



DIRECTIVE 2017-25

March 20, 2017

RE: JOINT USE AGREEMENT BETWEEN THE OHIO STATE UNIVERSITY AND EDISON WELDING INSTITUTE, INC.

The Ohio State University has been granted appropriations contained in Senate Bill 310 of 131th General Assembly in the amount of one million five hundred thousand dollars. Edison Welding Institute, Inc. will use the funds to improve the facility leased long term by Edison Welding Institute, Inc. As required by Ohio Administrative Code section 3333-1-03, The Ohio State University submitted a Joint Use Agreement for consideration and approval by the Chancellor.

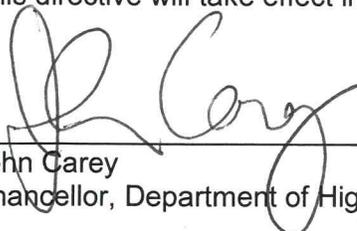
The agreement conforms to Ohio Administrative Code as follows –

- The format of the agreement is appropriate
- The commitment extends no less than twenty years
- The value of use to Ohio higher education institutions is reasonably related to the amount of the appropriation

Agency staff reviewed the agreement and posted its recommendations to the Department's website for purposes of providing a period of public comment before final approval by the Chancellor. The materials posted for comment and the joint use agreement are attached to this document.

Based on my review of staff recommendations, I hereby approve the Joint Use Agreement between The Ohio State University and Edison Welding Institute, Inc.

This directive will take effect immediately.



John Carey
Chancellor, Department of Higher Education

DWJ

JOINT USE AGREEMENT

This Joint Use Agreement (this "Agreement") is made and entered into as of the ~~1st~~ day of ~~February~~, 2017 by and between The Ohio State University (the "University"), 281 W. Lane Ave., Columbus, Ohio 43210, an instrumentality of the State of Ohio, and Edison Welding Institute, Inc. ("EWI"), 1250 Arthur E. Adams Drive, Columbus, OH 43221, a non-profit organized and existing under the laws of the State of Ohio.

RECITALS

WHEREAS, in 2016, the Ohio General Assembly appropriated state capital funds to the University, through the Chancellor of the Ohio Department of Higher Education (the "Chancellor"), for the following project (the "Project"), as more fully described herein:

Project Name: Edison Welding Institute
Legislation: Senate Bill 310
Capital Appropriation: C315FU
Total Appropriation Amount: \$1,500,000 (the "Appropriation").

WHEREAS, in accordance with the terms hereof, the Appropriation is to fund acquisition of additional machinery and equipment (the "Equipment") necessary for the optimum operation of the EWI Forming Center, located at 1250 Arthur E. Adams Drive, Columbus, OH 43221.

WHEREAS, in order for the Chancellor to release the Appropriation to the University, Ohio Administrative Code 3333-1-03(E) specifically requires execution of a joint use agreement containing specific requirements as set forth in (E) (1)-(11).

WHEREAS, the University has concluded that the value of the use of the Equipment by the University as provided in this Agreement is reasonably related to the amount of the Appropriation through the worksheet included in this Agreement as Attachment A.

NOW, THEREFORE, in furtherance of the above, and in consideration of the mutual covenants, promises, conditions and terms to be performed by each, the University and the EWI hereby agree as follows:

AGREEMENT

1. Commitment.

- A. EWI hereby represents to the University that EWI (i) has a long term lease on the property and building at which the Equipment will be installed, (ii) will continue that lease on the property and building and (iii) that no other person, party, or entity has any rights in or to such property and building.

