Graft Delivery Devices

Nordson MEDICAL
About Graft Delivery Devices

Nordson MEDICAL
Nordson MEDICAL is your partner in the global life sciences market providing innovative components, devices and custom OEM solutions for the precision management and delivery of fluids and biomaterials. The company has expanded through an aggressive strategy of product development and acquisition and has become a leader in developing products for the application of biomaterials and sterile fluids. Nordson MEDICAL products are sold across a wide variety of clinical specialties.

In 2010 Micromedics, Inc. was acquired by Nordson Corporation (NASDAQ: NDSN), one of the world’s leading producers of precision dispensing equipment that applies adhesives, sealants, coatings and other materials to a broad range of consumer, industrial and medical products. The company also manufactures equipment used in the testing and inspection of electronic components as well as technology-based systems for curing and surface treatment processes. Headquartered in Westlake, Ohio, Nordson has direct operations and sales support offices in more than 30 countries.

Global Regulatory & Registration Support
Nordson MEDICAL’s global registration expertise improves speed to market in new geographies. We can assist you with the stringent demands of marketing/distributing in many countries around the world, including the Americas, Europe, Australia, Russia, India, and Asia Pacific.

Assembly and Finishing Capabilities
Nordson MEDICAL offers unique solutions that exceed clinician needs. Utilizing hypo tube bending, ultrasonic welding and polymer solution casting, Nordson MEDICAL’s quality products are sophisticated and reliable. We have a solid reputation in today’s medical device and biotech markets with pressure and leak testing. We also offer manual, semi-automatic, and fully automatic finished good assembly.

Manufacturing Capacity and Quality
With access to over 250,000 square feet of design, manufacturing, assembly and distribution services, Nordson MEDICAL can meet your global demand for products.

We are an FDA registered manufacturing facility with clean room manufacturing and assembly. Nordson MEDICAL is equipped with multiple injection molding machines including plastic injection molding and over molding including 2-shot and insert molding. Products intended for sterilization are assembled and packaged in an ISO 14644-1 Class 8 clean room. We utilize both manual and automated medical device assembly processes tailored to manufacture the highest quality biomaterial delivery systems.

Nordson MEDICAL’s Quality Management System is designed as a system of interrelated processes meeting the requirements of ISO 13485. Quality is tracked with key metrics to ensure continuous improvement.

OsteoPrecision™ and OsteoXpress™
Graft Delivery Devices
Nordson MEDICAL’s graft delivery devices are designed to deliver hydrated allograft, autograft or synthetic bone graft materials to an orthopedic surgical site.

In addition, they are designed to facilitate the premixing of bone graft materials with fluids such as IV fluids, blood, plasma concentrate, platelet rich plasma, bone marrow or other specified blood components as deemed necessary by the clinical use requirements.

Nordson MEDICAL products are manufactured in a ISO 13485 certified facility and are marketed to a wide variety of customers including distributors, surgeons, OEMs, hospitals, and outpatient clinics. All products can be private labeled or customized to meet your specific user requirements.

Contact us to learn more about our proprietary products and how we can customize a delivery solution for your biomaterial. www.nordsonmedical.com
We will partner with you to deliver your next breakthrough idea.

With more than 30 years experience in providing OEM solutions to biomaterial manufacturers, we can provide the detailed support you need from idea to market.

**CONCEPT DEVELOPMENT**

**RESEARCH & DEVELOPMENT**

**RAPID PROTOTYPING**

**IN-HOUSE REGULATORY EXPERTISE**

**MANUFACTURING**

**COMMERCIALIZATION**

**Private Label and Customization**
OsteoPrecision™ and OsteoXpress™ Graft Delivery Devices can be private labeled or customized to meet your needs. Contact us to learn how we can partner with you to develop a delivery system that meets your unique user requirements.

TEL: +1 (651) 452-1977
TOLL FREE in USA: (800) 624-5662
OsteoPrecision™ Graft Delivery Devices

The OsteoPrecision™ Graft Delivery Device is designed for targeted delivery of hydrated allograft, autograft, or synthetic bone graft materials to an orthopedic surgical site, while maximizing material utilization. Available in vented and non-vented configurations, all devices are 15cc. *Graft materials not included.*

**MAXIMIZE MATERIAL UTILIZATION**

**INTEGRATED STYLET**

Maximizes material utilization and simplifies delivery with an all-in-one configuration

