Medical Industry Mecca!

Wonju Medical Industry Techno Valley
Will always be with you.
A bright future is guaranteed for Korea’s medical device industry.

‘Wonju Medical device Industry’ was initiated by a spontaneous help and close cooperation between local government and universities. It has been growing for 18 years with remarkable achievements in terms of quantitative and qualitative aspects thereof.

‘Wonju Medical Industry Techno Valley’ was founded in 2003. It has been providing enterprises therein with ‘MEDISTRY’ as a global cluster in providing medical equipment and instruments.

‘Wonju Medical Industry Techno Valley’ established customized ‘MEDISTRY’ provision system for companies with the intention of becoming ‘Strong & Small’ global companies throughout the cycle of developing medical device from each start-up.

The ‘MEDISTRY’ currently include comprehensive supports for multilateral analyses on preceding technologies, mechanical & instrumental design, pilot production, safety and reliability tests to secure conformity to international standards, and activities for making inroads to global market for corporations to have global competitiveness.

‘Wonju Medical Industry Techno Valley’ will continue cultivating professional human resources, promoting the convergence of R&D based innovative technologies, supporting the global network for interchange and collaboration, supporting business incubation, supporting exhibitions through available exhibition halls, and guiding domestic corporations to enter international procurement markets, especially in the field of healthcare and state-of-the-art medical instrument technologies with bio-convergence.
Wonju Medical Device Industry, the creator of a legend!

The Wonju Medical Device Industry is consistently stepping forward with no hesitations.

1998
- Established the incubator for Wonju Medical Device
- Designated as the Regional Research Center for medical measurements and rehabilitation engineering (Ministry of Science and Technology, Korea Science Foundation)

1999
- Officially appointed as the startup incubator for Wonju Medical Device
- Established the industrial technology complex for Wonju Medical Device (leased factories - 18 companies)
- Designated the Technology Innovation Center for cutting-edge medical devices

2000
- Known as the complex for stimulating venture companies

2001
- Formulated the Post-9 company
- Built the promotion center for the Wonju medical device industry (BITF, SF)

2002
- Signed the establishment project for the Wonju Medical Industry Techno Valley

2003
- Initiated the construction of the Wonju Medical Device Industrial Complex (Munak - Dangjawi, 30,000m²)
- Constructed the Cutting-edge Medical Device Techno Tower (inside Yonsei University, Wonju)
- Start-up Incubator, company research institutes, medical devices training center, TIC, RAC
- Completed expanding the Wonju Medical Device Industrial Complex (inside the Taegang Agricultural and Industrial Complex)
- Established the Foundation for Wonju Medical Industry Techno Valley (1st President: Woohoe Ahn)

2004
- Joined the 20th Korean International Medical & Hospital Equipment Show (KIMES) booth for Wonju
- Designated as the pilot complex for clustering the Wonju Medical Device Industrial Complex
- Established the Wonju Medical Device Industrial Complex (33 blocks)
- Inaugurated the 2nd President of the Wonju Medical Industry Techno Valley (Youngso Yoon)
- Established the booth in the MEDICA, Germany

2005
- Ranked as the 1st in the electronics, semiconductors sector from the 3rd year of local industry promotion projects (local industry foundation establishment project)
- Established the promotion team for Wonju Complex Innovation Center
- Declared the U-Health City
- Built the cutting-edge medical device venture center (BITF, SF)

2006
- Ranked as the 1st in the electronics, semiconductors sector from the 4th year of local industry promotion projects (local industry foundation establishment project)
- Earned the grade A for the performances of the Wonju Complex Innovation Center
- Hosted the 1st Gangwon Medical Devices Show (GAMES 2006)

2007
- Completed the cutting-edge medical device venture center (BITF, SF)
- Hosted the 2nd Gangwon Medical Devices Show (GAMES 2007)

2008
- Inaugurated the 3rd President of the Wonju Medical Industry Techno Valley (Youngso Yoon)
- Signed an agreement on the 2nd-phase local strategic industry promotion projects

2009
- President Lee visited Wonju Medical High School designated as the only medical device secondary school

2010
- Designated Wonju Cutting-edge Medical and Health Industry Special Zone as the excellent zone for 5 consecutive years
- Opened the U-Health City Experience Hall and Wonju Medical Device Exhibition Hall in Wuji, China
- Declared the vision 2020 for the developments of the Gangwon medical device industry
- Signed the agreement between Wonju and Dresden

