





hammer@osu.edu http://hammer.osu.edu

ERC- HAMMER Membership Agreement

By the signature of its authorized representative below, _______(Entity) agrees to join the NSF Engineering Research Center – Hybrid Autonomous Manufacturing Moving from Evolution to Revolution (HAMMER) at the Ohio State University. HAMMER members support the mutual needs of industry, other members of the ecosystem and HAMMER in developing the basic approaches, formalisms, standards, research and needs assessments in the area of Hybrid Autonomous Manufacturing. HAMMER member funding will provide support for student research, education, outreach and workforce development with HAMMER investigators.

(Entity) agrees to pay an annual membership fee in accordance with the rate schedule shown below. Alternatively, HAMMER will provide membership for provision or use of vital equipment, internship experiences or provision of fellowship funding at twice the unrestricted cash value. These agreements will be negotiated and agreed to by HAMMER leadership. This annual membership renews automatically but may be cancelled with 60 days written prior notice by either party at any time after the first year. Our signatures below confirm our acknowledgement of membership benefits and annual membership fees and intent to join the Center.

In the first year Memberships will be subject for renewal one year from execution date.

Required membership fee for company sizes:

Individual	\$200/year
Mini (<10 FTE employees)	\$300/year
Meso (SBIR-Eligible, <500 Employees)	\$1000/year
Non-Profits	\$1000/year
Macro (large company)	\$5000/year

Membership Benefits and Responsibilities

HAMMER Members support the development of next-generation flexible, assured quality manufacturing by basic and enabling research, development, education and collaborations. These objectives will be accomplished by providing appropriate venues and mechanisms for technical information exchange, research collaborations, student training, technology transfer and workforce development with HAMMER investigators. Federal NSF investment will be focused on long-term foundational and generally useful research, development and education. Separate programs leveraging HAMMER facilities and expertise can be developed for individual problem-focused research and development, including synergistic industrial, entrepreneurial or other extramural student experiences.

Membership benefits include but are not limited to:

General Benefits:

- Membership on the appropriate HAMMER technical or education Advisory Board.
- Invitation to the annual review meeting that includes presentations by HAMMER researchers, students and member companies.
- Regular research program updates through the HAMMER website.

- Opportunity to help set topics and design products for HAMMER educational programs and products.
- Opportunity to participate in Project, Research Thrust and Testbed meetings where core HAMMER technology outputs are developed and planned.

Research-related Benefits:

- Participate in setting the technical direction of HAMMER both in the long and near-term.
- Participate in HAMMER's project performance evaluation process.
- Opportunity to partner in a specific sub-field of HAMMER research through sponsored research projects with HAMMER member universities.
- Opportunity to sponsor a post-doctoral student dedicated to a project of mutual interest to member and HAMMER. Full support of a post-doctoral expenses is expected if the company will have a primary influence in choosing the research topic.
- Access to state-of-the-art HAMMER member university facilities, equipment and instrumentation; problembased R&D programs and research consultation through facilities use, service or innovation agreements with HAMMER member universities

Technology and Intellectual Property:

- Access to results and intellectual property developed through HAMMER-funded research projects via negotiated license agreements with HAMMER Inc., a not-for-profit corporation established by the HAMMER member universities to hold, mature, de-risk, and commercialize HAMMER intellectual property.
- Ability to collaborate on SBIR /STTR and other grant opportunities with HAMMER member universities.
- As commercially valuable Intellectual property products and training or certification products are developed, these will be actively managed by HAMMER Inc. in such a way to maximize advancement of the field of Hybrid Autonomous Manufacturing.
- Non-disclosure agreements will be required to participate in thrust and testbed meetings.

Educational Benefits:

- Regular awareness updates from HAMMER faculty, staff and students regarding related research, industry and
 educational trends and products provided through blogs and monthly teleconference seminars.
- With HAMMER faculty, develop and participate in symposia, think-tank sessions and member-specific training programs

Workforce Development:

- Access to a diverse student base across all partner universities
- Ability to host students as interns or become mentors
- Ability to nucleate, assess and guide the development of educational and workforce training products including training equipment, course modules, certificate programs and hands-on programs.

Community development and participation:

 HAMMER will actively nurture the development of a Hybrid Autonomous Manufacturing community seeking mutually beneficial relations between member companies.

Membership Desired Duties:

- Participation in the annual NSF review of HAMMER performance (costs of attendance born by the member).
- Carry out an annual analysis of the HAMMER strengths, weaknesses, opportunities, and threats (SWOT analysis).
- Annually provide documentation of the value that HAMMER membership has brought to your organization.







National Science Foundation's

Hybrid Autonomous Manufacturing Moving from Evolution to Revolution (HAMMER) Engineering research Center Membership Agreement

(Entity) is gra	anted a one-yea	ar membership in the NSF-HAMMER-ERC program at
the level of:		
Entity size: Mini Meso	Macro	Non-Profit or Individual
Individual Mini (<10 FTE employees) Meso (SBIR-Eligible, <500 Employees) Non-Profits Macro (large company)	\$200/year \$300/year \$1000/year \$1000/year \$5000/year	

The HAMMER membership is valid for one year from the execution date. After the membership agreement has been fully executed, an invoice and payment instructions will be sent via e-mail.

For The Ohio State University
Signature, Date
Print Name: