazards on treadmills. Additionally, the International Organization for Standardization (ISO) is requesting a one-year extension for work on developing a drowning test for their swimming pools standard. Another subcommittee member provided an update on Underwriters Laboratories' (UL) work updating the requirements in their standard for motor-operated massage and exercise machines to comply with the recent Reese's Law for devices with button- or coin-cell batteries.

The subcommittee reviewed comments received on the recently closed ballots. The ballot for ASTM F1250 and F3023 for stationary exercise bicycles received three comments:

- Proposed changing height dimensions for better accessibility to users of different sizes,
- Proposed a larger crank arm radius for stationary exercise handcycles, and
- Proposed requirements for emergency brakes on direct-drive-exercise bicycles.

The ballot for ASTM F2106 and F2115 for motorized treadmills received multiple comments:

- Proposed modifying the requirement for the mechanical guard to not require the guard to be tested through the full range of the tread's surface tension adjustment. The commenter argues that it is assumed that the treadmill is maintained and adjusted per the manufacturer's recommendations and that the current requirement is difficult for test labs to perform. The commenter proposes only controlling two variables: the full range of speed and the full range of inclination. The subcommittee decided to discuss this further in the task group.
- Proposed modifying a section of the mechanical guard requirement to only be applicable to fixed mechanical guards. The subcommittee agreed that this change would be editorial.
- Proposed differentiating between the insertion and the entrapment of the finger probe in the mechanical guard performance requirement. The commenter argued that there are areas adjacent to the mechanical guard that the finger probe may easily enter but do not necessarily pose an entrapment hazard. Staff expressed concern that some areas large enough to fit the finger probe may not entrap a finger but pull-in may still occur if an appendage larger than a finger, such as a foot or hand, is pulled in by the tread. The subcommittee agreed that the performance requirement will need to be more clearly defined so that it's clear for test labs which areas need to be evaluated that are actually hazardous. Staff was unable to hear portions of this discussion due to the meeting room's connectivity and audio issues.
- Proposed modifying the performance requirement for interlocking, breakaway guards to specify the functionality of the treadmill when the guard has been opened. The requirement states that the treadmill shall not function when the guard is opened, and the commenter proposes specifying that the power to the user interface or display need not be disconnected. The subcommittee agreed to revise this requirement further in the task group.
- Proposed revising the specifications of the finger probe to define the material and construction of the probe. Staff asked if defining the surface finish of the probe can lead to inconsistencies in the test because rougher surface finishes possibly could increase the likelihood of pull-in due to greater friction relative to a smooth surface finish. The subcommittee also discussed considering weight specifications to mitigate the risk of a heavy projectile if the probe is pulled in and will discuss further in the task group.

The subcommittee discussed equations for loading conditions specified in ASTM F2276, *Standard Specification for Fitness Equipment*. Staff was unable to hear portions of this discussion due to the meeting room's connectivity and audio issues. The subcommittee compared a performance requirement from the ASTM standard to the equivalent requirement in ISO 20957 for stationary training equipment. Both standards state that the product shall not break, but the ISO standard also specifies that the product shall function as intended. This inconsistency may pass the ASTM requirement but fail the ISO requirement. The subcommittee will consider revising the requirement by supplementing it with cyclic endurance requirement and discuss further in the task group.

Next Steps:

Staff will attend task and subcommittee meetings, as scheduled.