ISWP Standards Working Group

April 12, 2017 Standards Working Group (SWG) Meeting Recap

The ISWP Standards Working Group met by conference call on Wednesday, April 12, 2017 from 12:00 p.m. to 1:30 p.m. U.S. Eastern Time. This document provides objectives and a recap.

Objectives

1. Discuss progress updates from the subgroups and related future work.
2. Implementation plan.

Discussion

1. Scott Walters, Executive Director, Mobility Worldwide presented the mobility cart products to the group.
   a. The organization was founded in 1994, now has 21 locations.
   b. Carts provided for people in rural areas where conventional wheelchair won’t work. Includes places for carry-on items.
   c. Products based on travel-related functional requirements of the user.

2. Design Guidelines:
   a. Work on sections of testing matrix, R&D tests, product procurement recommendations (especially for government tenders).
   b. Request to all to contribute to section on Unique Design Case Studies.
   c. Matt plans to add content related to field testing.

3. Caster Testing
   a. Update slides: https://drive.google.com/open?id=0B3o-KpFV8x-8STJ4MFlhY21IcHc
   b. MIT will be sharing the shock data from the field study with ISWP.
   c. MIT to send casters to Norm for rolling resistance testing.

4. Corrosion testing
   a. No Update

5. Whole Chair Testing:
   a. Component procurements are in progress.
b. The project has been handed over to RPM technologies as students are done with the term.

c. FWM will receive training, then equipment will be transferred to FWM facility in California for OSHA approval before starting to use this summer.

d. The group aims to be done in May, visit to South Dakota for training.

e. Instrumentation is being handled by HBM, which offers programming flexibility.

6. Rolling resistance testing:
   a. Update slides: [https://drive.google.com/open?id=0B3o-KpFV8x-8VnMU2l4VDNoamc](https://drive.google.com/open?id=0B3o-KpFV8x-8VnMU2l4VDNoamc)
   b. The group could calculate the error due to moment induced on carriage due to weight.
   c. Added clutch to belt drive to avoid any errors with reverse rolling after stop.
   d. Add Pakistan wheel to the list of wheels tested.
   e. Check influence of pneumatic tire vs solid tire for pediatric users.

**Subgroups** (for reference)

- **Design Guidelines**: Mark Sullivan (lead), Daniel Martin, Jon Pearlman, Norman Reese, Chris Rushman, Eric Wunderlich

- **Casters**: Anand Mhatre (lead), Matt McCambridge, Jon Pearlman, Norman Reese, Don Schoendorfer, Joseph Ott, Stephanie Lachel

- **Corrosion**: Matt McCambridge, Don Schoendorfer, Anand Mhatre, Jon Pearlman

- **Rolling Resistance**: Norman Reese (lead), Matt McCambridge, Jon Pearlman

- **Whole Chair Testing**: Don Schoendorfer, Matt McCambridge, Josiah Auer, Mark Sullivan, Daniel Martin, Jon Pearlman, Norman Reese, Anand Mhatre, Dave Mahilo, Joseph Ott
Participants

- Daniel Martin, Shonaquip
- Matt McCambridge, MIT
- Norman Reese, LeTourneau University
- Rachel, LeTourneau University
- Don Schoendorfer, Free Wheelchair Mission
- Karl-Erik Westman, Handicap International
- Eric Wunderlich, LDS Church
- Chris Rushman, Motivation
- Dave Mahilo, Invacare
- Dr. Rory Cooper, University of Pittsburgh
- Anand Mhatre, University of Pittsburgh
- Dr. Jonathan Pearlman, University of Pittsburgh
- Nancy Augustine, University of Pittsburgh
- Ben Gebrosky, University of Pittsburgh
- Scott Walters, Mobility Worldwide
- Josiah Auer, Free Wheelchair Mission
- Joseph Ott, University of Pittsburgh
- Stephanie Lachell, University of Pittsburgh
- Krithika Kandavel, ISWP

Prepared by: Anand Mhatre, University of Pittsburgh