

Case No.: 19-2158-EL-EEC

Mercantile Customer: **Graphic Packaging**

Electric Utility: **Duke Energy**

Program Title or Description: **Infrared Paper Drying System**

Rule 4901:1-39-05(F), Ohio Administrative Code (O.A.C.), permits a mercantile customer to file, either individually or jointly with an electric utility, an application to commit the customer's existing demand reduction, demand response, and energy efficiency programs for integration with the electric utility's programs. The following application form is to be used by mercantile customers, either individually or jointly with their electric utility, to apply for commitment of such programs in accordance with the Commission's pilot program established in Case No. 10-834-EL-POR

Completed applications requesting the cash rebate reasonable arrangement option (Option 1) in lieu of an exemption from the electric utility's energy efficiency and demand reduction (EEDR) rider will be automatically approved on the sixty-first calendar day after filing, unless the Commission, or an attorney examiner, suspends or denies the application prior to that time. Completed applications requesting the exemption from the EEDR rider (Option 2) will also qualify for the 60-day automatic approval so long as the exemption period does not exceed 24 months. Rider exemptions for periods of more than 24 months will be reviewed by the Commission Staff and are only approved up the issuance of a Commission order.

Complete a separate application for each customer program. Projects undertaken by a customer as a single program at a single location or at various locations within the same service territory should be submitted together as a single program filing, when possible. Check all boxes that are applicable to your program. For each box checked, be sure to complete all subparts of the question, and provide all requested additional information. Submittal of incomplete applications may result in a suspension of the automatic approval process or denial of the application.

Any confidential or trade secret information may be submitted to Staff on disc or via email at ee-pdr@puc.state.oh.us.

Section 1: Mercantile Customer Information

Name: **Graphic Packaging**

Principal address: **407 Charles St
Middletown, OH 45042-2107**

Address of facility for which this energy efficiency program applies:

**407 Charles St
Middletown, OH 45042-2107**

Name and telephone number for responses to questions:

Andrew Taylor, (317) 838-2096

Electricity use by the customer (check the box(es) that apply):

- ☒ The customer uses more than seven hundred thousand kilowatt hours per year at the above facility. (Refer to **Appendix A** for documentation.)
- ☐ The customer is part of a national account involving multiple facilities in one or more states. (Please attach documentation.)

Section 2: Application Information

A) The customer is filing this application (choose which applies):

- ☐ Individually, without electric utility participation.
- ☒ **Jointly with the electric utility.**

B) The electric utility is: **Duke Energy**

C) The customer is offering to commit (check any that apply):

- ☐ Energy savings from the customer's energy efficiency program. (Complete Sections 3, 5, 6, and 7.)
- ☐ Capacity savings from the customer's demand response/demand reduction program. (Complete Sections 4, 5, 6, and 7.)
- ☒ **Both the energy savings and the capacity savings from the customer's energy efficiency program. (Complete all sections of the Application.)**

Section 3: Energy Efficiency Programs

A) The customer's energy efficiency program involves (check those that apply):

- ✓ Early replacement of fully functioning equipment with new equipment. (Provide the date on which the customer replaced fully functioning equipment, and the date on which the customer would have replaced such equipment if it had not been replaced early. Please include a brief explanation for how the customer determined this future replacement date (or, if not known, please explain why this is not known)).

Replaced steam-heated paper drying system with a more efficient infrared (IR) paper drying system. This upgrade significantly reduces the amount of electric energy required in the drying process.

- ☐ Installation of new equipment to replace equipment that needed to be replaced. The customer installed new equipment on the following date(s): _____.
- ☐ Installation of new equipment for new construction or facility expansion. The customer installed new equipment on the following date(s): _____.
- ☐ Behavioral or operational improvement.

B) Energy savings achieved/to be achieved by the energy efficiency program:

- 1) If you checked the box indicating that the project involves the early replacement of fully functioning equipment replaced with new equipment, then calculate the annual savings [(kWh used by the original equipment) - (kWh used by new equipment) = (kWh per year saved)]. Please attach your calculations and record the results below:

Annual savings: 1,548,180 kWh

Refer to Appendix B for calculations and supporting document

- 2) If you checked the box indicating that the customer installed new equipment to replace equipment that needed to be replaced, then calculate the annual savings [(kWh used by less efficient new equipment) - (kWh used by the higher efficiency new equipment) = (kWh per year saved)]. Please attach your calculations and record the results below:

Annual savings: _____kWh

Please describe any less efficient new equipment that was rejected in favor of the more efficient new equipment.

- 3) If you checked the box indicating that the project involves equipment for new construction or facility expansion, then calculate the annual savings [(kWh used by less efficient new equipment) - (kWh used by higher efficiency new equipment) = (kWh per year saved)]. Please attach your calculations and record the results below:

Annual savings: _____kWh

Please describe the less efficient new equipment that was rejected in favor of the more efficient new equipment.

- 4) If you checked the box indicating that the project involves behavioral or operational improvements, provide a description of how the annual savings were determined.

Annual savings: _____kWh

Section 4: Demand Reduction/Demand Response Programs

A) The customer's program involves (check the one that applies):

- ☒ **Coincident peak-demand savings from the customer's energy efficiency program.**
- ☐ **Actual peak-demand reduction. (Attach a description and documentation of the peak-demand reduction.)**
- ☐ **Potential peak-demand reduction (check the one that applies):**
 - ☐ **The customer's peak-demand reduction program meets the requirements to be counted as a capacity resource under a tariff of a regional transmission organization (RTO) approved by the Federal Energy Regulatory Commission.**
 - ☐ **The customer's peak-demand reduction program meets the requirements to be counted as a capacity resource under a program that is equivalent to an RTO program, which has been approved by the Public Utilities Commission of Ohio.**

B) On what date did the customer initiate its demand reduction program?

The infrared (IR) paper drying system was installed in August 2019.

C) What is the peak demand reduction achieved or capable of being achieved (show calculations through which this was determined):

0.0 kW

Refer to Appendix B for calculations and supporting documentation.

Section 5: Request for Cash Rebate Reasonable Arrangement (Option 1) or Exemption from Rider (Option 2)

Under this section, check the box that applies and fill in all blanks relating to that choice.

