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## Executive Committee Agenda

|   | <u>Page</u> |
|---|-------------|
| 1. Call to Order/Roll/Declaration of a Quorum (9:00am) (5 min) <i>Chair John Davis</i>  |             |
| 2. Consent Agenda (9:05 am) (5 min) <i>Chair John Davis</i>   | 2           |
| 2.1 Approve <a href="#">Minutes of October 18, 2022, Meeting</a>  |             |
| 3. Action Items (None)  |             |
| 4. Discussion Items   |             |
| 4.1 Oregon Manufacturing Innovation Center R&D (OMIC R&D)<br>(9:10 am) (60 minutes) <i>Craig Campbell, Executive Director, OMIC R&amp;D</i> | 5           |
| 5. Other Business/New Business (10:10 am) <i>Chair John Davis</i>   |             |
| 6. Adjournment (10:15 am) <i>Chair John Davis</i>   |             |

## Executive Committee DRAFT Minutes

1. **Call to Order/Roll/Declaration of a Quorum** *Chair John Davis*  
Chair Davis called the meeting to order at 8:07 am. The Board Secretary called roll and a quorum was declared.
2. **Consent Agenda** *Chair Davis*
  - 2.1 Approve Minutes of the June 2, 2022, meeting  
No changes voiced. Minutes approved as submitted. Motion by Trustee Minty, Seconded by
3. **Action Items – None**
4. **Other Business/New Business - None**
5. **Discussion Items – Chair Davis**
  - 5.1 The chair noted that this is a discussion day and the need to review the trustee membership and that 5 positions will open next year on the board, and that the executive committee serves as the committee on directors (trustees). A discussion to benefit the board and campus community and the process the board will take to make recommendations to the new governor. Chair Davis had shared the policy on board policy prior to the meeting in anticipation of the days discussion.  
Section 3.1 and section 3.2 of the board policy were read to the committee by Chair Davis. These sections include criterion for board membership. He then called on President Naganathan for his thoughts on the past selection of board members. President Naganathan shared the president provides a list of board trustee candidates to the board for their consideration, once decided the names of the trustee nominees are submitted to the governor’s office. He also acknowledged that anyone at anytime can submit names for nomination to the board through the published nomination process.  
Chair Davis shared that policy 4.1 points out the needs assessment aspect when a board vacancy occurs, and gaps are identified through this process. The board secretary maintains a list of those nominated and this is shared with the board when appropriate. Chair Davis noted the loss of Trustee Brown, Trustee Minty, Trustee Hill, and noted the gaps we will experience from their upcoming departure from the board. Chair Davis encouraged other Trustees and the public at large to make recommendations and added that these are governor appointed positions so the board can recommend but ultimately it is up to the

governor to decide. Trustee Jones added that what comes to mind to him that with several trustees rotating off, how will the board's ability to have a quorum be affected. President Naganathan noted that there is no automatic roll off and members can stay in place until they are replaced, and this is common across state entities. Trustee Minty noted that as one of two persons who are in Klamath that it is important that we have continued representation on the board from Klamath persons. Trustee Brown added that is important that we continued to look at diversity as we fill positions. It behooves us to make sure we put forward good names for consideration. Chair Davis added that the university stature has risen and there is a good opportunity to have high-capacity persons who also have a diverse background.

Board Assessment – *Chair Davis*

Chair Davis noted and highlighted the role of the board committees and one responsibility of the executive committee to examine/assess the effectiveness of the board. Chair Davis noted the need identified in the climate assessment for the board to be seen and engaged on campus. He noted that the board has been engaging on campus through tours, lunches, and their presence. Trustee Brown added he believed there is an assessment tool, perhaps from AGB, that we can use to see where we are. Trustee Minty noted that assessment used in the past were not helpful, but an accountability tool would be more helpful. Trustee Brown added that it is important not to reinvent the wheel but that there are some instruments out there that may be helpful, the open-ended questions tend to provide the greatest insight. Chair Davis added it is important for the board to assess and be assessed. He noted the feeling from some that the board was not engaged with the campus community, and noted the responsiveness to address those comments, which included involvement on campus during board meetings, tours, meetings, and convocation.