2011
- Constructed the cutting-edge Medical Device Multi Complex Center (MCC, currently the Medical device Complex Center)
- Inaugurated the 4th President of the Wonju Medical Industry Techno Valley (Youngso Yoon)

2012
- Inaugurated the 5th President of the Wonju Medical Industry Techno Valley (Woonbok Lee)

2013
- Designated the technology support center as the UI certificate
- Constructed the Medical Device Complex Center (MCD)

2014
- Participated in the Visit to Germany (signed MOU with Beiersdorf, Dresden Saxony, Germany)
- Promoted the Project to Support Enterprises of Medical device Export
- Selected and Promoted the (PIA)p Project of Economic Cooperation Region

2015
- Inaugurated the 6th President of the Wonju Medical Industry Techno Valley (Minhoil Chang)
- Opened the Exhibition Hall for Medical Instruments and Equipment for Living
- Established the Medium and Long-term Vision 2025 for the Development of Medical Device Industry
- Concluded an MOU with Jinan County, Nan Chang City, Jiang Xi Province, China
- Participated in Wonju Joint-Exhibition in Hong Kong Cosmospro-Expo
- Participated in the MEDICA of Germany and promoted Business Cooperation and Interchange with Bisakory, Dresden, Saxony, Germany
- Promoted the Plan to Culture Regional Strategic Industries for Regulation-Free Zones

2016
- Visit by the Prime Minister and Ministers of the Ministries of Welfare and Future
- Participated in the MEDICA of Germany
- Built Electromagnetic Wave Test Facilities (EMC Chamber)
- Concluded an MOU with Health Insurance Review & Assessment Service and Samsung Medical Center, Seoul
- Prepared the Wonju Joint-Exhibition Hall for KIMES 2016
- Participated in Economic Delegation to Iran
- Held the Meeting for the Promotion of Joint Purchase

2017
- Dubai Arab Health Participation
- Wonju Medical Device Export Agreement
- Promotion of next-generation Bio-Health ecosystem development project

2018
- Digital healthcare alliance launched
Development of medical device industry

The Gangwon Medical Device Industry takes lead in globalized the Korean medical devices industry and accounts for 5% of companies in Korea. This industry accounts for 11% of the medical device production and 15% of the exports in Korea.

We are composed of companies with firm and solid foundations! The Wonju Medical Industry Techno Valley plays a crucial role in stepping towards the global market.

### Development of Domestic Medical Device Industry (2014 ~2016)

<table>
<thead>
<tr>
<th>Division</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>CAGR (3-Year %)</th>
<th>Ratio of Increment Compared to Previous Year %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Companies</td>
<td>2,786</td>
<td>2,903</td>
<td>2,943</td>
<td>2.8%</td>
<td>102.39%</td>
</tr>
<tr>
<td>Production</td>
<td>3,868</td>
<td>4,202</td>
<td>5,063</td>
<td>10.3%</td>
<td>118.62%</td>
</tr>
<tr>
<td>Export</td>
<td>2,173</td>
<td>2,710</td>
<td>2,988</td>
<td>6.4%</td>
<td>105.19%</td>
</tr>
<tr>
<td>Employees</td>
<td>41,043</td>
<td>42,002</td>
<td>52,253</td>
<td>12.8%</td>
<td>116.47%</td>
</tr>
</tbody>
</table>

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### Gangwondo / Wonju Growth of Medical Device Industries (2006 ~2016)

- **Production**: 5,493 Trillion KRW (10.98%) (Domestic Total 50,016 Trillion KRW)
- **Employment**: 4,521 People (9.46%) (Domestic Total 47,802 People)
- **Export**: 4.07 Million $ (10.98%) (Domestic Total 27,10 Million $)
- **Enterprises**: 140 EA (4.68%) (Domestic Total 2,992 EA)
Vision 2025 for the Development of Medical Device Industry

The Wonju Medical Device Industry is consistently stepping forward with no hesitations.