Note: If Option 2 is selected, the application will not qualify for the 60-day automatic approval. All applications, however, will be considered on a timely basis by the Commission.

A) The customer is applying for:

☒ **Option 1: A cash rebate reasonable arrangement.**

OR

☐ Option 2: An exemption from the energy efficiency cost recovery mechanism implemented by the electric utility.

OR

☐ Commitment payment

B) The value of the option that the customer is seeking is:

Option 1: A cash rebate reasonable arrangement, which is the lesser of (show both amounts):

☒ A cash rebate of \$50,316. Refer to Appendix C for documentation. (Rebate shall not exceed 50% project cost.)

Option 2: An exemption from payment of the electric utility's energy efficiency/peak demand reduction rider.

☐ An exemption from payment of the electric utility's energy efficiency/peak demand reduction rider for ____ months (not to exceed 24 months). (Attach calculations showing how this time period was determined.)

OR

☐ A commitment payment valued at no more than \$_____. (Attach documentation and

calculations showing how this payment amount was determined.)

OR

- ☐ Ongoing exemption from payment of the electric utility's energy efficiency/peak demand reduction rider for an initial period of 24 months because this program is part of the customer's ongoing efficiency program. (Attach documentation that establishes the ongoing nature of the program.) In order to continue the exemption beyond the initial 24 month period, the customer will need to provide a future application establishing additional energy savings and the continuance of the organization's energy efficiency program.)

Section 6: Cost Effectiveness

The program is cost effective because it has a benefit/cost ratio greater than 1 using the (choose which applies):

- ☐ Total Resource Cost (TRC) Test. The calculated TRC value is: _____
(Continue to Subsection 1, then skip Subsection 2)
- ✓ Utility Cost Test (UCT) . The calculated UCT value is 7.40 (Skip to Subsection 2.) **Refer to Appendix D for calculations and supporting documents.**

Subsection 1: TRC Test Used (please fill in all blanks).

The TRC value of the program is calculated by dividing the value of our avoided supply costs (generation capacity, energy, and any transmission or distribution) by the sum of our program overhead and installation costs and any incremental measure costs paid by either the customer or the electric utility.

The electric utility's avoided supply costs were _____.

Our program costs were _____.

The incremental measure costs were _____.

Subsection 2: UCT Used (please fill in all blanks).

We calculated the UCT value of our program by dividing the value of our avoided supply costs (capacity and energy) by the costs to our electric utility (including administrative costs and incentives paid or rider exemption costs) to obtain our commitment.

Our avoided supply costs were \$682,603.

The utility's program costs were \$41,919.

The utility's incentive costs/rebate costs were \$50,316.

Refer to Appendix D for calculations and supporting documents.

Section 7: Additional Information

Please attach the following supporting documentation to this application:

Narrative description of the program including, but not limited to, make, model, and year of any installed and replaced equipment.

A copy of the formal declaration or agreement that commits the program or measure to the electric utility, including:

- 1) any confidentiality requirements associated with the agreement;
- 2) a description of any consequences of noncompliance with the terms of the commitment;
- 3) a description of coordination requirements between the customer and the electric utility with regard to peak demand reduction;
- 4) permission by the customer to the electric utility and Commission staff and consultants to measure and verify energy savings and/or peak-demand reductions resulting from your program; and,
- 5) a commitment by the customer to provide an annual report on your energy savings and electric utility peak-demand reductions achieved.

Refer to Offer Letter following this application

A description of all methodologies, protocols, and practices used or proposed to be used in measuring and verifying program results. Additionally, identify and explain all deviations from any program measurement and verification guidelines that may be published by the Commission.

96602038 02		
GRAPHIC PACKAGING		
407 CHARLES		
MIDDLETOWN, OH 45042		
Date	Days	Actual KWH
9/27/2019	30	6,511,862
8/28/2019	29	5,180,256
7/30/2019	32	6,958,483
6/28/2019	29	5,998,320
5/30/2019	30	6,527,578
4/30/2019	32	6,798,557
3/29/2019	29	6,369,542
2/28/2019	29	6,058,829
1/30/2019	30	6,426,730
12/31/2018	33	6,693,638
11/28/2018	33	7,200,365
10/26/2018	29	6,349,402
Total		77,073,562

Appendix B - Graphic Packaging Energy Savings Achieved

	Baseline Used			Post Project Actual			Savings	
	Description	Annual kWh	Summer Coincident kW	Description	Annual kWh	Summer Coincident kW	Annual kWh	Summer Coincident kW
ECM - 1	Steam-heated paper drying system	79,361,099	9,059	Infrared-heated paper drying system	77,812,919	9,059	1,548,180	0.0
Notes:	Energy consumption baseline, demand baseline and post project energy consumption basis are outlined in the following pages.							
	After consideration of line losses, total energy savings are 1,669,648 kWh and 0 summer coincident kW. These values may also reflect minor DSM modeling software rounding error.							

Appendix C -Cash Rebate Calculation

Graphic Packaging Infrared Paper Drying System

Measure	Quantity	Cash Rebate Rate	Cash Rebate
Infrared (IR) Paper Drying System	1	50% of incentive that would be offered by the Smart \$aver Custom program	\$50,316
			\$50,316

Appendix D -UCT Value

Graphic Packaging Infrared Paper Drying System

Measure	Total Avoided Cost	Program Cost	Incentive	Quantity	Measure UCT
IR Paper Drying System	\$682,603	\$41,919	\$50,316	1	7.40
Totals	\$682,603	\$41,919	\$50,316	1	

Total Avoided Supply Costs	\$682,603	Aggregate Application UCT	7.40
Total Program Costs	\$41,919		
Total Incentive	\$50,316		



Smart Saver® Incentive Program

phone: 866.380.9580

fax: 980.373.9755

customprocessing@duke-energy-energyefficiency.com

11/5/2019

Greg France
GRAPHIC PACKAGING INTERNATIONAL INC - 9660203802
407 CHARLES ST
MIDDLETOWN OH 45042-2107

Subject: Your Application for a Duke Energy Mercantile Self-Direct Rebate CMO19-0000165670

Dear Greg France,

Thank you for your Duke Energy Mercantile Self Direct rebate application. As noted in the Energy Conservation Measure (ECM) chart on page 2, a total rebate of \$50,316.00 has been proposed for your project completed in the 2019 calendar years. All Self Direct Rebates are contingent upon approval by the Public Utilities Commission of Ohio (PUCO).