Chair Davis then referred to a recent ASOIT letter and that the letter had not formally been acknowledged by the board. He noted that his objective is to share the letter has been reviewed, conversations with ASOIT leadership has taken place and interaction between the two groups has been productive. Trustee Jones added he saw this as a question about a response to the letter and if so, what would the response look like. He noted the need to have a meeting with the ASOIT in Klamath Falls as was held in Portland Metro. Chair Davis recognized Trustee Wichmann who added that ASOIT at least last year wanted a lot of things done differently and had communication around several different topics. That this year's leadership is different and warrants a different approach. He felt that approach was not productive and that his interaction with the new ASOIT leadership will be more productive with the new leadership being brought into the room and discussions held. Chair Davis added that the next time the board meeting in Klamath Falls will be in April, of next year but that he will commit to work with the president to set up some meetings with ASOIT leadership there. Trustee Brown said the board be mindful (ASOIT) of not going around the president but to do so in partnership with the president. His concern is that we do not get into the weeds on issues but find a way to communicate without getting into a dialogue that is inappropriate or inaccurate. Trustee Wichmann shared it is a way to view and hear varied opinions and are reaching out to a variety of constituents to gather information so as to best advise the president. He noted that the past view of the board was that to make change we (ASOIT) need to go all the way to the top, that the board alone can make substantive change. Chair Davis said that the conversation on shared governance does not mean going around administrators to get an answer when told no. Trustee Jones added the

We need to be careful when reaching out to various groups and to be aware of the delicate balance between the board and others. He added the need for there to be answers to questions being asked and that feedback is needed for those who comes before the board. He also noted that with several new trustees we need to be mindful and provide information to them. President Naganathan added that for public comment, there needs to be visible and transparent follow-up and an address when appropriate. It depends on the topic and the boards consideration on the issue(s) presented. President Naganathan thanked Trustee Wichmann for his service and his work with President Naganathan when Trustee Wichmann served as an ASOIT leader.

The Executive Committee met in Executive Session per ORS 192.660(2)(f) to consider information or records that are exempt by law from public inspection, and ORS 192.660(2)(i) to review and evaluate the employment-related performance of the chief executive officer.

Due to technical difficulties the resumption of the executive committee was delayed approximately 40 minutes.

Chair Davis began the discussion on President Naganathan's compensation, noted he had not received a salary increase during his time at Oregon Tech, that President Naganathan took a reduction in salary during the pandemic. Chair Davis noted the board is remiss if it does not do an annual review of the president's compensation. Trustee Jones added

Trustee Minty moved

Trustee Nunez seconded

A friendly amendment was added by Trustee Brown.

Motion: That the Chair and Vice Chair negotiate the president's contract with him.

With all present voting aye, the motion passed.

## **6. Adjournment**

Acting Chair Davis adjourned the meeting at 9:37 am.



**OMIC | R&D**

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**Presentation to Oregon Tech Board of Trustees  
January 26, 2023**

Craig Campbell – Executive Director, OMIC R&D

# WHAT I WILL COVER

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- BACKGROUND AND STRUCTURE
- CAPABILITIES
- CAPACITY
- RESOURCES
- RESULTS
- INITIATIVES

# BACKGROUND

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OREGON METALS INITIATIVE (OMI)

NORTHWEST COLLABORATORY FOR SUSTAINABLE  
MANUFACTURING (NCSM)

ADVANCED MANUFACTURING RESEARCH CENTER  
(AMRC – SHEFFIELD ENGLAND)

# BACKGROUND

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- **COLLABORATION SIGNED – JUNE 2017 – OREGON**
- **TECH BECOMES HOST ORGANIZATION**
- **FIRST MACHINE/FIRST EMPLOYEE – APRIL 2018**

# **ROLES AND STRUCTURE**

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- **OREGON TECH – BOARD OF TRUSTEES**
- **OMIC R&D GOVERNING BOARD**
- **OMIC R&D TECHNICAL ADVISORY BOARD**
- **ROLE OF OREGON TECH AS HOST**
- **ROLE OF OREGON TECH AS MEMBER**

# OREGON TECH AS HOST

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Staffing and operations of OMIC R&D are paid for entirely through a grant through Business Oregon.

