サービスと商品
- 人間型ロボットHRP-2
- JoyChair™ - R1
- dSAアクチュエータ
- dSACドライバ
- ヘリコプタの製品開発‥
- 航空機販売
- フォグシャワー
- 電動式カーゴミラー
- 汎用ストレッチャ装置
- 夜間照明装置

主なプロダクト／作業実績
- 人間型ロボットHRP-2P
- 人間型ロボットisamu
- ロボコプタ300
- 下面チェッカー

［航空・機械事業ＴＯＰ］

humanoid robot "isamu"

isamu

▶ 日本語

The Aircraft and Mechanical Systems Division of Kawada Industries, Inc. has developed a humanoid robot "isamu" in conjunction with the University of Tokyo's Inoue-Inaba Laboratory (http://www.jsk.t.u-tokyo.ac.jp).

This humanoid robot has technologies obtained from Kawada Industries' association with Tokyo University's "H6" and "H7" humanoid robots. The robot is 1.5 m in height, weighs 55 kg, and has 32 degrees of freedom. The bipedal walk control system software was developed by the Inoue-Inaba Laboratory; the hardware and robotics structures, including servo level control system, was developed by Kawada Industries. Aircraft technologies were applied to the body frame, which led to a strong and light structure. A joystick can control the robot's variable walking pattern and speed of up to 2 km/hour. The robot can walk up and down 25-cm high steps. The hand grippers are installed with touch sensors and each hand can grip up objects weighing up to 2 kg. With two-camera stereo graphics input, the robot can recognize pre-entered human faces.

Aside from the two humanoid robots, H6 and H7, as mentioned above, in 2000, Kawada Industries joined a research and development project focused on the "transparent" humanoid robot development platform. This platform is based upon the Humanoid Robotics Project (HRP) of the New Energy and Industrial Technology Development Organization (NEDO: www.nedo.go.jp).

Kawada Industries plans to enhance the business of "human-interactive motion control" and uninhabited systems that have been developed in-house by electro-mechanical engineering

technology obtained through helicopter research and development. Some of the applications for human interactive motion control technology are mechanical systems for construction, disaster situation, handicapped aids, rehabilitation and training, and amusement. The newly developed "isamu" will be used as a test bed for the product development for the aforementioned industries.

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