- B. EWI agrees to perform the Project as set forth above, and in accordance with the terms hereof, so that the purchased Equipment may be used as detailed above and dedicated to serving the needs of the Franklin County community, including, without limitation, the University. EWI shall (i) purchase, install, and operate the Equipment, in a safe manner consistent with generally accepted standards, and (ii) comply with all applicable legal requirements, including without limitation, all pertinent federal, state and local laws as well as state administrative regulations. It is hereby expressly agreed that EWI shall follow competitive bidding procedures as outlined generally in Ohio Revised Code Chapter 153, where applicable, which shall include, at a minimum, publishing advertisements to seek bids, receiving sealed bids, and awarding contracts to the lowest responsive and responsible bidders, and such selection procedures as directed by laws applicable to the University.
- C. Prior to purchasing the Equipment, EWI shall provide the University with a copy of the equipment descriptions and specifications. It shall be the responsibility of EWI to ensure that the same comply with the applicable laws and requirements of public authorities, and the delivery of the equipment descriptions and specifications to the University shall not be deemed a representation or warranty of any kind that the same satisfy the requirements or standards of any governmental authority having jurisdiction thereof or otherwise suitable for the purposes for which they were designed. From time to time during the performance of the Project, but in no event less than once a month, EWI shall provide the University with an update on the Project status.
- D. EWI shall offer and make available to the University all the "Annual value of use" as described in the Joint Use Agreement Worksheet – Attachment A hereby incorporated. The new equipment being purchased with funds allocated in SB310 for this purpose, will be made available for OSU's use at a minimum of the hours indicated in Sections II.b and II.e of Attachment A. The hours made available for OSU's use will be coordinated to work with faculty and student academic schedules. This value to the University shall be at no charge to the University and it is hereby agreed that this agreement reasonably reflects the magnitude of the University's investment in the Equipment. Upon request, not to exceed once per calendar year, EWI shall provide to the University and the Chancellor written documentation that satisfactorily demonstrates the above requirement, within 45 days of request. For the avoidance of doubt, the parties agree that the value set forth on Attachment A is separate and apart from any value, rights or obligations which may be provided for under (i) that certain Agreement on Cooperation between the parties dated April 1, 1995, (ii) that certain Land Lease between the parties dated April 1, 1995, and (iii) that certain Sublease between the parties dated April 1, 1995, all as the same may have been or will be amended or modified.
2. Term. The term ("Term") of this Agreement shall be twenty (20) years, commencing when the Equipment is installed and is ready for the usage by the University, and shall expire on the day which is the last day of the month in which the twentieth (20th) anniversary of such usage date, unless sooner terminated pursuant to the terms hereof or at law. In the event that

the University no longer has the right to use the Equipment prior to its expiration in accordance with the term hereof, EWI shall reimburse the State of Ohio in an amount (the "Reimbursement Amount") calculated by (a) dividing the amount of the Appropriation actually paid to EWI by twenty (20) and (b) multiplying the resulting amount by twenty (20) less the number of full years the new Equipment has been utilized by the University in accordance with this Agreement. The Reimbursement Amount shall be paid in cash, by wire or by certified check.

3. Funds used for Capital Improvements. Except for the funds used to cover the University's administrative costs, the full amount of the Appropriation shall be used by EWI only for capital improvements that are part of the Project and not for operating costs.
4. Insurance.
 - A. EWI agrees that it shall, at its sole cost and expense, procure and continue in force during the Term of this Agreement (i) a policy of comprehensive general personal injury and property damage liability insurance against claims for bodily injury, death and property damage (including completed operations and contractual liability), on an occurrence basis in an amount not less than \$1,000,000 combined single limits and (ii) all-risk property insurance, including fire and casualty insurance for the Equipment, in an amount equal to full replacement cost but in no event less than the Appropriation.
 - B. Prior to any contractor being permitted to perform work on the Project, and throughout the entire period any Project alterations or improvements are being performed, it shall be the obligation of EWI to require each of the contractors to carry and maintain in full force and effect commercially reasonable insurance coverages consistent with standard insurance requirements for contractors performing similar work in a similar location.
 - C. The insurance policies described in Paragraphs 4A and 4B above shall be carried with companies licensed to do business in the State of Ohio, and, upon request from the University, EWI shall provide a Certificate of Insurance evidencing the above coverages. All such policies shall name the University, and its directors, employees, faculty and agents and such other persons or entities as the University may reasonably request from time to time, each as an "Additional Insured" and shall contain a waiver of the insurer's right of subrogation against the University and its carrier. The University shall not at any time be liable for damage or injury to persons or property around the Equipment or the building in which it is housed. Any coverage limit required herein shall not be construed as a limitation or satisfaction of any hold harmless or indemnification agreement contained herein.
5. Indemnity and Hold Harmless. EWI shall indemnify, defend and save harmless the University, its affiliates, shareholders, directors, officers, agents, employees and contractors from and against any and all loss, cost (including attorneys' fees), damage, expense and liability (including statutory liability and liability under workers' compensation laws) in

connection with claims, judgments, damages, penalties, fines, liabilities, losses, suits, administrative proceedings, arising out of any act or neglect by EWI, its agents, employees, contractors, licensees, invitees, representatives, or visitors, in, on or about the Equipment or in connection with this Agreement or the Project, including without limitation, the installation, operation or maintenance of the Equipment and the use of the Appropriation. This provision shall survive the expiration or sooner termination of this Agreement.

