



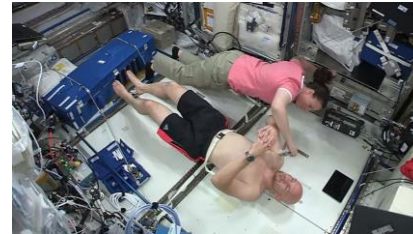
### TECHNOLOGY DESCRIPTION

The device developed measures the passive characteristics of near-surface skeletal muscles (tone, elasticity and rigidity). As with an examination by a medical doctor, the device checks areas of tension and hardening in the muscles when the patient is relaxed. For this, a short mechanical stimulus is placed on the surface of the skin. Then, the vibration of the muscle beneath is measured digitally. The obtained data provide precise information about the elasticity, stiffness and tone of the examined resting muscles.



### INNOVATIVE ASPECTS

For the first time, it is possible to determine the state of muscles objectively, rapidly and easily. Furthermore, consistent data about skeletal muscles are received with the help of this device. To date, medical diagnosis is based on the palpation of the musculature by a medical doctor. This is not an objective procedure and it delivers no usable data in terms of consistency. In order to obtain detailed information, e.g. about muscular efficiency, muscular tissue must be removed from the patient and analysed in the laboratory.



### TECHNOLOGY READINESS (in space application)

TRL 9 (2024)

### COUNTRY OF ORIGIN

Germany

### LATEST UPDATE

06/2024

### TAGS

#non-invasive

#device

#muscle

#medical

#examination

#stimulus

### APPLICATION AREAS

Consumer Products

Education & Training

Health

Space technologies

SPACE  
FOR BUSINESS  
BUSINESS  
FOR SPACE

TECH CARD