At your earliest convenience, please indicate if you accept this rebate by:

- providing your signature on Page 2
- completing the PUCO-required affidavit on Page 3

Please return the documents to my attention via fax at 513.629.5572 or email to customprocessing@duke-energy-energyefficiency.com. Upon receipt, Duke Energy will submit the necessary documentation to PUCO. Following PUCO's approval, Duke Energy will remit payment.

We value your business and look forward to working with you on this and future energy efficiency projects. We hope you will consider our Smart Saver® incentives, when applicable. Please contact me if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read 'Andrew Taylor', with a stylized flourish at the end.

Andrew Taylor
Program Manager
Custom Incentives

cc: Teri Morris
Walt Dindoffer



**Please indicate your response to this rebate offer
within 30 days of receipt.**

☒ Rebate is accepted.

☐ Rebate is declined.

By accepting this rebate, GRAPHIC PACKAGING INTERNATIONAL INC - 9660203802 affirms its intention to commit and integrate the energy efficiency projects listed on the following pages into Duke Energy's peak demand reduction, demand response and/or energy efficiency programs.

Additionally, GRAPHIC PACKAGING INTERNATIONAL INC - 9660203802 also agrees to serve as joint applicant in any future filings necessary to secure approval of this arrangement as required by PUCO and to comply with any information and reporting requirements imposed by rule or as part of that approval.

Finally, GRAPHIC PACKAGING INTERNATIONAL INC - 9660203802 affirms that all application information submitted to Duke Energy pursuant to this rebate offer is true and accurate. Information in question would include, but not be limited to, project scope, equipment specifications, equipment operational details, project costs, project completion dates, and the quantity of energy conservation measures installed.

If rebate is accepted, will you use the monies to fund future energy efficiency and/or demand reduction projects? ☐ Yes ☒ No

Customer Signature

GREGORY S. FRANCE

Printed Name

11-22-19

Date



Proposed Rebate Amounts

Measure ID	Energy Conservation Measure	Proposed Rebate Amount
ECM-1	Graphic Pack Intl - Dryer Replacement	\$50,316.00 per facility X 1
	Total	\$50,316.00

- **NOTE: Please note given the typical (60) day PUCO review period it is not likely this rebate will be paid until early 2020 once accepted.**



Public Utilities Commission

(Mercantile Customers Only)

Application to Commit Energy Efficiency/Peak Demand Reduction Programs

Case No.: 19-258-EL-EEC

State of Ohio :

Greg France, Affiant, being duly sworn according to law, deposes and says that:

1. I am the duly authorized representative of:

Graphic Packaging International Inc.- Middletown, Ohio Mill

[INSERT CUSTOMER OR EDU COMPANY NAME AND ANY APPLICABLE NAME(S) DOING BUSINESS AS]

2. I have personally examined all the information contained in the foregoing application, including any exhibits and attachments. Based upon my examination and inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate and complete.

3. I am aware of fines and penalties which may be imposed under Ohio Revised Code Sections 2921.11, 2921.31, 4903.02, 4903.03, and 4903.99 for submitting false information.

[Signature]
SIGNATURE OF AFFIANT & TITLE

Sworn and subscribed before me this 22 day of November, 2019
DAY MONTH YEAR

[Signature]
SIGNATURE OF OFFICIAL ADMINISTERING OATH

Tami Baughman
PRINT NAME AND TITLE

My commission expires on 3/20/21
DATE



TAMI BAUGHMAN
NOTARY PUBLIC - OHIO
MY COMMISSION EXPIRES
MARCH 20, 2021

Graphic Packaging International – Middletown, OH

Upgrade IR Dryers #4 & #5 (Coater Exit) and New Controls

This project is to upgrade the #4 and #5 steam heated dryers at the Middletown, OH mill with upgraded, more efficient gas infrared (IR) dryers and an upgraded Delta V controls package.

Upgrading to IR technology and Delta V controls increases paper sheet consistency, improves drying uniformity and time, and increases efficiency and output (per kW) of the line.

#4 & #5 dryers are at the coater exit on the line. The old steam dryers were in frequent disrepair, required frequent maintenance, and caused issues with production. The old controls also did not allow for increased speed or efficiency due to temperature and uniformity swings, requiring the line to run in a more conservative control band. The new IR dryers and controls allow for heating to be controlled to the specific needs of the product being run. Steam heated dryers consume a significant amount more in energy than new technology gas IR dryers.

Upgrading to IR technology increases paper sheet consistency, improves drying uniformity and time, and increases efficiency and productivity of the line.

The productivity of the line increases with more efficient and consistent IR drying and improved modern control technology, allowing the line to be sped up. This increases the product output (salable tons) per kW electric consumption.

The project includes:

1. Removal of old steam dryers
2. New modern technology, more efficient gas infrared dryer units
3. Upgraded instrumentation and controls (Delta V controls)
4. New piping and electrical
5. New gas control valves
6. New fan vibration isolators
7. New pressure switches, thermocouples, ignition and flame rod wires
8. New flexible hoses and ductwork, new insulation
9. Labor, materials, engineering, project management, construction management, commissioning

**Mercantile Self Direct
Nonresidential Custom Rebate Application
PART 1**



Ohio Mercantile Self Direct Program

Application Guide and Cover Sheet

Questions? Call 866.380.9580 or visit duke-energy.com.

Email this form along with completed Mercantile Self Direct Prescriptive or Custom applications, proof of payment, energy savings calculations and spec sheets to SelfDirect@Duke-Energy.com. You may also fax to 513.629.5572.

Mercantile customers, defined as using at least 700,000 kilowatt-hours (kWh) annually or having an account in multiple locations are eligible for the Mercantile Self Direct program. Indicate which applies:

- ☒ a single Duke Energy Ohio account with 700,000 kWh annual usage
☐ an account with multiple locations

Please list Duke Energy account numbers below (attach listing of multiple accounts and/or billing history for other utilities as required):

Account Number	Annual Usage	Account Number	Annual Usage
9660-2038-02-2	79,303,395 (2018)		

Self Direct rebates are available for completed Custom projects that have not previously received a Duke Energy Smart Saver® Custom Incentive. Self Direct rebates are applicable to Prescriptive measures that were installed more than 90 days prior to submission to Duke Energy and have not previously received a Duke Energy Prescriptive rebate.

