**Figure S1:** The impact of vibration information on filtering performance at Day 1

**Figure S2:** The impact of vibration information on filtering performance at Day 2

**Figure S3:** The impact of vibration information on filtering performance at Day 3

**Figure S4:** The filtering effect of the proposed algorithm at Day 1

**Figure S5:** The filtering effect of the proposed algorithm at Day 2

**Figure S6:** The filtering effect of the proposed algorithm at Day 3