**Mission**
- Facilitation of Industrial Eco-System for Sustainable Development of Wonju Medical device Industry

**Vision**
- “Global Connected-Health Leading Platform”

**Business philosophy**
- Customer Orientation | Enhancement of Specialty | Social Responsibility

**Key Projects**

**01**
1. Promotion and Facilitation of Making Inroads into the Global Procurement Market
2. Marking Inroads into the Markets of Developing Countries and Establishment of Joint Assets
3. Enhancement of Support for International Exhibition

**02**
1. Establishment of Integrated Enterprise Support System
2. Promotion of the Academy for Healthcare Start-up
3. Preparation of the Foundation to Attract Investment-Financing

**03**
1. Development of the ‘Connected Health Process’
2. Promotion of Cooperation with Professions Institutions
3. Promotion of Cooperation with Overseas Institutions

**04**
1. Invitation of Medical device Enterprises of Innovative Convergence Technologies
2. Promotion of Project to become National Industrial Complex
3. Improvement of Cluster’s Environment
The core of the company supports -
development of world-class medical devices!

**MEDICAL + INDUSTRY**

Enjoy the one-stop total solution with the experience and the infrastructure of Wonju Medical Industry Techno Valley.

**Ideas consultation**
- Provides and analyzes the medical devices market data
- Provides idea consultation and commercial researches
- Reviews technical viability of products
- Reviews international standards

**Product and Mechanical Design**
- Determines the product design concepts
- 3D modeling and rendering
- Mechanical designs

**Prototype Production**
- Precise parts processing
- Post-treatment processing and assembling
- Manufactures tailor-made PCB

**Marketing & Exporting Support**
- Supports local and overseas marketing services
- Supports exhibition participations

**Quality and Regulatory Support**
- Provides test environments for local and overseas standards
- Obtains reliability and safety test
- Supports clinical tests for local and overseas standard achievements

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</thead>
<tbody>
<tr>
<td>Seminar &amp; International / Domestic Certification</td>
<td>Technical Support Product Development</td>
<td>Outside Cooperation System Membership System</td>
<td></td>
<td>GMES Local Advertising for GMES</td>
</tr>
<tr>
<td></td>
<td>Test / Analyzing Support Clinical Trial Pass</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Design Support Commercialization</td>
<td></td>
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</tbody>
</table>
Step 01

**Idea Realization**

*Incubator consulting are based on the medical device market analysis*

- Company consulting services based on the analysis of medical devices market data and product trends
- Idea realization predicts the value-added and technical competitiveness of products
- Introduce tailor-made supports which contributes to quick product developments and saves costs

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Step 02

**Product & Mechanical Design**

*Innovative product designs to commercialize high quality medical devices*

**Design**

- Develop the product designs by considering product functions, shapes, usability and international specifications for the medical devices

**Mechanical design**

- Quantitative designs by considering internal and external functions of the product
- Predict faults in advance by assembling and operating in the computerized environment
- Reverse designs to create product design data for real products without data
Step. 03

Prototype Production

Operates highly precise automatic process system to form the designated data into the product

- Product of high fidelity prototype based on the design
- Review problems, assemblies and mass productions of the design in advance to complement the design
- Prepare automation systems including machine tool, rapid modeling equipment and SMT system

Step. 04

Quality & Regulatory Support

Supports local and overseas common tests and inspections to secure global competitiveness

Safety and reliability test
- Secure safety by verifying and evaluating the reliability and durability of the newly developed products
- Utilize test facilities and research device for the medical device

Support clinical tests and overseas specifications (certifications)
- Discover tasks for clinical tests and link such tests for product commercialization
- Support to obtain overseas standards and certificates
Marketing & Export Support

Support local and overseas marketing and export to explore markets

Support local and overseas marketing services
・Sales agent: Product promotions, open branches
・Support establishing overseas service centers

Support exhibitions participation
・Establish Wonju Hall in the international medical devices exhibition
・Host the Gangwon Medical Devices Show (GMES)

Nurture global brand
・Establish local and overseas sales networks by forming strategic partnerships
・Support exporting projects inclusive of the ODA
・Support creating overseas sales networks through opening common branches
・Maintaining overseas sales networks through supports on exhibition halls

The foundation establishes ground for entering the global markets with successful marketing performances.

Medical device exhibition hall
The exhibition hall operates 365 days to support global businesses by providing product promotions, acts as a meeting point for local and foreign buyers, and holds forums, seminars and conferences for medical devices which is recognized as a marketing center that connects sale revenues.

Overview
・Location: Inside the Medical Device Complex Center
・Area: 2 floors, 4,693㎡
・For: Local medical device manufacturers and distributors
Wonju will stand next to you as part of the innovative medical cluster.

