## Дата: 10.11.21

## Группа: Т-22

## Тема: Перевести и записать текст Robot fingers that adapt to shape

A new type of robot gripper, believed to be the first of its kind in the world, picks up a telephone receiver and presents it to the waiting hand of Peter Scott, the robotics at Imperial College, London University, who invented the device. Called the Omnigripper, it is claimed to be more versatile than ordinary grippers, giving robots a sense of touch and enabling them to pick up objects of almost any shape.

The prototype Omnigripper can handle objects weighing up to about 2kg. It consists basically of two slightly separated "fingers", each made up of an array of 127 closely-spaced telescopic pins that can ride up and down independently of each other, Lowering the gripper over, an object pushes some of the pins out of the way, leaving “customized” fingers moulded round the item to be lifted. Feedback from each pin can provide tactile information about an object and build up a three-dimensional image of it.

The basic design form of the Omnigripper allows for many variations for different applications, and for the development of bigger and more complicated versions. Industrially, the gripper should prove particularly useful in automatic assembly lines where robots frequently need to handle a wide variety of parts for a given assembly and position them accurately. The Omnigripper principle has been patented internationally by the British Technology Group and the next stage will be to develop versions for licensed users.