DENTAL TECHNOLOGIES AND INNOVATION in Greater Minneapolis-Saint Paul Minnesota, USA

A LEADER IN DENTAL PRODUCTS AND WORKFORCE

DENTAL PRODUCT MANUFACTURERS AND RESEARCH LABORATORIES will find the perfect location in Greater MSP. The region is home to one of the most skilled workforces in the world, a highly evolved biobusiness ecosystem and an exceptional quality of life. The costs for operating biobusinesses are among the lowest in the U.S. with competitive costs for wages and cost of living.

3M is “a patent dynamo, both in the U.S. and Europe.”
-Dental Industry Review

A BUSINESS COMMUNITY OF THOUGHT LEADERSHIP Greater MSP boasts a large and closely networked biobusiness community with more than 660 companies and the 2nd highest concentration of jobs in the medical technology sector. A rapidly expanding segment in the medical device industry is dental related products. Greater MSP ranks in the Top Ten metros for patent-production in all dentistry-related technologies, including surgery, synthetic materials, sterilization processes, dentistry and ceramic compositions. We have the knowledge base for dental devices and solutions.

The region has an impressive concentration of large device manufacturers including: Medtronic, Boston Scientific, 3M, Bayer Interventional Solutions.

3M ESPE, headquartered in Greater MSP, was recently named the most innovative company worldwide in the dental industry for the eighth consecutive year.

Patterson Dental, a Fortune 1000 company headquartered in Greater MSP, provides over 90,000 dental related products making it one of North America’s largest distributors with a wide range of equipment, software, technology solutions and services.

THE WORKFORCE YOUR BUSINESS NEEDS. Greater MSP boasts the highest labor force participation rate in the country. With over 26,000 workers in medical and surgical device manufacturing, Greater MSP’s industry employment is 17 times greater than the national average. Each year, 36 colleges and universities graduate over 3,000 students with life science degrees and certificates and over 550 dental related degrees. More than 10 schools provide technical training for laboratory and manufacturing workplaces.

Photo courtesy of the University of Minnesota School of Dentistry
“The University of Minnesota has one of the highest profile dental programs in the country, attracting the best and brightest students”

- Leon Assael, D.M.D., C.M.M.
  Dean, University of Minnesota Dental School

A LEADER IN RESEARCH AND DEVELOPMENT The University of Minnesota School of Dentistry has earned an international reputation for its educational, clinical, research, service and patient care programs. In 2011 it spent $9 million on research. It has received significant funding from the National Institute of Dental and Craniofacial Research (NIDCR) placing it among the top institutions in the U.S. for total federal grants.

CORPORATE RESOURCES: RESEARCH CENTERS AND LABS
These fully equipped multipurpose research clinics provide cooperative ventures with related centers, institutes and universities around the world.

- Minnesota Dental Research Center for Biomaterials and Biomechanics
- Hard Tissue Research Laboratory
- Minnesota Craniofacial Research Training Program
- Oral Health Clinical Research Clinic
- Temporomandibular Joint Disorders TMJ Registry and Repository
- University of Minnesota Bio-Engineering Lab

THE AMERICAN DENTAL EDUCATION ASSOCIATION awarded the 2013 William J. Gies Award for Vision, Innovation, and Achievement to the Minnesota Dental Research Center for Biomaterials and Biomechanics, a collaboration founded by the University of Minnesota and 3M, and open to any company interested in the advancement of biomaterials and biomechanics.
**GREATER MSP HAS SOME OF THE LOWEST SALARY COSTS** for the workers needed to help companies succeed.

<table>
<thead>
<tr>
<th>OCCUPATION</th>
<th>GREATER MSP MINNESOTA</th>
<th>BOSTON MASSACHUSETTS</th>
<th>PHILADELPHIA PENNSYLVANIA</th>
<th>CHICAGO ILLINOIS</th>
<th>NEW YORK NEW YORK</th>
<th>SAN DIEGO CALIFORNIA</th>
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<tbody>
<tr>
<td>Assemblers and Fabricators</td>
<td>$27,206</td>
<td>$27,310</td>
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**Cost of Living Index**

- Greater MSP: 110
- Boston: 140
- Philadelphia: 124
- Chicago: 117
- New York: 229
- San Diego: 133

**INFRASTRUCTURE KEEPS GREATER MSP CONNECTED.**

Minneapolis-Saint Paul International airport offers over 1200 seats to Europe daily on non-stop flights and serves another 135 non-stop locations. MSP International airport was recently recognized as one of the Best Airports in North America and has one of the highest efficiency ratings.
A STRONG GERMAN HERITAGE  Over 36% of Minnesotans claim German ancestry, twice that seen nationally and more Minnesotans claim German descent than any other ethnicity. It’s no wonder the national Germanic Genealogy Society is headquartered in St. Paul, Minnesota, one of the few cities with a German Immersion school.

