

Section 01. Innovations in Engineering

Tatyana Chernyak

A.A. Martinenko, research supervisor

V.V. Zabolotnikova, language adviser

National TU «Dnipro Polytechnic», Dnipro, Ukraine

Fitness trackers

Fitness trackers can be safely attributed to technical innovations.

There are some basic characteristics typical for all devices, regardless of price and brand.

The option of counting the steps, the calories burned and the possibility of installing an individual program will help to carry out the most productive workouts.

The pulse measurement option is very important for training because if the threshold is exceeded, the tracker will notify you about this by sound or vibration signal. Thus, excessive loads can be avoided.

Function of measuring pressure: these trackers will perfectly suit as clever assistants to the elderly.

Notifications from social networks, SMS messages and calls with the option of resetting an incoming call come on fitness trackers in the form of vibration. This function is also indispensable for people who due to age or illness have hearing problems or simply in noisy places.

Track the sleep phase thanks to the smart alarm function. The peculiarity of this function is that an intelligent bracelet wakes you up at a time when it's easier for you to wake up. Naturally, you can set an approximate framework to wake up at the right time for you. In the morning you can see detailed statistics, for example, periods of deep and fast sleep.

Still in all fitness trackers there is an option “do not sit back” which at some long inactivity reminds by an audible or vibro signal that it is time to be warmed up.

In newer and more expensive models there are a number of additional functions.

For example, some sports bracelets can work in water. A fitness tracker will count the distance that you sailed, and can also show even the total number of strokes that you have made.

Fitness tracker will allow you to monitor your food in detail.

There are also such fitness trackers that scan products online. This is done by barcode.

This is only a small part of fitness tracker functions and area of its use which obviously proves the device viability and marketing potential.