Oregon Tech provides “back office” services (Human Resources, Grant Management, Accounting, Procurement, and Contracting). These services are paid for through a finance & administration fee equal to 50% of OMIC R&D salaries.



# OMIC R&D COLLABORATION AGREEMENT

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Collaborative partnership between Industry and academia, to meet industry's applied research challenges that has become possible due to government investment.

# OMIC Membership

Absolent

ATI

AXILE

BOEING

KENAMETAL

Mahr

Mastercam

MITSUBISHI MATERIALS

CAPTURE 3D  
a ZEISS company

CARON  
ENGINEERING

CGTECH  
VERICUT

Coböt Team

Oregon TECH  
Oregon Institute of Technology

Oregon State  
University

OREGON TOOL

OSG

DAIMLER

Doosan Machine Tools

EDGE  
TECHNOLOGIES

Ellison  
TECHNOLOGIES

PGE

Portland State  
UNIVERSITY

SANDVIK  
Coromant

Schaeffler  
SPECIALIZED  
LUBRICANTS

GEFERJET

HAIMER  
Quality Wins.

HANGSTERPERS

HEIDENHAIN

SECO

SILVER EAGLE

SUGINO

SUMITOMO  
CARBIDE - CBN - DIAMOND

ph HORN ph

IEMCA

IMCO  
Power. Precision. Performance.

IMS  
SOFTWARE

Thermal  
Modification  
Technologies

TSUGAMI  
Rem Sales, LLC

VIGOR

WFL  
MILLTURN TECHNOLOGIES

ZOLLER  
expect great measures



# TYPES OF MEMBERSHIPS

## Industry Members

(Private sector companies involved in manufacturing)

Tier 1

Tier 2

Associate

## Research Members

(OSU, PSU and Oregon Tech)

# TYPES OF RESEARCH

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## General Research Projects

- Address needs of multiple Industry Members or manufacturing in general.
- Paid for from membership dues.
- Intellectual Property treatment governed by the Collaboration Agreement and General Projects Master Agreement.

## Specific Research Projects

- Address needs of an individual company
- Paid for from company no membership funds
- Often Proprietary

# Role of Members in research

## Industry Members

Direct focus of General Research Projects.  
Provide subject matter expertise.

## Research Members

Provide researchers and labs to conduct  
General Research Projects and Specific  
Research Projects.

# RESEARCH – EXAMPLES OF IMPACT

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OMIC R&D Research needs to provide an applicable solution on the manufacturing floor, and needs to have an answer to the question: so what?

## GENERAL RESEARCH PROJECTS

A14 Alternate Material to Carbide – Dr. Mostafa Saber

R21 Robotic Haptic Feedback – Drs Fitter and Davidson

R7 – Robotic Vision System for Quantitative and Qualitative Part Inspection – Dr. Fan

R22 Mobile Printing Platform – Dr. Campbell

## SPECIFIC RESEARCH PROJECTS

OMS 412 CBN Turning of Titanium for Sumitomo

OMS415 – C103 Machineability Evaluation

# Leadership Team



Craig Campbell  
Executive Director



Urmaze Naterwalla  
Head of Research &  
Development



Josh Koch  
Business Development  
Manager



Grant Kirby  
Workforce Development  
Manager



Michele Vitali  
Business Operations  
Manager

# Research Team

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Jen Kammerman  
Research Administrative  
Manager