Greater MSP’s German roots clearly remain deep with an active German-American Chamber of Commerce (GACC), numerous Sister City affiliations, and the Center for German Studies at the University of Minnesota’s Twin Cities campus.

THE GERMAN-AMERICAN CONNECTION IN GREATER MSP

According to the GACC’s Top 50 Ranking of German Firms, 90% of German subsidiaries in the United States are growing. These entities are investing in business expansions and new hires throughout the United States. Overall, their sales performance increased 7.5% between 2010 and 2011. The Top 50 created over 461,000 jobs, with Siemens USA is the biggest employer at over 60,000 employees. Eric Spiegel, President & CEO of Siemens, believes the U.S. is a “vital production location, an important research center and a key base from which we export to the rest of the world”. Siemens employs about 300 in Minnesota alone.

Over 20 large Minnesota-owned companies have established a business presence in Germany including:

- 3M
- CARGILL
- GENERAL MILLS
- PENTAIR
- MEDTRONIC
- ECOLAB
- ST. JUDE MEDICAL
- STARKEY LABS

The following German-owned companies are among many that have successfully invested in Greater MSP operations:

- ALLIANZ AG
- BASF
- BAYER
- CARL ZEISS
- CENIX BIOSCIENCE
- FRESENIUS MEDICAL CARE
- HERAEUS MEDICAL
- OTTO GROUP
- OTTO BOCK
- ROBERT BOSCH
- SIEGWERK
- SIEMANS AG
- TOGNUM AG
- WÜRTH GMBH

25.0 TO 73.0 PERCENTAGE OF THE POPULATION REPORTING GERMAN ANCESTRY

0.0
FROM BANKING TO IT PROFESSIONALS TO LEGAL SERVICES,
Greater MSP is home to companies that service the world’s best medical innovators.

- Piper Jaffray, headquartered in Minneapolis, has ranked as the top IPO underwriter and M&A adviser in the health care industry since 2005, serving high-growth life science clients.
- The American Dental Association continually chooses Minneapolis-based U.S. Bank for its member credit services.
- The region is an industry and academic bioinformatics powerhouse leveraging IBM’s supercomputer facility near the Mayo Clinic.

LifeScience Alley (LSA), the nation’s largest state-based life science trade association, has a 26-year track record of enabling biobusinesses to succeed. It is a critical resource to help companies navigate the government approval process and bring their products to the market faster.

The University of Minnesota has teams specializing in research and licensing agreements for medical devices, diagnostics, biologics, sterilization processes, and materials engineering – the full breadth of potential dental tools and products. The Medical Device Opportunity Licensing Program was designed to make it quick, easy and affordable for design and development companies to license medical and dental device technologies at the idea or proof-of-concept stage.

The Office for Technology Commercialization has had unmatched success in helping ideas prosper. In 2012, the office had 115 patent filings, 71 new licenses, 321 disclosures and 12 University-affiliated start ups. Recent technologies developed with the Office for Technology Commercialization include:

- An algorithm for automatic dental feature identification and alignment of teeth in dental models
- Enhanced computed tomography scan
- A halogen disinfectant to sterilize air and water from dental tools

The U.S. Medical Device Innovation Consortium (MDIC) is a joint venture between LSA and the FDA’s Center for Devices and Radiological Health. The MDIC is the only public-private partnership created with the sole objective of advancing medical device regulatory science.
INCENTIVES MAKE A DIFFERENCE  The Greater MSP region can offer a wide variety of assistance, incentives and loans for businesses including:

- Local government tax forgiveness
- State government grants and loans for buildings, equipment, and employee training
- Tax credits for investors
- Electric and natural gas utility rebates

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OUTSTANDING QUALITY OF LIFE  The Greater MSP community is vibrant, diverse and engaged in an abundance of activities. We have five professional sports teams, the most theater seats per capita and we were recently recognized as the most physically active, healthiest and safest cities. And the list goes on:

- #1 bike city in America (Bicycling Magazine)
- #1 market for working mothers (Forbes)
- #3 ranked Gallup Wellbeing Index
- #3 market for young professionals (Forbes)
- #4 most socially networked city (Men’s Health)

Business and People Prosper Here.
Find out more. Contact GREATER MSP.

WWW.GREATERMSP.ORG