Self Direct program rules allow for, though do not require, certain projects that are Prescriptive in nature under the Smart Saver program to be evaluated using the Custom process in the Self Direct program. Use the list on page two as a guide to determine which Self Direct program best fits your project(s). Apply for Self Direct projects using the appropriate application forms in conjunction with this cover sheet.

Self Direct program rules also allow for behaviorally based and/or no cost and low cost projects to receive rebates.

Please check each box to indicate completion/inclusion of the following program requirements:

<input checked="" type="checkbox"/> All sections of appropriate application(s) are completed	<input checked="" type="checkbox"/> Proof of payment.*	<input checked="" type="checkbox"/> Manufacturer's Spec sheets	<input checked="" type="checkbox"/> Energy model/calculations and detailed inputs for Custom applications
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*If a single payment record is intended to demonstrate the costs of both Prescriptive and Custom projects, please include an additional document with an estimated breakout of costs for each Prescriptive and Custom energy conservation measure.

Mercantile Self Direct Nonresidential Custom Rebate Application PART 1



****Behavioral energy efficiency and demand reduction projects must be both measurable and verifiable. Provide justification with your application. Rebates for such projects may be small in magnitude.**

Application Type	Prescriptive Measures with Optional Custom Processing
Heating and Cooling and Window Films, Programmable Thermostats, and Guest Room Energy Management Systems	<input type="checkbox"/> ENERGY STAR® Window/Sleeve/Room AC <input type="checkbox"/> Air Source Heat Pump Water Heater <input type="checkbox"/> Central Air Unit
	<input type="checkbox"/> Setback/Programmable Thermostat <input type="checkbox"/> Window Film <input type="checkbox"/> Guestroom Energy Management Control
Chillers	<input type="checkbox"/> Air Cooled Chiller <input type="checkbox"/> Water Cooled Chiller
Motors, Pumps and Variable Frequency Drives (VFDs)	<input type="checkbox"/> VFD – applied to Process Pump <input type="checkbox"/> VFD – applied to HVAC Fan <input type="checkbox"/> VFD – applied to HVAC Pump
Food Service	<input type="checkbox"/> ENERGY STAR Hot Food Holding Cabinet <input type="checkbox"/> Anti-Sweat Heater Control <input type="checkbox"/> Night Covers for Display <input type="checkbox"/> Cooking Equipment <input type="checkbox"/> ECM Cooler, Freezer, and Display Case Motors <input type="checkbox"/> ENERGY STAR Ice Machine <input type="checkbox"/> ENERGY STAR Solid or Glass Door Reach-In Freezer or Refrigerator
Process Equipment	<input type="checkbox"/> Engineered Nozzle – Compressed Air <input type="checkbox"/> Pellet Dryer Duct Insulation <input type="checkbox"/> Air Compressor Equipped with VFD
Chiller Tune-ups	<input type="checkbox"/> Air Cooled Chiller tune-up <input type="checkbox"/> Water Cooled Chiller tune-up

Please indicate above any Prescriptive energy conservation measures to be evaluated through the Custom process. Only Prescriptive measures listed above are eligible for this option. To receive a Self Direct Custom rebate, a detailed analysis of pre-project and post-project energy usage and project costs must be included in the application.

Although some Self Direct Prescriptive measures are eligible for evaluation through Custom processes, such an approach may not be most effective for certain measures.

**Mercantile Self Direct
Nonresidential Custom Rebate Application
PART 1**



1. Contact Information (Required)

Duke Energy Customer Contact Information ¹					
Company Name (as it appears on your bill)	Graphic Packaging International Inc				
Address	1500 Riveredge Parkway, Suite 100				
City	Atlanta	State	GA	ZIP Code	30328
Project Contact	Greg France				
Office Phone		Mobile Phone	513-464-6600		
Email Address	greg.france@graphicpkg.com				

Equipment Vendor / Contractor / Architect / Engineer Contact Information					
Company Name	Development Solutions Midwest				
Address	4856 Farwell Lake Rd.				
City	Horton	State	MI	ZIP Code	49246
Project Contact	Walt Dindoffer				
Office Phone		Mobile Phone	419-944-8565		
Email Address	walt@dsmidwest.com				

Who is the primary point of contact for technical questions? ²	Walt Dindoffer, DS Midwest
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Payment Information					
If an incentive is awarded, who should receive payment? ³					
<input checked="" type="checkbox"/> Customer <input type="checkbox"/> Vendor* (customer or customer's agent ⁴ must sign below)					
*If the payee is the vendor, they must issue a credit in the amount of the incentive to the customer on the invoice and include it with the payment request.					
Tax ID Number for Payee (provide W-9)		84-0772929			
Mailing Address for Payee (if different from above) Check payable to: Neil Shockey (Controller)					
Street	407 Charles St				
City	Middletown	State	OH	ZIP Code	45042

¹ Provided customer information should match the Duke Energy customer of record and W-9 form provided with this application. If the customer entity is a business affiliate of the Duke Energy customer of record, documentation must be provided that demonstrates the business affiliation.

² Note that if the vendor is the primary point of contact, the customer will still be copied on all application correspondence. If the customer does not wish to be copied, the customer must provide a signed letter of authorization on customer letterhead indicating an entity is acting as an agent for the customer. Duke Energy does not act as an agent.

³ If payment is to be made to an entity other than the Duke Energy account holder or the vendor, a payment waiver is required and will be provided for customer signature.

⁴ If an outside agent is acting on behalf of the Duke Energy customer of record, a letter of authorization on customer letterhead and signed by an authorized employee of the customer must be provided.

**Mercantile Self Direct
Nonresidential Custom Rebate Application
PART 1**



2. Project Information (Required)

A. Please indicate project type:

- ☐ New construction
- ☐ Expansion at an existing facility (existing Duke Energy account number)
- ☐ Replacing equipment due to equipment failure
- ☐ Replacing equipment that is estimated to have remaining useful life of two years or less
- ☒ Replacing equipment that is estimated to have remaining useful life of more than two

years

- ☐ Behavioral, operational and/or procedural programs/projects

B. Please describe your project, or attach a detailed project description that describes the project.

This project is to upgrade the #4 and #5 (coater exit) dryers at the Middletown, OH mill from steam heated dryers to more efficient gas infrared (IR) dryers. Please see attached details.