Cody Apple  
Machining Solutions  
Researcher - Subtractive



Jordan Meader  
Machining Solutions  
Researcher - Robotics



Kyle McGann  
Machining Solutions  
Researcher - Additive



Taylor Schaming  
Associate Machining  
Solutions Researcher -  
Subtractive

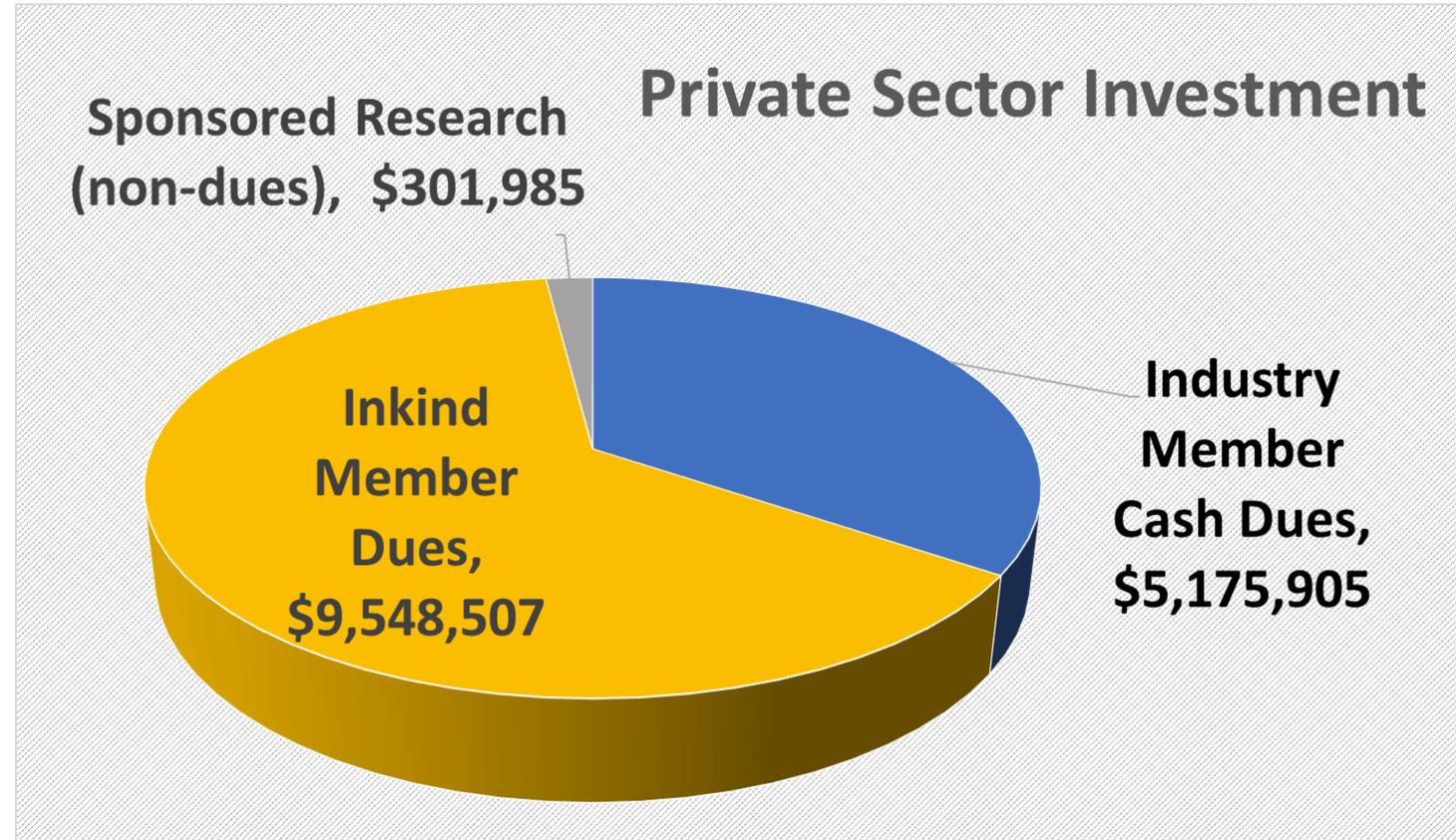
# PRIVATE SECTOR INVESTMENT TO DATE

**\$15 Million** in private sector investment.

Member cash dues are dedicated to fund General Research Projects.

Sponsored Research funds are from member and non-member companies for individual research projects.

In-kind Membership Dues provide machines, tools and other equipment for OMIC R&D's use.