6. Distribution of Funds and Administrative Costs. After the full execution and delivery of this Agreement, the University shall submit to the Chancellor a formal written request for the release of the Appropriation. The University shall be paid for administrative costs incurred as a result of the Project. Such administrative costs shall be \$22,500, which is equal to 1.5% of the Appropriation, and shall be paid to the University upon receipt of the Appropriation. At any time the full execution and delivery of this Agreement but in no event after eleven (11) months after such date, EWI, on behalf of itself, shall submit a written draw request detailing expenditures to the University for the permitted use of the remaining Appropriation in the amount of \$1,477,500 for the Project. The University shall disburse the above amounts to EWI after the University's receipt of the Appropriation, approved invoices or other appropriate documentation of such expenses and any other necessary approvals.
7. Validity. If any term, covenant or condition of this Agreement or the application thereof to any person or circumstance shall, to any extent, be illegal, invalid or unenforceable because of judicial construction, then the remaining terms, covenants and conditions of this Agreement or their application to persons or circumstances other than those held invalid or unenforceable shall not be affected thereby; and each term, covenant or condition of this Agreement shall be valid and enforced to the fullest extent permitted by law.
8. Assignment. This Agreement may not be assigned by EWI in any form or to any extent, without the prior written consent of the University, together with the written consent and approval of the Chancellor, which such consent may be granted or withheld in the University's (or the Chancellor's) sole discretion. Any assignment without such written consent shall be null and void.
9. Notices. Any notice required or permitted to be given under this Agreement shall be given either by: (i) first-class certified mail, return receipt requested, addressed to the party at the address shown below, or (ii) personal delivery at the then-current address of such party; in either event, with a copy given by either manner to the person designated below to receive a copy. Such notice shall be effective when delivered to both persons. The current addresses of the parties and the persons to receive copies are, respectively, as follows:

To the University:	Christopher M. Culley General Counsel Office of Legal Affairs The Ohio State University 1590 North High Street Suite 500 Columbus, Ohio 43210-2178
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with a copy to:

Planning and Real Estate
The Ohio State University
200 McCracken
2003 Millikin Road
Columbus, Ohio 43210

To the EWI:

James Tighe
CFO and VP
Edison Welding Institute, Inc.
1250 Arthur E. Adams Drive
Columbus, OH 43221

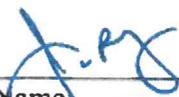
10. Governing Law. This Agreement shall be subject to and interpreted in accordance with the laws of the State of Ohio, and any action brought pursuant to this Agreement shall be brought in a court of competent jurisdiction within the State of Ohio.
11. Amendments. Any amendment to this Agreement will not be effective unless and until approved in writing by the parties hereto and by the Chancellor.
12. Headings. The headings used in this Agreement are inserted only as a matter of convenience and for reference and should not be given effect in the interpretation of this Agreement.
13. Trademarks/Service marks. EWI shall not make use of the University's name or other identifying marks or property of the University, nor make any representation, either express or implied as to University's promotion or endorsement of the Project unless it has received the prior written permission from the University to do so.
14. Recitals. The Recitals above are incorporated herein by reference.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date first written above.

THE OHIO STATE UNIVERSITY

By: 
Name: Jay Kasey
Title: Senior Vice President, Admin & Planning

EDISON WELDING INSTITUTE, INC.

By: 
Name: James P. Tighe
Title: CFO

Joint Use Agreement Worksheet – Attachment A

The Ohio Board of Regents

October 2016

Direction: The purpose of this worksheet is to enable a campus to demonstrate how the value of the uses that will be derived from a Joint Use Agreement is reasonably related to the value of the state capital appropriation made to the partner entity. Section I is to be filled out by the staff of the Board of Regents. Sections II and III are to be filled out by the partner campus.

