

Robots

According to one estimate, there are almost one million industrial robots in service worldwide. They can work tirelessly 24 hours a day, seven days a week.

But robots are no longer confined to factories. For example, have you ever seen a disk-shaped robot which is vacuuming the floors of houses? This robot covers open areas in a widening spiral motion and navigates along walls, eventually learning the room layout. The robot automatically stops when finished and heads to its recharging station. It is amazing that over two million of these robots are now in use.

Another kind of robots is the search and rescue robot, with more-advanced models being developed. It is designed to find trapped survivors in a collapsed structure in a rapid and efficient way so as to find victims while they are still alive. Search work is often limited due to the unacceptable personal risk from further collapse and inaccessibility of voids which are not big enough for humans or dogs. Serpentine mechanisms, on the other hand, have many more degrees of freedom than conventional robots and rescue machinery, thus they are able to reach locations otherwise inaccessible by conventional robots and people.