C. When did you start and complete implementation?

Start date / (mm/yyyy) End date / (mm/yyyy)

09/2018

08/2019

D. Are you also applying for Self Direct Prescriptive rebates and, if so, which one(s)?

N/A

E. Please indicate which worksheet(s) you are submitting for this application (check all that apply):

- ☐ Lighting
- ☐ Variable Frequency Drive (VFD)
- ☐ Compressed Air
- ☐ Energy Management System (EMS)
- ☒ General (for projects not easily submitted using one of the above worksheets)

F. List all assumptions about the baseline and proposed equipment energy use and operation schedule, or attach a document listing that information. Attach specification sheets for all proposed new equipment.

Please see attached. Baseline is 18 months of production output (kWh per ton salabale product) as shown in the excel data file. Post-data is increased tons and reduced kWh.

G. Attach a supplier or contractor invoice(s) and/or other equivalent information documenting the Implementation Cost for each project listed in your application.

Does the Implementation Cost include any internal labor? No

If yes, please specify which costs are internal labor.

All costs included with this application are external costs, no internal costs included.

⁵ If your project involves some equipment that is eligible for prescriptive rebates and some equipment that is likely eligible for custom rebates, and if it is feasible to separate the equipment for the energy analysis, then the equipment will be evaluated separately. If it is not feasible to separate the equipment for analysis, then the equipment will be evaluated together in the custom application.

⁶ Internal labor costs cannot be counted in the Incremental Project Cost for purposes of analysis.

**Mercantile Self Direct
Nonresidential Custom Rebate Application
PART 1**



17. Disclaimers: *Duke Energy Ohio, Inc.*

- a. does not endorse any particular manufacturer, product or system design within the program;
- b. will not be responsible for any tax liability imposed on the customer as a result of the payment of rebates;
- c. does not expressly or implicitly warrant the performance of installed equipment (contact your contractor for details regarding equipment warranties);
- d. is not responsible for the proper disposal/recycling of any waste generated or obsolete or old equipment as a result of this project;
- e. is not liable for any damage caused by the installation of the equipment nor for any damage caused by the malfunction of the installed equipment; and
- f. reserves the right to change or discontinue this program at any time. The acceptance of program applications is determined solely by *Duke Energy Ohio, Inc.*

CUSTOMER SIGNATURE REQUIRED

By signing below, I certify that I have read and agree to the above Mercantile Self Direct Attestation and Terms and Conditions.

Customer Signature			
Print Name	Greg Farnice	Date	10-2-19

TRADE ALLY SIGNATURE (REQUIRED ONLY IF TRADE ALLY IS PAYEE)

By signing below, I certify that I have read and agree to the above Mercantile Self Direct Attestation and Terms and Conditions.

Trade Ally Signature			
Print Name		Date	

CUSTOMER – AUTHORIZATION TO DESIGNATE TRADE ALLY AS PAYEE

If an incentive is awarded and the customer would like to authorize payment to the trade ally, the customer must sign below to allow release of their incentive to the trade ally.

Required: Final invoice from trade ally to customer must show the incentive credited to the customer. If the itemized invoice does not reflect a deduction of the incentive amount, the payee will be changed to the customer.

Customer Signature			
Print Name		Date	



App No.	
Rev.	

Provide a list of sites addressed by this custom incentive application

[illegible]



For each project, answer the following questions (use one worksheet per project)

Project Name: **Upgrade Dryers #4 & #5 (Coaster Exit) to Infrared and New Control System**

App No. 0

Rev. 0

How would you classify this project? (Place an x in all boxes that apply)

Lighting	Heating/Cooling	Air Compressor	Energy Management System
VFD	Motors/Pumps	Process Equipment	Other, describe below: X
Line efficiency gain (productivity increase, energy use decrease)			

Brief Project Description

Describe the Baseline Equipment/System (see note 3)	Describe the Proposed High Efficiency Project
Baseline equipment is original #4 & #5 steam heated dryers, original instrumentation/electrical/wiring, original controls. Baseline is 18 months of production data and energy use (daily kWh/salable tons), then compared to post-install data.	This project is to replace the #4 & #5 steam dryers with upgraded, more efficient gas IR dryers and upgraded Delta V controls. #4 & #5 dryers are at the coaster exit on the line. Upgrading to IR technology increases paper sheet consistency, improves drying uniformity and time, and increases efficiency and output (per kW) of the line.
If Existing Equipment is the Baseline, how many years of useful life remain or how many years until replacement?	5
Detailed Project Description Attached?	Yes (Required)

Operating Hours (see note 4)

24 x 7	Weekday		Saturday		Sunday		Weeks of Use in Year (see note below)	Total Annual Hours of Use
	Start Hour	End Hour	Start Hour	End Hour	Start Hour	End Hour		
Yes							50	8,520

If the equipment is not in use 52 weeks during the year (for example, during holiday or summer break), provide an explanation of when usage is not expected and why:

24x7 operation, with scheduled maintenance shutdowns; 10 days planned total shutdown time annually

Energy Savings

	Baseline (see note 3)	Proposed	Savings	Describe how energy numbers were calculated
Annual Electric Energy	79,445,691 kWh	76,733,323 kWh	2,712,368 kWh	Baseline data is 18 months of average production output (kWh per salable ton of product) January 2018 - July 2019. Post-Project data is 25 days of increased production (salable tons) and reduced consumption (kWh). Overall increase in salable tons per kWh of 13.5 kWh/ton daily, or 2.95% efficiency increase.
Electric Demand	0 kW	0 kW	0 kW	
Calculations attached	Yes	Yes	(Required)	

Simple Payback

Average electric rate (\$/kWh) on the applicable accounts (see note 5)	\$0.10
Estimated annual electric savings	\$271,237
Other annual savings in addition to electric savings, such as operations, maintenance, other fuels	\$0.00
Incremental cost to implement the project (equipment & installation) (see note 6)	\$1,028,000.00
Copy of vendor proposal is attached (see note 7)	Yes
Simple Electric Payback in years (see note 8)	3.790046147
Total Payback in years	3.790046147



