

Muscle Suits

Brand New Support Suits which assist person's Movements

Operating Principle: Rotate the Joints by transferring the Contraction Force of Pneumatic Artificial Muscle to the Joint Pulley through the Wire



Application example:
Support of Back



For Arm & Back Support

For Back Support

Wearable Robot
Light weight and low cost movement support suit (Arm / Back)
Assist human movement directly by wearing it



Assist movements of older and physically handicapped persons who need nursing care
Assist normal individual's pose and muscle especially for labor
Possible to demonstrate various movements such as swings



Application example:
Support of Back + Shoulder + Elbow



* Many feasibility studies in progress
* Technical transfer is welcome

2012 Arm & Back Model Specification

Weight	9 Kg
Motivity	Compressed Air
DOF	Elbow 1 DOF Shoulder 4 DOF Back 1 DOF
Support Motion	Bending Elbow Inflection of Shoulder (To Front) Straighten Back
Support Torque	Elbow 50 Nm Shoulder 50 Nm Back 200 Nm
Interface	Motion Playback by Switch

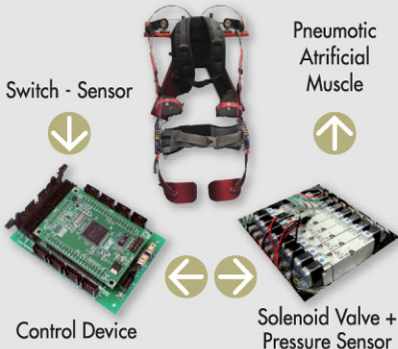


2012 Back Model Specification

Weight	5 Kg
Motivity	Compressed Air
DOF	Back 1 DOF Leg One leg 3 DOF
Support Motion	Straighten Back
Support Torque	200Nm
Interface	Acceleration, Angle, Exhalation, Sound



Muscle Suits



Compressor



Pneumatic Artificial Muscle