# CAPITAL AND EQUIPMENT BONDS AND GRANTS

OMIC R&D has received almost **\$25 million** for development and renovation of the OMIC R&D campus

## STATE BOND FUNDS\*

|  |              |
|--|--------------|
| Charles T Parker Way Construction          | \$ 3,390,000 |
| Match for EDA Renovation Grant             | \$ 3,875,000 |
| Equipment for Additive Innovation Center   | \$ 3,000,000 |
| Additive Innovation Center - Phase 1 Grant | \$ 3,500,000 |
| Additive Innovation Center - Phase 2 Grant | \$ 5,000,000 |
| Hot Isostatic Press                        | \$ 3,000,000 |

## FEDERAL GRANT

|  |              |
|--|--------------|
| Dept. of Commerce EDA Renovation Grant | \$ 2,984,514 |
|--|--------------|

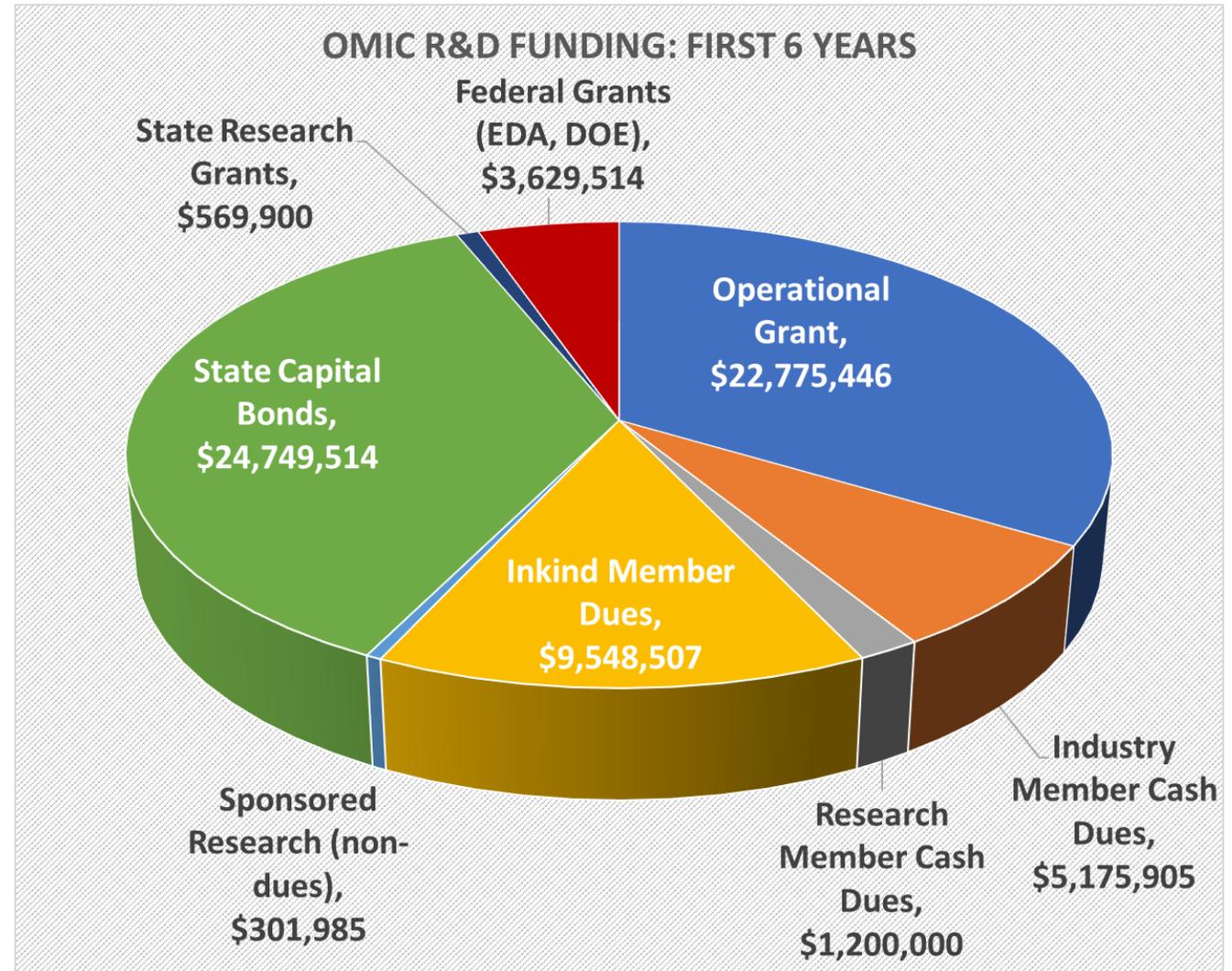
**TOTAL** \$ **24,749,514**

\*Funds received from these bonds do not need to be repaid.