Smart Saver® Incentive Program

phone 866.380.9580

fax 980.373.9755

customprocessing@duke-energy-energyefficiency.com

11/5/2019

Greg France
GRAPHIC PACKAGING INTERNATIONAL INC - 9660203802
407 CHARLES ST
MIDDLETOWN OH 45042-2107

Subject: Your Application for a Duke Energy Mercantile Self-Direct Rebate CMO19-0000165670

Dear Greg France,

Thank you for your Duke Energy Mercantile Self Direct rebate application. As noted in the Energy Conservation Measure (ECM) chart on page 2, a total rebate of \$50,316.00 has been proposed for your project completed in the 2019 calendar years. **All Self Direct Rebates are contingent upon approval by the Public Utilities Commission of Ohio (PUCO).**

At your earliest convenience, please indicate if you accept this rebate by:

- providing your signature on Page 2
- completing the PUCO-required affidavit on Page 3

Please return the documents to my attention via fax at 513.629.5572 or email to customprocessing@duke-energy-energyefficiency.com. Upon receipt, Duke Energy will submit the necessary documentation to PUCO. Following PUCO's approval, Duke Energy will remit payment.

We value your business and look forward to working with you on this and future energy efficiency projects. We hope you will consider our Smart Saver® incentives, when applicable. Please contact me if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read 'Andrew Taylor', with a long horizontal flourish extending to the right.

Andrew Taylor
Program Manager
Custom Incentives

cc: Teri Morris
Walt Dindoffer



**Please indicate your response to this rebate offer
within 30 days of receipt.**

☐ Rebate is accepted.

☐ Rebate is declined.

By accepting this rebate, GRAPHIC PACKAGING INTERNATIONAL INC - 9660203802 affirms its intention to commit and integrate the energy efficiency projects listed on the following pages into Duke Energy's peak demand reduction, demand response and/or energy efficiency programs.

Additionally, GRAPHIC PACKAGING INTERNATIONAL INC - 9660203802 also agrees to serve as joint applicant in any future filings necessary to secure approval of this arrangement as required by PUCO and to comply with any information and reporting requirements imposed by rule or as part of that approval.

Finally, GRAPHIC PACKAGING INTERNATIONAL INC - 9660203802 affirms that all application information submitted to Duke Energy pursuant to this rebate offer is true and accurate. Information in question would include, but not be limited to, project scope, equipment specifications, equipment operational details, project costs, project completion dates, and the quantity of energy conservation measures installed.

If rebate is accepted, will you use the monies to fund future energy efficiency and/or demand reduction projects? ☐ Yes ☐ No

Customer Signature

Printed Name

Date



Proposed Rebate Amounts

Measure ID	Energy Conservation Measure	Proposed Rebate Amount
ECM-1	Graphic Pack Intl - Dryer Replacement	\$50,316.00 per facility X 1
	Total	\$50,316.00

- **NOTE:** Please note given the typical (60) day PUCO review period it is not likely this rebate will be paid until early 2020 once accepted.

Energy & Production Data												
18 months prior to project												
Energy Usage												
PURCH ELECT (MkWh)												
Production												
Tons produced												
Tons per day produced												
Daily avg kWh/ton												
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
6,814	6,247	6,844	5,800	6,780	6,649	6,848	6,879	6,573	6,897	6,592	6,379	
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
14,504	13,741	15,109	12,681	14,970	14,405	14,844	15,379	14,598	15,513	14,505	13,321	
6,814,301	6,247,463	6,844,302	5,800,792	6,780,168	6,648,604	6,847,829	6,878,718	6,572,747	6,897,017	6,592,498	6,379,456	
467.9	490.8	487.4	422.7	482.9	480.2	478.9	495.1	486.6	500.4	483.5	429.7	
219,816.2	223,723.7	220,783.9	193,343.1	216,715.1	212,620.1	220,897.7	221,894.1	219,091.6	222,444.4	219,749.9	205,788.9	
459.82	454.66	452.99	457.40	452.90	461.54	461.31	447.28	450.24	444.60	454.51	478.91	

Post shutdown data (after implementation)		Safable	
Date	kWh	Tons	
8/28/2019	213168.00	498	
8/29/2019	219364.00	535	
8/30/2019	219513.60	522	
8/31/2019	218064.00	455	
9/1/2019	219100.80	501	
9/2/2019	218467.20	513	
9/3/2019	219465.60	517	
9/4/2019	205305.60	455	
9/5/2019	215654.40	484	
9/6/2019	219609.60	474	
9/7/2019	218568.80	496	
9/8/2019	219561.60	532	
9/9/2019	219964.80	541	
9/10/2019	220262.40	506	
9/11/2019	219552.00	460	
9/12/2019	221500.80	531	
9/13/2019	221577.60	440	
9/14/2019	204979.20	469	
9/15/2019	200947.20	385	
9/16/2019	219340.80	524	
9/17/2019	216902.40	401	
9/18/2019	218851.20	464	
9/19/2019	220176.00	508	
9/20/2019	219033.60	484	
9/21/2019	221232.00	547	
9/22/2019	203731.20	514	
9/23/2019	220118.40	514	
9/24/2019	218678.40	503	
9/25/2019	218803.20	518	
9/26/2019	220368.00	571	
9/27/2019	179203.00	272	
9/28/2019	219916.80	507	
9/29/2019	218400.00	494	
9/30/2019	219724.80	511	
Total	7,349,107	16,647	

Average tons/day	
Avg kWh/ton	489.6
Avg kWh/ton	441.5

20

21

22

Graphic Packaging International

Capital Project Estimation Worksheets - AR 2b

Supporting AR #

0034

-

1

8

-

0

2

4

Completed by: Dale Gibbemeyer

Instructions Complete a worksheet for each piece of equipment included in the project AR. Attach bids for all equipment and each item/service exceeding \$25,000.

