

Project Assessment Form: 2024 IEDA Butchery Grant Program

This assessment must be completed to apply for the grant. It cannot be replaced with a prior assessment of any kind from CIRAS (including the 2022 Butchery application and Industry 4.0 assessments).

STEP 1: Complete this CIRAS assessment form and submit PRIOR to your IEDA Butchery Grant Application. Send completed form to: ciras.grants@iastate.edu by March 7, 2024

STEP 2: CIRAS staff will review the information and return to the applicant with comments and suggestions for improvement in the order in which they are received. Turnaround time may vary with application submissions, but all feedback for the Project Assessments will be returned no later than March 28, 2024.

STEP 3: Grant applicants should consider the feedback and incorporate changes into their project plans. The revised plan, the original plan, and the CIRAS feedback should all be attached to the IEDA Butchery Grant Program application (step 4).

STEP 4: Complete the IEDA Butchery Grant Program application and include your CIRAS-reviewed Project Assessment with the grant application. Grant Application can be accessed at: <https://www.iowaeda.com/grow/butchery-innovation-revitalization>

ASSESSMENT NOTE: Due to the varied nature of a given project, *all fields do not need to be completed.* If a particular question does not apply to your project, simply enter “not applicable.”

QUESTIONS: Should you have any questions on the form or the project planning process, CIRAS is here to help. Contact Rachel Hahn, Food Account Manager, at rhahn@iastate.edu or 515.620.8093.

Applicant Information

Business Name	Walford Locker
Business Address	123 A Street, Walford, IA
Contact Name	Rachel Hahn
Contact Number	(515) 620-8093
Contact Email	rhahn@iastate.edu
DUNS Number	1234567

1. **Project Overview:** Briefly describe what will be completed as part of the project (300 words or less)

Project will support purchase, installation, and setup of an automated piston filler for our roll stock line to increase throughputs/ line speed, reduce labor inputs, and decrease product loss. The new piston filler will meet all HACCP and food safety requirements, as well as be USDA compliant. Project costs will be distributed between equipment purchase, installation of electrical/compressed air, training (including travel), and start-up. Project ROI was calculated at 317% and payback period is only ~4 months.

2. **Project Scope:** Detailed list of what will be completed as part of the project.

<p>Considerations:</p> <ul style="list-style-type: none"> • Specific equipment • Electrical and Mechanical Installation • Demolition needs • Lighting and other room upgrades • Employee Training 	<p>Equipment: Unifiller M2 Depositor, no-drip nozzle, Dual Lane (details attached) Electrical: 20 amp 3-phase outlet (drop-down) Air: 10 cfm @ 80 psi. Air line extended from room X to above Unifiller install location. Training: Travel costs (including Airfare, lodging, M&E) plus 1-day onsite for 2 technicians from Unifiller. Start-up: Plant materials, labor, and packaging during time of training.</p>
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3. **Business Impact:** Describe the impact this investment will have on your business. Please include a calculated simple return on investment (ROI) if applicable.

<p>Considerations:</p> <ul style="list-style-type: none"> • Current capacity • Market demand • Expected future capacity • Equipment speed changes • Reduction in labor required • Retained employees • Storage capacity 	<p>Current production requires 3 employees (2 filling and 1 wiping seals). The piston filler will require only 1 employee. This employee reduction will reduce line costs by ~\$100k/yr. The two employees will be utilized in another plant location.</p> <p>Current production limits line speeds to 10 pouches per minute. The piston filler will support line speeds to 20 pouches per minute. This increased production rate will double line capacity (from 720k/yr to 1.4M/yr units).</p> <p>Yields will be increased by decreasing seal failures. Current seal failures result in 5-7% yield loss (\$400k/yr). Use of the piston filler will reduce seal failures (less product in seal that causes failure). Expected seal failure yield loss is 3-5%. This is a savings of est. \$100k/yr.</p>
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4. Planning Strategy: Alternative Solutions Considered:

<p>Considerations:</p> <ul style="list-style-type: none"> • Alternative approaches, equipment, technology or contractors considered • Why each were rejected 	<p>Project evaluation included review of 3 piston fillers from different manufacturers, including shipping examples of our current product for testing at their locations (video taken).</p> <p>All fillers were compared based-on price, industry reputation, service/support, cleaning/sanitation, and ease-of-use. The Unifiller piston filler was internally rated highest.</p>
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5. Project Budget: Provide a total and an itemized budget for the project. Each expense should be categorized as either an estimate, a vendor quote, or a competitive bid. Everything listed in Question #2 above needs a cost listed below. Insert more rows as needed. Note: include installation and demolition costs.