# OVERALL FUNDING: FIRST SIX YEARS

OMIC R&D has received almost **\$65 million** in direct and indirect funding for its operational and capital needs since its opening.





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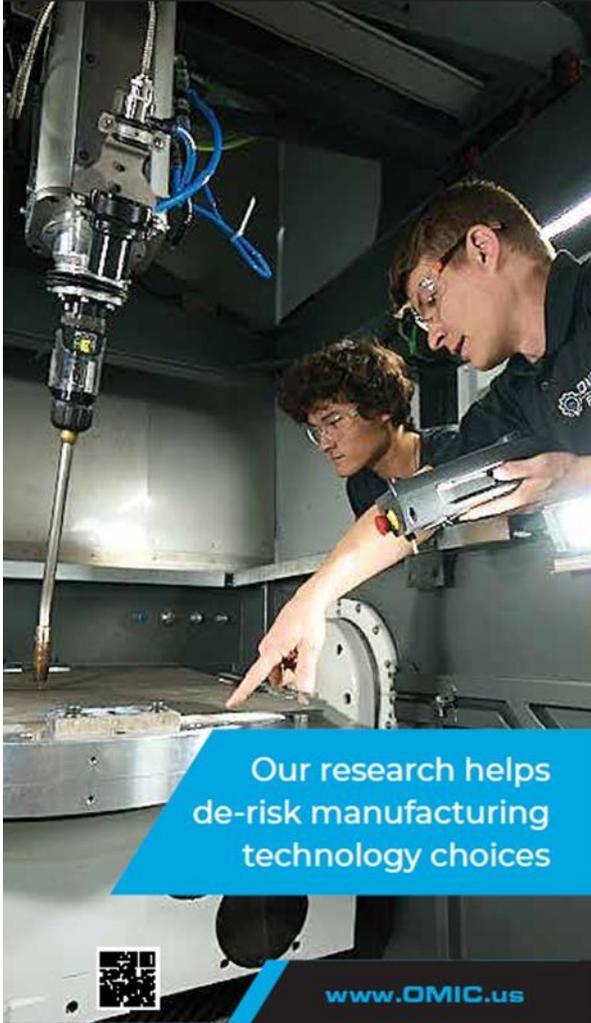
Combining traditional manufacturing with today's technology



[www.OMIC.us](http://www.OMIC.us)



Collaborate. Innovate. Elevate.



Our research helps de-risk manufacturing technology choices



[www.OMIC.us](http://www.OMIC.us)



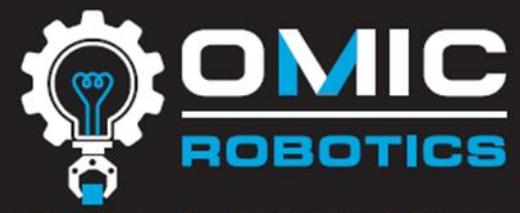
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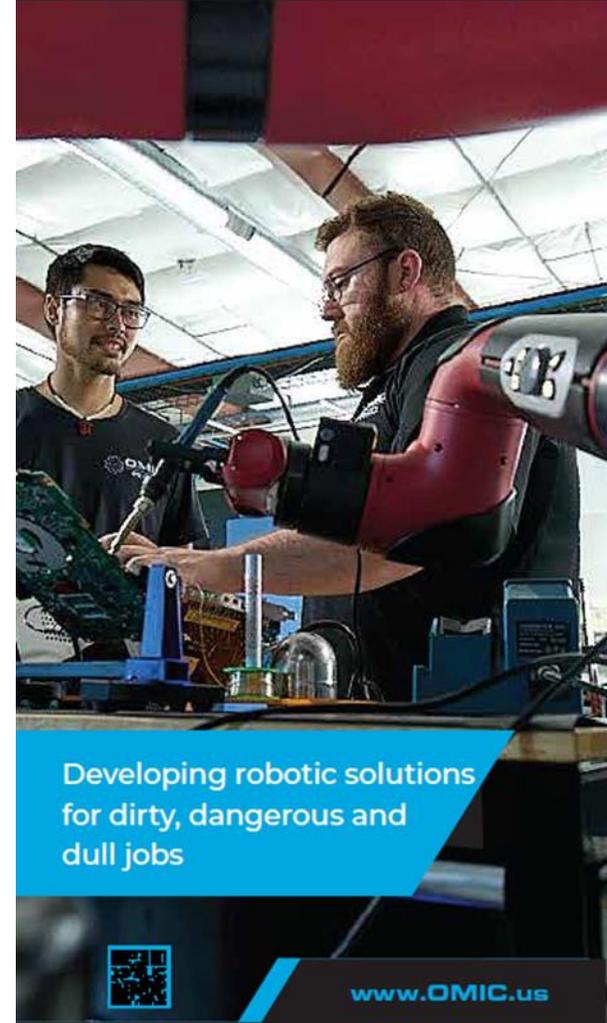
Building lighter, stronger and purpose-made advanced materials