Full Description & Proposed Vendor	Turnkey? (Y/N)	Estimated Cost
Indirect Cost		
A1 Spares		\$6,800
B2 Engineering		\$63,189
C1 Start Up Support		\$20,000
C4 Freight		\$14,042
D1 Indirect Construction		\$35,105
TOTAL		\$139,136
External Cost		
Delta V Controls		\$38,528
Marsden Replacement Panel		\$50,541
Marsden Fan Vibration Isolators		\$2,240
Marsden Replacement Gas Vlv		\$7,979
Marsden Flex Hoses		\$4,900
Marsden Pressure Sw's		\$820
Ignition and Flame Wire		\$1,640
TOTAL		\$106,648
Direct Cost		
0 Installation		\$25,000
5 Site Prep - Straight Premium Blen		\$31,692
10 Process Equip (Millwright) Blend		\$233,591
30 Structural Steel and Suppots		\$48,994
61 Pipe Straight Prem Blend		\$74,817
66 Sheet Metal St/Prem Blend		\$109,393
70 Electrical		\$85,441
71 Electrical St/Prem Blend		\$83,777
80 Instrumentation		\$6,440
81 Instrumentation St/Prem Blend		\$2,958
TOTAL		\$702,103
Electrical, Plumbing & HVAC		
		\$0
Floor Prep. & Other Construction		
		\$0
Outside Consulting,		

		TOTAL	\$0
Internal Labor (if applicable)	Manhours	Rate	
			\$0
			\$0
			\$0
	TOTAL		\$0

Sales Tax	\$0
------------------	------------

Construction Management	
Annual Construction Management	\$20,000
TOTAL	\$20,000

Total Capital	\$967,887
---------------	-----------

Expense	
TOTAL	\$0

Demolition	
TOTAL	\$0

Total Project Cost	\$967,887
Contingency @ 10.0%	\$96,789
Grand Total of Project	\$1,064,676

Graphics Packaging International - Middletown, OH

407 Charles Street

Middletown, OH 45042

Greg France

513-464-6600

greg.france@graphicpkg.com

Duke Energy - Ohio Mercantile Self Direct Program

Acct: 9660-2038-02-Z

Project Name:

Middletown Mill #4 & #5 IR Dryers & Controls

Vendor	Address	Invoice Date	Invoice #	Cost	GPI PO#
Marsden Inc.	6800 Westfield Ave, Pennsauken, NJ 08110-1532	11/19/2019	00013331	\$ 138,555.14	4504967073
Marsden Inc.	6800 Westfield Ave, Pennsauken, NJ 08110-1532	3/25/2019	00013413	\$ 92,370.10	4504967073
Marsden Inc.	6800 Westfield Ave, Pennsauken, NJ 08110-1532	3/25/2019	00013342	\$ 2,215.00	4505022511
Marsden Inc.	6800 Westfield Ave, Pennsauken, NJ 08110-1532	8/11/2019	00013526	\$ 3,956.92	4505106421
Assoc Prof Engineering Consultants LLC	204 Hiawatha Trail, Springboro, OH 45066	5/28/2019	20190135	\$ 2,187.82	4505046900
Assoc Prof Engineering Consultants LLC	204 Hiawatha Trail, Springboro, OH 45066	5/28/2019	20190134	\$ 3,636.98	4505046900
Assoc Prof Engineering Consultants LLC	204 Hiawatha Trail, Springboro, OH 45066	6/10/2019	20190147	\$ 7,235.71	4505046900
Assoc Prof Engineering Consultants LLC	204 Hiawatha Trail, Springboro, OH 45066	4/1/2019	20190084	\$ 4,277.83	4505046900
Assoc Prof Engineering Consultants LLC	204 Hiawatha Trail, Springboro, OH 45066	3/18/2019	20190070	\$ 2,465.39	4505046900
Assoc Prof Engineering Consultants LLC	204 Hiawatha Trail, Springboro, OH 45066	4/15/2019	20190095	\$ 6,713.47	4505046900
Matlock Electric Co Inc	2780 Highland Ave, Cincinnati, OH 45212-2408	7/8/2019	0071341	\$ 14,645.00	4505050563
Cornerstone Controls Inc	7171 E Kemper Rd, Cincinnati, OH 45249-1028	4/23/2019	CD99056960	\$ 2,793.73	4505057706
Fabricator Inc. - Eli Martin	7110 Morgan Rd, Cleves, OH 45002-9767	4/29/2019	149223	\$ 36,022.00	4505064600
Rosemount Inc.	8200 Market Boulevard, Chanhassen, MN 55317	7/10/2019	71488626	\$ 14,714.68	4505091139
Ohio Insulation	PO Box 751465, Dayton, OH 45475	8/26/2019	11499	\$ 22,320.00	4505099553
Ohio Insulation	PO Box 751465, Dayton, OH 45475	8/26/2019	11498	\$ 2,083.00	4505119464
Complete Mechanical Svcs	11398 Grooms Rd, Blue Ash, OH 45242	3/27/2019	06-22550	\$ 3,425.00	4505041069
Complete Mechanical Svcs	11398 Grooms Rd, Blue Ash, OH 45242	5/30/2019	06-22814	\$ 36,270.00	4505064610
Complete Mechanical Svcs	11400 Grooms Rd, Blue Ash, OH 45242	6/7/2019	06-22881	\$ 2,699.20	4505050560
Complete Mechanical Svcs	11401 Grooms Rd, Blue Ash, OH 45242	5/31/2019	06-22844	\$ 3,821.34	4505050560
Complete Mechanical Svcs	11402 Grooms Rd, Blue Ash, OH 45242	5/17/2019	06-22797	\$ 7,556.49	4505050560
Invoices attached total				\$ 409,964.80	

Walt Dindoffer

Walt@DMSidwest.com

419-944-8565



Major Invoices only included - others available upon request

Project total: \$ 1,028,000.00

MARSDEN, INC.

