Materiality Provide safety and comfort

Manufacturing facilities are responding urgently to the need for automation to sustain economic activity in a social environment with a declining birthrate and an aging population. We have developed a “Rotary Actuator Type Hand” and the feeder for a picking robot, “TRINITTE™,” that contribute to human replacement and efficiency at production sites. Meanwhile, as natural disasters due to abnormal weather and other factors increase, disaster prevention and mitigation efforts are being promoted to reduce the impact of disasters on people’s lives. We have also developed and marketed “N³ N-CUBE,” which houses small-sized wind generators, solar panels, and storage batteries in containers from the perspective of disaster prevention and disaster mitigation, which are used in a wide range of fields.

Through these products, we provide peace of mind and comfort to customers.

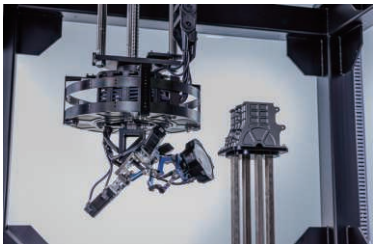
Robot-related

We have launched the “TRINITTE™,” our unique feeder for picking robots, which supplies parts from a rotating disk that automatically provides parts and has been well received. “TRINITTE™” is connected in conjunction with a camera and picking robot and provides continuous picking of moving workpieces by following the workpieces on a circular arc path. We have also developed a compact and lightweight “Rotary Actuator Type Hand” for picking robots to be used in combination with “TRINITTE™.” The position and posture can be adjusted within a range of 0 to 100° by rotating the mounting section with the chuck section gripping the workpiece around the rotary axis of the rotary actuator. When attached to a SCARA robot, picking can be performed from the side or diagonally. This system can significantly reduce the number of parts missed, and it realizes stable and continuous picking of parts with an inexpensive equipment configuration.

In addition, in response to numerous requests for improved portability of the “i-WRIST™” wrist joint module for robots, we have developed the “IWS-C01,” which increased the maximum payload capacity from 1 kg to 3 kg. The “IWS-C01” has been well received by the market as it has expanded the range of applications.

We will continue to propose modular products for robots that contribute to the promotion of efficiency and reduce manpower as a measure of automation at manufacturing sites.

Rotary Actuator Type Hand



Wrist joint module for visual inspection of aluminum castings “i-WRIST™”

Disaster mitigation and disaster prevention

We have developed “N³ N-CUBE,” a transportable independent power source containing small-sized wind power generators, solar panels and storage batteries in containers. The initial purpose of the development was to create storage facilities in preparation for natural disasters and rescue facilities in the event of a disaster. However, as the market has evolved, many of these facilities have also been adopted as infrastructure equipment in places where commercial power has not been installed.

Disaster prevention centers are being built in various locations to serve as disaster relief operations bases and storage facilities for stockpiling emergency food and medical supplies. We propose to install “N³ N-CUBE” in the center to provide electric power for lighting and air conditioning in the center in normal times and to use it as a first-aid facility and emergency power source during a disaster.

We have also developed the “N³ N-CUBE” equipped with a circulation-type flush toilet and treatment tank to be installed at parks and facilities in mountainous regions etc. where commercial power has not been introduced. Water used in the toilet is filtered in the treatment tank and circulated as reclaimed water. Maintenance only requires a few changes of water a year, and no water supply or sewerage construction is required. Because water is recycled as reclaimed water, it is possible to use clean water without draining it outside. In addition, our products are widely used in various situations, such as in bus waiting areas and workcation facilities.

“N³ N-CUBE” installed as a waiting room at a bus stop in Yoshida Town, Shizuoka Prefecture, Japan