Total Capital Investment:	\$62,900
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Item	Cost	Competitive Bid	Vendor Quote	Internal Estimate
Unifiller M2	\$55,000	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Electrical – drop down outlet	\$600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Air Line – Extend line to work area	\$300	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Training	\$5000	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Start-Up costs	\$2000	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6. Project Schedule: Start and Stop dates for the project, along with milestone dates and lead times, if known.

<p>Considerations:</p> <ul style="list-style-type: none"> • Equipment order date • Equipment lead time • Installation schedule • Training schedule 	<p>Project Schedule:</p> <p>Equipment Lead – 10-12 weeks Estimated Order Date – January 15, 2023 Estimated delivery Date – April 1, 2023</p> <p>Installation Schedule Electrical – w/o January 21, 2023 Air – w/o February 1, 2023</p> <p>Training Schedule – TBD, expected 1-2 weeks after arrival of equipment to the plant.</p>
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7. **Health, Safety and Environmental Considerations:** Provide details on whether the project presents any new risks, and the businesses plan for mitigation.

<p>Considerations:</p> <ul style="list-style-type: none"> ● Lock Out/Tag Out points ● New safety risks ● New chemicals ● Wastewater production increases 	<p>No special risks were identified. No exposed moving parts were identified that posed significant risk. E-stops are easily accessed.</p>
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8. **Regulatory and Food Safety Considerations: Provide details/known plans of action for regulatory and food safety as a result of the project.**

<p>Considerations:</p> <ul style="list-style-type: none"> ● Are you changing a recipe or product label? ● Is all equipment designed for human food production? ● Will electrical installation be wash down rated? ● Do you have a cleaning plan? ● Impact to any food safety certifications 	<p>The equipment has been reviewed for cleaning/sanitation considerations and fits into our current cleaning schedule/method. No special/unique cleaning chemicals or methods will need to be employed.</p> <p>It is designed to meet USDA full washdown capabilities.</p> <p>It will be included into our HACCP program as well as the food safety plan.</p>
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9. **Project Risks & Unknowns:** List any known business risks to the project or unknowns.

<p>Considerations:</p> <ul style="list-style-type: none"> ● Estimates in the budget that are not quoted by vendors ● Fluid lead times for equipment ● New technology for employees to learn ● New contractors at the facility 	<p>Ease-of-use was a key decision focus in selection of this technology. Testing and review indicated that training would not require significant time and that employees would easily acquire the skills to use the equipment safely and effectively.</p> <p>Project risk is low because timing is conservative, and few facility changes are required.</p>
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10. Training and Start-Up Plan: Provide details/known plans of action for training and operational start-up.

<p>Considerations:</p> <ul style="list-style-type: none"> • Vendor Acceptance Testing • Start Up Plans • Employee Training Plans • Contingency plans (what if the project doesn't meet schedule) 	<p>No Factory Approval Test (FAT) will be performed because of on-site technician set-up and training.</p> <p>Staff to be trained include 1st/2nd shift lead operators and assistant operators, 1st/2nd shift supervisors, and Operations manager.</p> <p>Equipment technicians (2) will be onsite for 1-day, but will extend for additional days if warranted/needed.</p> <p>Written generic SOPs will be provided by Unifiller related to operation, programming, setup, cleaning/sanitation. We will create SOPs that are specific to our operation and needs. During the training period notes will be taken for follow-up or additional detail.</p>
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11. External Resources: Provide any outside sources of advice or support.

<p>Considerations:</p> <ul style="list-style-type: none"> • IDALS Meat Inspection Bureau • Iowa State Meat Science Extension • Engineering Firms • Utility Providers • Iowa Area Development Group • Local Economic Development • Small Business Development Center 	<p>We worked with CIRAS to identify this technology, review different vendors/equipment, and determine the financial cost/benefits/analysis.</p>
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