OMIC R&D is modeled on the success of the Advanced Manufacturing Research Center in Sheffield. It was the first of 15 such R&D centers across the globe involving industry and academic partners to fill the gap between private and government funded advanced and applied research for commercialization.

Industry collaborates with community colleges like Portland Community College to train students using a hands-on apprenticeship model to develop a skilled, well paid manufacturing workforce. This attracts companies and jobs, and bolsters communities, especially those struggling to reinvent themselves after shifts away from once thriving trades such as timber or other extraction industries.

University students are engaged as interns in real-time applied research on industry problem sets. They work directly with faculty at their and other universities, and with global industry members, to learn how to trouble shoot, problem solve, and complete analysis on sophisticated machinery.
OMIC R&D serves as an anchor for a new regional economic engine driven by manufacturing. This has brought new national and global manufacturing companies to Scappoose, the greater Portland area, and the state which will bring interest, investment and jobs to Oregon.

The “OMIC Effect” is already being realized. The first arrival is OSG USA Inc., a company from Japan whose US headquarters is in California. OSG has planning underway to build a new facility adjacent to OMIC R&D in Scappoose. For now OSG is housed within the OMIC R&D complex.
OMIC R&D is a collaboration of 22 industry members, 3 academic research members, and the State of Oregon. By sharing challenges, ideas, and solutions, we capitalize on a wealth of knowledge and experience to address challenges in manufacturing that would be unsolvable when approached in isolation.

Through collaboration, innovation is born, resulting in applied solutions for our members to make products better, faster, greener and less expensively. This translates into a robust manufacturing industry creating more jobs, better jobs, a safer workplace, and a healthier economy.
OMIC R&D
A Unique Partnership Model

GOVERNMENT
ACADEMIA
INDUSTRY
PHILANTHROPY

Oregon Manufacturing Innovation Center Research & Development
33701 Charles T. Parker Way
Scappoose, OR 97056
Tel: 503.543.3306
contact@omic.us
www.omic.us
Since OMIC R&D’s inception in June 2017, industry has invested over $1.2 million in cutting-edge research led by experts from three Oregon public university partners.

OMIC R&D engages in applied research such as concept design, prototyping, third party unbiased product testing, and development of innovative manufacturing methods to apply on the manufacturing line. These strengthen the metals manufacturing sector, attracting global partners to invest in our state and region.

**ADDITIVE MANUFACTURING**
3D printed parts with shorter lead times, less waste

**ADVANCED ALLOYS**
Increased material performance, reduced costs, faster production

**AUTOMATION INDUSTRY 4.0**
Optimizing robotics and computer-controlled systems to improve safety and quality

**JOINING**
Innovative welding techniques to improve productivity and product quality while lowering emissions

**SUBTRACTIVE MANUFACTURING**
Increasing product quality and production speed through new milling, turning, cutting and grinding techniques using computer numerical control (CNC) machines
Revolutionizing Manufacturing at OMIC R&D

“Working on new rapid tooling solutions with OMIC gives Daimler Trucks North America the chance to test new technologies, processes, and designs to reduce lead time and cost while significantly increasing flexibility and individualization of our products. This can be a game changer.”
- Dr. Markus Friese, Daimler

“Our involvement in OMIC R&D has granted access to advanced metal working technologies previously considered cost prohibitive to small businesses.”
- Jeff Passmore, Silver Eagle Manufacturing

“The testing and verification done by OMIC R&D has been invaluable in providing direct cost savings to improve productivity for member companies.”
- Joe Gentile, Hangsterfer’s Laboratories
OMIC R&D began operating in June 2017 out of its 34,000 sf facility in Scappoose, Oregon with 7 industry members, 3 research universities, and an expansive group of community partners and stakeholders.

Today, with 25 member organizations – and new members joining monthly – OMIC R&D is strengthening and growing manufacturing in Oregon and the region, while also creating an infrastructure to train our next generation workforce.

**Industry Investment in OMIC R&D**

- **Member Cash dues of $2.3 million in first two years**
- **Member In-kind dues (machinery/equipment) of $5.1 million in first two years**
- **150% increase in members in less than 24 months.**

Each member is committed to annual dues and/or in-kind sophisticated machinery for the life of the Collaboration Agreement, which extends through June 2027.
### Current Members

as of February 2019

<table>
<thead>
<tr>
<th>Company Name</th>
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<tbody>
<tr>
<td>ATI Specialty Alloys &amp; Components</td>
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<td>Blount International</td>
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<td>Boeing</td>
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<td>CG Tech</td>
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<td>Daimler Trucks North America</td>
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<td>Haimer USA</td>
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<td>Hangsterfer’s Laboratories</td>
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<td>IMS Software</td>
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<td>Kennametal Inc.</td>
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<tr>
<td>Mitsubishi Materials Corporation</td>
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<td>Oregon Institute of Technology*</td>
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<td>Oregon Manufacturing Extension Partnership</td>
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<td>Oregon State University</td>
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<td>OSG USA, Inc.</td>
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<td>Portland State University</td>
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<td>Sandvik Coromant</td>
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<td>Schaeffer Manufacturing</td>
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<td>Seco Tools</td>
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<td>Silver Eagle Manufacturing</td>
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<td>Sugino Machine Limited</td>
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<td>Summit Manufacturing</td>
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<td>Vigor</td>
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<td>Walter USA</td>
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<td>WFL Millturn Technologies</td>
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<td>ZOLLER</td>
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*Oregon Institute of Technology is also the facility owner and operations host*
Over the next two years, OMIC R&D will have a substantial impact on manufacturing in Oregon, the region, and beyond by:

Creating **three research Centers of Excellence**: Cutting Tool Design, Production, and Inspection; Gear Making; and Rapid Tooling.

Developing a **distance learning initiative** to up-train manufacturing employees in the workplace, and re-train those seeking to transition to a manufacturing career.

Building a **collaboration with K-12 schools, community colleges, and universities** to provide seamless pathways for young people to gain the training and education needed for well-paying manufacturing jobs.

Sponsoring the first **Trends in Advanced Manufacturing (TRAM) conference** in the Spring of 2020, showcasing advances in metals manufacturing developed at OMIC R&D, and through our members and partners around the globe.

Through these efforts, OMIC R&D will restore pride in manufacturing and the manufacturing workplace, and grow the industry, jobs and our innovation economy.
Spotlight:
OMIC DEARMOND SCHOLAR
MaryAnne Laxama
Hillsboro - Liberty H.S. grad
• 4-years fully paid tuition at Oregon Institute of Technology - Manufacturing Technology Engineering
• Assisting in Research at OMIC R&D

“My internship at OMIC R&D has been an amazing experience. I get to work with faculty researchers, manufacturing professionals, and work on real research projects that help companies with their R&D. Most freshman don’t get an opportunity like this.”

“I’m excited about the innovation and collaboration that OMIC is already bringing to Columbia County and NW Oregon … it was inspiring to see so many local students excited about manufacturing careers and hands-on learning. The opportunities that OMIC offers students and the local workforce will be transformational.”
- Congresswoman Bonamici

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