

Mars International is a supplier to the Healthcare industry providing custom electrical and mechanical assemblies, stainless steel tubing, and final products. Services include electrical and mechanical design, embedded software development, manufacturing engineering, and product delivery management.

Mars International designs and manufactures digital home health, safety, and security devices, medical disposables, and stainless steel tubing used in orthopedic and vascular minimally-invasive surgical and diagnostic procedures, such as laparoscopy, arthroscopy, angiography, and endoscopy.

### **Product Applications**

Mars International is well positioned to support the product needs of many devices for the Healthcare industry. Key manufacturing and development capabilities provide the infrastructure and the service to benefit the following product solutions and more.

### Digital Home Health, Safety, and Security

- Blood analyzers
- Insulin pumps
- Nebulizers
- Medication management systems
- Medical alert systems
- Vital sign monitors
- Physical therapy products
- Motion detectors
- Door, window, bed, chair, toilet sensors

#### **Disposables**

- Dry powder inhalers
- Prefillable syringes
- Oral care products
- Urinary catheters

#### **Surgical Devices**

- Stainless steel tubing
- Laparoscopes, endoscopes
- Needles, syringes
- Stainless steel staple applicators

### **Key Manufacturing Capabilities**

- Total product assembly
- Printed circuit board assembly
- Molded plastics enclosures, buttons, switches, etc.
- Precision metals medical grade stainless steel tubing, casings, machined parts, etc.
- Electro-mechanical assembly
- Clean room environment
- ISO 13485:2003

# **Key Development Capabilities**

- Mixed signal design
- Optimized embedded software
- Printed circuit board layout
- Tooling design and construction
- Molding simulation
- Structural analysis
- Test procedure definition
- UL and FCC pre-certification

# **Key Technologies**

- μProcessors / μControllers
- Digital signal processors
- Wireless RF communications
- USB connectivity



Blood analyzer



Isometric PT knee exercise controller



Endoscopic surgical pump



Orthopedic cold therapy control PCB



Oral care kit



Range-of-Motion knee brace hinge



Surgical needles



Electrolysis system controller