Minimizes packaging size for easier storage

**VENTED & NON-VENTED OPTIONS**

**Vented Configuration**

Vents air for better saturation and hydration of materials

**Non-Vented Configuration**

Allows for pre-filling of materials when hydration is not required

**TAPERED CAP & WIDE BORE CANNULA**

Allows for the extrusion of high viscosity bone materials

**EASY OPERATION**

Multiple cannula options (5cm, 10cm, 15cm) allow for delivery of graft materials to targeted surgical sites

Available female luer adapter connects directly with a standard syringe for easy hydration *(OP vented versions only)*

Optional hydration tube evenly distributes liquids into material for consistent hydration

Large finger flanges allow for a better grip and is designed for one-handed ease-of-use
The OsteoPrecision™ Graft Delivery Device is designed for targeted delivery of hydrated allograft, autograft, or synthetic bone graft materials to an orthopedic surgical site, while maximizing material utilization. Available in vented and non-vented configurations, all devices are 15cc. *Graft materials not included.*

**Vented**

**Sterile** (FDA Clearance Pending)
- 5cm Cannula
  - GD-1115-050
- 10cm Cannula
  - GD-1115-100
- 15cm Cannula
  - GD-1115-150

**Non-Sterile**
- 5cm Cannula
  - GDNS-1115-050
- 10cm Cannula
  - GDNS-1115-100
- 15cm Cannula
  - GDNS-1115-150

**Non-Vented**

**Sterile** (FDA Clearance Pending)
- 5cm Cannula
  - GD-1015-050
- 10cm Cannula
  - GD-1015-100
- 15cm Cannula
  - GD-1015-150

**Non-Sterile**
- 5cm Cannula
  - GDNS-1015-050
- 10cm Cannula
  - GDNS-1015-100
- 15cm Cannula
  - GDNS-1015-150

**Vented with Hydration Tube**

**Sterile** (FDA Clearance Pending)
- 5cm Cannula
  - GD-1215-050
- 10cm Cannula
  - GD-1215-100
- 15cm Cannula
  - GD-1215-150

**Non-Sterile**
- 5cm Cannula
  - GDNS-1215-050
- 10cm Cannula
  - GDNS-1215-100
- 15cm Cannula
  - GDNS-1215-150

OsteoPrecision™ Graft Delivery Devices with regulatory clearance are planned to be available in summer 2015 for sale in the USA, CE marked (Europe), Canada, and Australia.
OsteoXpress™ Graft Delivery Devices

The OsteoXpress™ Graft Delivery Device is designed to hydrate allograft, autograft or synthetic bone graft materials and deliver to an orthopedic surgical site. This system is easy to assemble and facilitates the premixing of bone graft materials with intravenous fluids, blood, plasma concentrate, platelet rich plasma, bone marrow, and others.

**FILL**

- Allows simple integration of graft material and hydration fluid
- Unique tray with funnel for conveniently filling barrel with graft material
- 15cc barrel allows for creation of small or large logs based on procedure

**HYDRATE**

- Patented, vented membrane releases air during hydration, eliminating air pockets and improving saturation of material
- Female luer on distal end for simple connection to hydration syringe

**DELIVER**

- Removable threaded cap maximizes graft utilization and allows for easy delivery of graft log
- Large finger flanges for better grip when expressing graft
The OsteoXpress™ Graft Delivery Device is designed to hydrate allograft, autograft or synthetic bone graft materials and deliver to an orthopedic surgical site. This system is easy to assemble and facilitates the premixing of bone graft materials with intravenous fluids, blood, plasma concentrate, platelet rich plasma, bone marrow, and others.

GD-5515
Graft Delivery Device, 15cc
Graft materials not included.

GDNS-5505
Non-Sterile
Graft Delivery Device, 5cc
Graft materials not included.

GD-5515 OsteoXpress™ Graft Delivery Device is FDA cleared, CE marked, registered in Canada and Australia. We can support you where you need it.
ORDERING INFORMATION

OsteoPrecision™ and OsteoXpress™ Graft Delivery Devices. *Graft materials not included.* For more information or samples, call 800-624-5662 or visit us online at nordsonmedical.com.

Nordson MEDICAL is the partner of choice for graft delivery devices with innovative development and design expertise, comprehensive global regulatory support, and broad manufacturing and packaging capabilities. For over 30 years, Nordson MEDICAL has been a global provider of innovative products and has earned a solid reputation for quality, service and reliability. All of our products and services are backed by Nordson Corporation, a global leader in precision dispensing equipment serving many consumers and industrial manufacturing industries, helping customers succeed.