## Recommendation for the Cleaning and Disinfection of the GRAIL, M-GAIT and BWS Light

**Update April 2020**

### 1. General

*Note: everywhere ‘GRAIL’ is mentioned, both GRAIL and M-GAIT is meant, unless otherwise specified*

According to the Guideline for sterilization and disinfection in Healthcare facilities, the GRAIL is a noncritical item, described as follows: "Noncritical items are those that come in contact with intact skin but not mucous membranes. Intact skin acts as an effective barrier to most microorganisms; therefore, the sterility of items coming in contact with intact skin is "not critical." ¹

The following processes are recommended, but should be adapted to comply with the local or national guidelines which may apply within the Healthcare Facility or the country of use:

- Pre-Cleaning / Cleaning (if necessary)
- Disinfection

Patients may be at high risk for infections. We therefore recommend that you take additional cleaning and disinfection measures as well as protection measures for patients and therapists. While we recommend the following, we advise that you first and foremost follow the guidelines already in place at your facility, or consult with an internal disinfectant expert for further advice.

### 2. Pre-cleaning / cleaning

- Make sure the system is switched off.
- Before starting the disinfection procedure, visible dirt and particles should be wiped off the GRAIL (treadmill, motion platform, handrails on platform and stairs) with a mild detergent and/or a damp cloth, using very little water. Make sure no water is spilled at the belt gap.

### 3. Disinfection

- The GRAIL can generally be disinfected with the procedure of surface disinfection using wipes and/or sprays.
- The more delicate orthopedic parts (harnesses) must be washed at the end of each workday to ensure proper disinfection. It is recommended to disinfect the orthopedic parts between patients/therapists using either wipes or foam spray.
- Please ensure that no liquids, including disinfectant come in contact with electronic interfaces.
- The use of disinfection showers is not permitted due to the electric connections and the unsealed moveable parts.
- Ensure that surfaces to be disinfected are covered well with disinfectant.

The GRAIL and BWS have different harnesses, each of these harnesses have their own disinfection recommendations based on the input of the manufacturers of Motek/DIH. Chapter 3.1 describes the disinfection method for the GRAIL safety harness for training (PETZL), chapter 3.2 describes the disinfection method for the GRAIL safety harness for gait analysis (JSP Pioneer), chapter 3.3 for the BWS Light harness. The images below show the different harnesses.

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¹ Rutala WA et al., 2008
3.1 GRAIL safety harness for training (PETZL) disinfection

The PETZL harness can be cleaned during COVID-19 crisis according to following protocols of the harness manufacturer:

- Protocol 1: Respect a 72 hour quarantine period,
- Protocol 2: Hand wash products with soap and water, at a maximum temperature of 65°C. Please look for the additional washing instructions below.

Otherwise, under normal circumstances, please wash PETZL harness according to the following instructions:

- Wash harnesses in lukewarm soapy water (ph neutral, 30 °C maximum), then rinse thoroughly with fresh tap water.
- You can wash your harness in a washing machine. Choose the 30 °C delicate synthetic setting, without spin cycle.
- Wash the harness inside a thick cloth bag to avoid damaging the machine drum with metal parts of harnesses.
- Use only household face and body soap. All other cleaning products, for example solvents, stain removers, degreasers, etc. are too strong and are incompatible with nylon and can damage the product.
- Do not use a high pressure water sprayer.
- Hang harnesses on a line to dry
- Do not use laundry detergent.

3.2 GRAIL safety harness for gait analysis (JSP Pioneer) disinfection

The JSP Pioneer harness can be cleaned according to following instructions of the harness manufacturer:

- For minor soiling, the harness may be cleaned with a cotton cloth or soft brush.
- For intensive cleaning, wash at temperature of 30° using a neutral detergent.
- Allow the harness to completely dry before storing.

3.3 BWS Light harness disinfection

The Maine Anti-Gravity harness can be cleaned according to following instructions of the harness manufacturer:

1. Between patients the harness can be wiped with a standard disinfectant wipe cloth.
2. Washing the Maine Anti-Gravity harness:
   a. Hand wash in cool water.
   c. Although the harness can handle hot temperatures hot water machine washing is not recommended as the Velcro will break down causing short life.
Disclaimer:
The responsible organization (operator of the medical devices) has the obligation to fulfill all applicable general, local or national hygiene instructions to protect patients, own employees and third personnel from any kind of possible infections.
The manufacturer of the medical devices cannot be held responsible for any infectious diseases related to its products.

(These recommendations are not exhaustive as there may be local processes/substances that already comply with cleaning and disinfecting requirements)

- Please note that alcohol-based disinfectants can be used, but might lead to changes in material composition over medium to long-term application.
- In case of any uncertainties, please always consult an internal disinfectant expert.