The foundation comprehensively and systematically supports and nurtures the medical industry in order to expand the growing infrastructure of related industries, advanced local industries, sharpen competitive edges and contributions to the local developments.

### Related and Supporting Institutions

**GOVERNMENT AGENCY**
- Ministry of Trade, Industry and Energy
- Small and Medium Business Administration
- Gangwon-do Province
- Korea Testing Laboratory
- Research Institute for Gangwon
- Gangwon Techno Park
- Gangwon Regional Business Evaluation Institute
- Korean Trade Association
- Korea Trade Investment Promotion Agency
- Korea industrial complex corporation
- Small and medium Business Corporation

**HEALTH AND MEDICAL INSTITUTION**
- Health Insurance Review & Assessment Service
- National Health Insurance Service
- The Republic of KOREA National Red Cross
- Korea Veterans Health Service
- National Forensic Service

**Wonju City**
- Designated as special zone for health and medical industries
- Designated as a health city by the WHO
- Designated as an innovative city
- Designated as a corporate city

**RESEARCH CENTER**
- Medical device innovation center
- Wonju Severance Christian Hospital
- Yonsei Institute of Medical Engineering
- Kangwon University Institute medical device GEMS-CRC
- Fraunhofer Joint Research Center
- Oriental Medical Industry Development Center

**Education Agency**
- Kangwon National University
- Yonsei University
- Gangneung Wonju National University
- Wonju Medical High School
- Kwandong University
- Korea Polytechnics III
- Sangji University
- Hallym University
- Sangji Yeongseo College
- Hallym University
- Songho College
- Kyungdong University

**FINANCIAL INSTITUTION**
- Gangwon Fund
- Korea Technology Credit Guarantee Fund
- Korea Credit Guarantee Fund
- Korea Development Bank
- Export-Import Bank of Korea
Wonju, a good city for companies, is heading towards the world.

The city has everything to become a world-class medical devices city. The environment of Wonju not only provides industrial sites, but also all the systems for companies based on a comfortable residential environment.

Donghwa medical instruments Complex
Size: 332,001㎡
Heart of the Wonju medical devices industry
Clustering of advanced medical devices manufacturers

Medical Industry Techno center
For POST-BI
Rental factories with the size of 33,058㎡

Venture center (KTL)
Size: 4,783㎡
Start-up and company research institutes
Advanced supporting equipment and facilities
Institute of Medical Engineering, Yonsei University,
Yonsei Medical Devices Development &
Promotion Center, KTL, KICOX

Medical Industry Techno Tower

Medical Devices Complex Center (Wonju Enterprise City)
B1F, 10F, floor (industrial site: 866,231㎡)
Medical devices manufacturers, exhibition hall

Space

<table>
<thead>
<tr>
<th>Category</th>
<th>Rental fee</th>
<th>Deposit</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rental factory</td>
<td>19,500KRW (3.3㎡)</td>
<td>Rental fees maintenance fees for 6 months</td>
<td></td>
</tr>
</tbody>
</table>

[Excluding the VAT]

Enterprises moving into the cluster until the ratio of move-in reaching 90% will benefit from basic rental charge discounted of 7500 KRW, resulting in 12,000 KRW. The basic charge will also be reduced by 1,500 KRW annually for an additional 5 years after move-in.

Contact

Support subsidiaries, etc
Enterprise Attraction, Enterprise Support Division, Wonju City Hall
Tel +82-(0)33-737-2991-3 Fax +82-(0)33-737-4813

Contact for rental and support
Enterprise Support Team, Wonju Medical Industry Techno Valley
Tel +82-(0)33-760-6123 Fax +82-(0)33-760-6199
Location

Enter the metropolitan area within 50 minutes.
Wonju, the gate to Gangwon and equipped with transport infrastructure amounting to 1.9 trillion KRW!
The city owns the biggest benefits for the 2018 Pyeongchang Winter Olympic Games with the expansion of existing highways and the Gwangju-Wonju Highway currently under construction.

Road
01. Gwangju-Wonju Highway with 4 lanes roundtrip connecting the Jungbu Highway and the Yeongdong Highway (completed in 2016)
02. Completed expanding of 4 ~ 6 lanes between Singal and Yeoju in the existing Yeongdong Highway

Railroad
01. Completed constructing double lanes between Cheongnyangri and West Wonju
02. High-speed railway for Incheon International Airport-Cheongnyangri-West Wonju-Pyeongchang-Gangneung (completed in 2017)