Example: A campus wishes to enter into a Joint Use Agreement with a 501(C)(3) entity for a state appropriation of \$5,000,000. The annual debt service paid by the state on this appropriation is about \$390,000 per year, for 20 years. To demonstrate that the value of the uses of the facility is reasonably related to the state appropriation, the sum of the campus' educational uses of the facility should roughly equal \$390,000 per year for 20 years.

Section I: State appropriation information.

1. Amount of state appropriation provided:	\$	<u>1,500,000.00</u>
2. Estimated annual debt service on the appropriation:	\$	<u>115,314.22</u>
3. Term of the state bond, in years:		<u>20</u>

Section II: Estimated value of use of the facility.

Use(s) of the facility*	Annual value of use	# of years
a. <u>Instruction of 7wk OSU Lab Course</u>	<u>\$ 23,240</u>	<u>20</u>
b. <u>Four days of equipment access for OSU lab courses</u>	<u>\$ 29,056</u>	<u>20</u>
c. <u>Promotion / Support of joint forming</u>	<u>\$ 16,290</u>	<u>20</u>
d. <u>EWI sponsorship of OSU's CPF</u>	<u>\$ 15,000</u>	<u>20</u>
e. <u>Min of 8 days/yr of select EWI forming eq</u>	<u>\$ 34,520</u>	<u>20</u>
f. _____	<u>\$ _____</u>	<u>_____</u>

(* List additional uses on separate page as needed.)

Section III:

On a separate page, explain how each use listed in Section II was valued for this analysis.

Section III: Value Analysis

Value Analysis for Edison Welding Institute

Overview of Project

The State of Ohio appropriated \$1,500,000 to the Ohio State University (OSU) for Edison Welding Institute (EWI), a non-profit engineering services organization, to invest in advanced sheet metal forming equipment and facilities. This allocation of State capital will allow EWI to invest in state of the art equipment, which will augment existing capabilities in forming technology to help EWI work with customers in the transportation industry to address the challenges resulting from the need to develop lightweight vehicle structures and components. Having this equipment available to OSU and EWI will benefit industry by advancing research and implementation of advanced technology into production.

Value to The Ohio State University

EWI has a long running partnership with OSU, particularly in metal forming. All of EWI's forming staff have advanced degrees from OSU, and there are many collaborative efforts with Dr. Taylan Altan, who operates OSU's Center for Precision Forming, and Dr. Farhang Pourboghraat, both from the Department of Integrated Systems Engineering (ISE). The ISE department is considering adding faculty in forming and access to EWI's forming equipment could be attractive in recruiting to OSU.

EWI has worked with Dr. Philip J. Smith, Chair of the Department of Integrated Systems Engineering, to develop the proposed offering outlined below that would complement both organizations. To fulfill the \$115,315.22 annual commitment to OSU under this program, EWI will provide \$118,106 in value in the following areas:

- Access to EWI staff and equipment for lab courses.
- Usage of tooling/equipment for demonstrations and research
- Promotion of EWI / OSU collaborative forming activities
- Direct financial contribution to OSU's Center for Precision Forming.

Considering the 20 year length of this agreement, both sides agree to meet at set intervals to review and make adjustments as necessary for the remainder of the agreement. These reviews will occur in January 2019, 2022, 2025, 2028, 2031, and 2034.

Education/Training of Students (Lab Instruction)- \$23,240:

A major benefit of EWI/OSU cooperation would be the education and training of students. Utilizing EWI staff to instruct a lab course can leverage their unique experience and perspective to benefit the university, their students and the course instructor. An EWI staff member will instruct a seven week lab course once per year to complement the forming curriculum.

For this activity, the Chairman of the ISE department will submit a request to EWI a minimum of 12 weeks prior to the start of a semester to request EWI to support an OSU lab course. That request will be made to the Engineering Manager at EWI over the forming area and will contain details on the desired content and time frame of the course, and corresponding professor / TA for the course. Within two weeks upon receipt of the request, the Engineering Manager at EWI will communicate EWI's acceptance and assign staff to support the activity and inform the Chairman of the ISE department. OSU will provide any course materials necessary for the instructor and students, access to OSU systems required for course instruction, and a parking pass for the EWI instructor... Upon completion of the course, confirmation will be sent by the assigned staff to the EWI Engineering Manager and Chairman of the ISE department.