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Collaborate. Innovate. Elevate.



Developing robotic solutions for dirty, dangerous and dull jobs



[www.OMIC.us](http://www.OMIC.us)

# Capabilities

## Mills



Okuma  
M560V

## MillTurns



WFL  
M30

## Lathes



Doosan  
TT2500SY



Sugino  
JCC603



Doosan  
DVF5000



Tsugami  
SS38MH-5AX



ANCA TX 7  
Linear



# OMIC ADDITIVE INNOVATION CENTER



A2.0 1'-0" = 3/32"

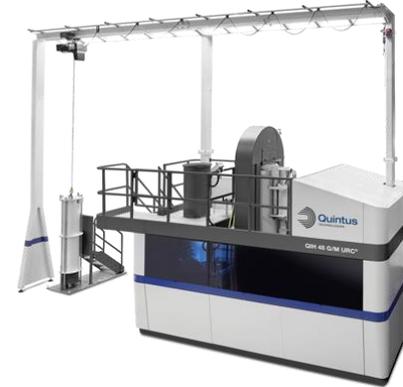
# AIC Capabilities



GEFERTEC Arc605



Wenzel LH 1210  
CMM



Quintus QIH48  
HIPing Furnace



ZOLLER Titan



ExOne X1 25Pro



Capture 3D Atos 5  
Scanbox



ELNIK 3025T Sintering  
Furnace



# RESULTS

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40 Industry directed applied General Research Projects completed.

21 research projects completed for member and non-member companies.

41 Members from across the globe.

Touted as an example of a successful economic development strategy.

48 High School and College students have participated in OMIC R&D summer internships



**OMIC**  
**R&D**

Collaborate. Innovate. Elevate.

# PCC OMIC TRAINING CENTER

The PCC OMIC Training Center provides flexible, responsive solutions to Industry needs. It was completed in the Summer of 2021 and began classes that Fall

## TRAINING (Certificate Programs)

CADD

Welding

Machine Manufacturing

Mechatronics

## PARTNERSHIP

Internships

Community

Awareness



# OMIC Initiatives

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- Development of prototype AR/VR CTE instruction modules.
- Memorandum of understanding with the PCC OMIC Training Center regarding the OMIC Initiative.
- New format for OMIC high school summer internship program.
- Inclusion of structured training elements for Summer university internship programs (Oregon Tech/DeArmond and OSU).
- Additive manufacturing competition for area high schools.



# OMIC Initiatives (cont.)

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- Ribbon cutting and opening of Additive Innovation Center.
- First annual OMIC R&D Research Symposium.
- OMIC R&D sponsored Northwest Conference on Emerging Trends and Innovation in Advanced Manufacturing in collaboration with Oregon Business Council.
- Development of kindergarten through post graduate knowledge and skills pathway in additive manufacturing.
- Manufacturing Solutions Researchers self-directed applied innovation projects.
- Design of Business Development Center as OMIC R&D Building 3.





# Questions

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**Thank you!**

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