The value for course instruction is built based on EWI's hourly rates for a Senior Engineer to instruct a seven week lab course once per year. That staff would develop the materials, instruct the course, follow up with students as necessary, and submit student results. That total effort is estimated as follows:

Based on previous experience instructing lab courses, this effort will require 1.25 man-days per class to prepare, instruct and follow up for a seven week course, assuming that the course is convened once per week. The total value for this effort is \$23,240 per year.

- Based on EWI's current labor rates and subject to change, this would result in 8.75 man-days:
 - o Total Effort: 8.75 man-days @ \$2,656 / day = \$23,240 per year

Education/Training of Students (Equipment Access)- \$29,056:

In addition to instructing lab courses, EWI staff and select equipment may be utilized to support an onsite lab course for a minimum of two days per semester, totaling four days per calendar year. EWI staff will operate the equipment and work with the requesting OSU faculty to develop the activity. Two days of Application Engineer and Senior Technician time will be required for each day of equipment / facility utilization by OSU. This time is necessary to support material development, planning, set-up, preparation, execution, and tear down of equipment.

For this activity, the Chairman of the ISE department will submit a request to EWI a minimum of 12 weeks prior to the start of a semester to request EWI to support an OSU lab course. That request will be made to the Engineering Manager at EWI over the forming area and will contain details on the desired content and time frame of the course, and corresponding professor / TA for the course. OSU will be responsible for providing any consumable materials, specialty equipment, instrumentation, and data acquisition for the course. Within two weeks upon receipt of the request, the Engineering Manager at EWI will assign staff to support the activity and inform the

Chairman of the ISE department. Upon completion of the lab days, confirmation will be sent by the assigned staff to the EWI Engineering Manager and Chairman of the ISE department. EWI reserves the right to refuse any request that is deemed unsafe or could damage the equipment.

The value for this activity is based on eight days of Applications Engineer and a Senior Technician time at EWI's hourly rates for each to support four days of onsite lab course instruction. That total effort is estimated as follows:

- Based on EWI's current labor rates and subject to change, this would result in 16 man-days at a blended rate of \$1,816 per day:
 - Total Effort: 16 man-days @ \$1,816 / day = \$29,056 per year

Promotion and Support of EWI / OSU Joint Activity in Forming - \$16,290

With EWI and OSU having forming capabilities, both have agreed to collaborate as much as possible, rather than compete. Through this agreement EWI is committing to the promotion and support of EWI / OSU joint forming activities. This will include marketing, operational and logistical expenses for any formal or informal events involving the two organizations. In the event that this activity leads to funding for OSU, that funding amount would be counted toward EWI's obligation to OSU. This potential benefit for OSU is not currently figured in to this JUA.

The Chairman of OSU's ISE department will select an OSU employee to represent the university and to work with EWI on joint activities. EWI does have the right to evaluate that representative and approve or reject for this position. No less than 12 weeks prior to an event, the EWI engineering manager will coordinate a meeting with the OSU representative and EWI's technical, marketing, and business development staff to plan the upcoming event.

EWI reviewed the activity necessary to promote and support EWI's other consortiums to provide an estimate for this document. EWI anticipates operating semi-annual meetings in either the Columbus, OH or Detroit, MI areas. The costs for promoting and operating these events, as well as other regular promotion/marketing are broken out below. EWI will be posting half of the associated costs toward this agreement. OSU staff would provide for their own transportation, lodging and meals not covered as part of the event.

- Two one-day events per year – Meeting room, catered lunch and refreshments, AV equipment and dinner. \$5,250 per event.
 - Half of two events @ \$5,250 / event = \$5,250 per year
- Based on EWI's current labor rates and subject to change, this would result in twelve man-days per event for EWI marketing staff and Business development staff for a total of twenty four man-days at a blended rate of \$920 per day.
 - Half of the support for two events is twelve man-days x \$920 / day = \$11,040 per year
- Total benefit: \$16,290 per year

Paid Membership into OSU's Center for Precision Forming - \$15,000:

For almost 10 years, Dr. Altan has been operating OSU's Center for Precision Forming (CPF). CPF is a member based group, constructed of a variety of companies interested in advancing metal forming technology and practices. EWI is committing to Associate Membership (companies <500 employees), which is currently \$15,000 per year. In addition to this direct financial support, EWI will provide equipment access, which will be described below.

- Total for CPF Membership = \$15,000 per year

Equipment Usage for Demonstration to Educational Institutions/ Industry and Faculty Research - \$34,520:

Exposure to this equipment by industry and educational institutions is critical to proliferate the technology, to train the work force to utilize its capabilities and to advance research. EWI's mission is support the application of innovative technologies into manufacturing. One component of this is to demonstrate the capabilities and applications of the equipment. EWI will conduct demonstrations for state educational institutions in Ohio and companies to showcase the technology. EWI has a long history of collaborating with educational institutions, particularly OSU, and recognizes that making the equipment available for university research is also important. In addition to the demonstrations, EWI commits to providing time to support research work on the equipment.

EWI will make selected forming equipment available for demonstrations and research work by state university faculty. The list is comprised of both existing equipment and new equipment that will be procured through this project (outlined below). The existing equipment included is complementary to the new equipment being purchased through the State appropriation.

For this activity, the Chairman of the ISE department will gather all internal requests for time on EWI equipment, combine and prioritize the list and submit an official request to the Engineering Manager at EWI on the 1st of every other month. This notice will be given a minimum of 8 weeks in advance of the desired test dates. That request will be made to the Engineering Manager at EWI over the forming area and will contain details on the requestor and desired testing scope, including a matrix of tests, materials, and number of samples. The request will also list the equipment supplied by the requestor, options for dates of activity, and estimated length of test. OSU will be responsible for providing any consumable materials, specialty equipment, instrumentation, and data acquisition equipment. Within three weeks upon receipt of the request, the Engineering Manager at EWI will assign staff to support the activity and an initial schedule for the time on the equipment. The selected EWI associate will then schedule times to meet with the OSU requestor to discuss details on the activity. Two weeks prior to the planned time on the equipment, EWI will update / confirm the schedule. In the event of conflicting/competing schedules or priorities among the OSU requests, the Chairman of the ISE department will resolve any issues. EWI reserves the right to refuse any request that is deemed unsafe or could damage the equipment.

The value listed is built on EWI's current labor rates and subject to change, and would result in EWI staff supporting a minimum of eight days per year of equipment usage

for the described purpose. EWI staff will prepare and operate the equipment, and can assist in the analysis or interpretation of results. For estimation purposes it is assumed that one day of equipment usage requires eight hours of time from an Application Engineer and twelve hours from a Senior Technician.

- Equipment Usage – 2.5 man-days * 8 days = 20 man-days
Based on EWI's current labor rates and subject to change, this would result in twenty man-days per event for at a blended rate of \$1,726 per day = \$34,520
- Total for Equipment Usage for Demonstration/Faculty Research = \$34,520/year

No	Equipment name	Applications	Existing / New
1	300-Ton servo press	Testing for sheet metal forming for springback, blanking, bending and deep drawing, etc.	New
2	160-Ton hydraulic press	Testing for sheet metal forming and cold forging	Existing
3	Coil feeder	Feeding the coil material to the press	New
4	Part handling robot	Handling either flat blank or stamping	New
5	ATOZ	3-D Scanning tool for creating the CAD model	New
6	Hole expansion test tooling with the vision sensor	Evaluate edge cracking	Existing
7	Biaxial bulge test tooling	Biaxial flow stress curve with the sheet materials	Existing
8	Round cup draw test	Limiting draw ratio and lubricant evaluation	Existing
9	Strip galling test	Evaluate the galling resistance of tool coating and tool materials	Existing
10	Rectangular pan draw test	Evaluate material drawability and critical failures	Existing
11	Universal forming test	Evaluate various failures in stamping	Existing
12	UNIST lubricator	Automated lubricator for sheet samples	Existing
13	Upsetting test	Flow stress of billet materials	Existing
14	Standard Limiting Dome Height (LDH) Test	Forming limit diagram	Existing