6800 WESTFIELD AVE.
 PENNSAUKEN, NJ 08110-1532
 TAX ID# 22-1816030

Invoice

Date	Invoice #
11/19/2018	00013331

Bill To
GRAPHIC PACKAGING INTERNATIONAL INC> PO BOX 35800 WEST MONROE, LA 71294 ATTN: ACCTS. PAYABLE

Ship To
GRAPHIC PACKAGING INT'L INC 407 CHARLES ST MIDDLETOWN, OH 45042

Description			Amount
IR SYSTEM MODIFICATIONS & ENGINEERING:			
	\$ 149,550.00		
- EIGHT (8) 4x4 VIBRATION ISOLATORS FOR BLOWER & FAN	2,240.00		
- ONE (1) MAIN GAS VALVE & PRESSURE REGULATOR	7,979.00		
- TWELVE (12) FLEX DUCTS & HOSES	4,900.00		
- ONE (1) EXHAUST THERMOCOUPLE	356.00		
- SEVEN (7) PRESSURE SWITCHES	820.00		
- ONE LOT (1) 200 FT. IGNITION WIRE	390.00		
- ONE LOT (1) 200 FT. FLAMEROD WIRE	1,250.00		
- ONE (1) REPLACEMENT OF PANEL	38,345.00		
- ONE (1) ED17584-2, COMBUSTION SUPPORT SKID	4029.00		
- TWO (2) FD19156, AIR DELIVERY BOX, SST	11,202.00		
- TWO (2) FC19934-5, DRIVE SIDE END FRAME	1,770.00		
- TWO (2) FD20125-8, OPERATOR SIDE END FRAME	3,150.00		
- TWO (2) 4MA CYLINDER/ACCESSORIES, RETRACTION CYLINDER	4,944.24		
TOTAL SYSTEM PRICE \$ 230,925.24			
SYSTEM PHASES:			
60% WITH APPROVAL DRAWINGS. TO BE SUBMITTED ON OR AFTER			0.00
NOVEMBER 9, 2018. NET 60			138,555.14
40% UPON READY FOR SHIPMENT. NET 60			0.00
TOTAL			138,555.14
Total			✓ \$138,555.14
P.O. No.	Terms	Project	Payments/Credits
4504967073	Net 30	P-9554	Balance Due in USD \$138,555.14

MARSDEN, INC.

6800 WESTFIELD AVE.
 PENNSAUKEN, NJ 08110-1532
 TAX ID# 22-1816030

Invoice

Date	Invoice #
3/25/2019	00013413

Bill To
GRAPHIC PACKAGING INTERNATIONAL INC> PO BOX 35800 WEST MONROE, LA 71294 ATTN: ACCTS. PAYABLE

Ship To
GRAPHIC PACKAGING INT'L INC 407 CHARLES ST MIDDLETOWN, OH 45042

Description			Amount
IR SYSTEM MODIFICATIONS & ENGINEERING:			
	\$ 149,550.00		
- EIGHT (8) 4x4 VIBRATION ISOLATORS FOR BLOWER & FAN	2,240.00		
- ONE (1) MAIN GAS VALVE & PRESSURE REGULATOR	7,979.00		
- TWELVE (12) FLEX DUCTS & HOSES	4,900.00		
- ONE (1) EXHAUST THERMOCOUPLE	356.00		
- SEVEN (7) PRESSURE SWITCHES	820.00		
- ONE LOT (1) 200 FT. IGNITION WIRE	390.00		
- ONE LOT (1) 200 FT. FLAMEROD WIRE	1,250.00		
- ONE (1) REPLACEMENT OF PANEL	38,345.00		
- ONE (1) ED17584-2. COMBUSTION SUPPORT SKID	4029.00		
- TWO (2) FD19156, AIR DELIVERY BOX, SST	11,202.00		
- TWO (2) FC19934-5, DRIVE SIDE END FRAME	1,770.00		
- TWO (2) FD20125-8, OPERATOR SIDE END FRAME	3,150.00		
- TWO (2) 4MA CYLINDER/ACCESSORIES, RETRACTION CYLINDER	4,944.24		
TOTAL SYSTEM PRICE \$ 230,925.24			
SYSTEM PHASES:			
60% WITH APPROVAL DRAWINGS. TO BE SUBMITTED ON OR AFTER			0.00
NOVEMBER 9, 2018. NET 60			0.00
40% UPON READY FOR SHIPMENT, NET 60			92,370.10
TOTAL			92,370.10
Total			\$92,370.10
P.O. No.	Terms	Project	Payments/Credits
4504967073	Net 30	P-9554	\$0.00
Balance Due in USD			\$92,370.10

MARSDEN, INC.

6800 WESTFIELD AVE.

PENNSAUKEN, NJ 08110-1532

FAX ID# 22-1816030

Invoice

Date

3/25/2019

Invoice #

00013412

Bill To

GRAPHIC PACKAGING INTERNATIONAL INC>

PO BOX 35800

WEST MONROE LA 71294

ATTN: ACCTS PAYABLE

Ship To

GRAPHIC PACKAGING INT'L INC

407 CHARLES ST

MIDDLETOWN, OH 45042

Sales Rep	F.O.B.	Ship Date	Shipped Via	Terms	P.O. Number	Project
		3/25/2019	XPO - COLLECT	Net 30	4505022511	P-9624
Quantity	Item Number	Description			Unit Price	Amount
1	(D) 1769 1F4	Add 8 Channel Isolated Analog PLC Card			2,215.00	2,215.00

TOTAL PAYABLE IN US DOLLARS

\$2,215.00

Invoice: 06-22550



Complete Mechanical Services

11399 Grooms Road
Blue Ash, OH 45242
Office 513.489.3080
Fax 513.489.3082

SOLD TO:
Graphic Packaging International
Attn: Accounts Payable
P.O. Box 35800
West Monroe, LA 71294-5800

SHIP TO:
Natural Gas Piping

ACCOUNT NO	PO NUMBER	PROJECT NUMBER	DATE SHIPPED	TERMS	INVOICE DATE	QTY
GRAPHIC	4505041069	190177.1		Net 60	3/27/2019	1

ITEM NO	QUANTITY	DESCRIPTION	UNIT PRICE	EXTENSION
	1	Labor, Materials and Equipment for Natural Gas Piping.	3,425.00	3,425.00*
		Contract Amount \$6850.00		
		Completed to Date		

* means item is non-taxable

TOTAL AMOUNT 3,425.00 ✓

Cutting Edge from concept to completion



Associated Professional Engineering Consultants, LLC

204 Hiawatha Trail, Springboro, OH 45066
Phone (937) 746-4600 Fax (937) 746-5569

May 28, 2019

GRAPHIC PACKAGING INTERNATIONAL
ATTN: ACCOUNTS PAYABLE
PO BOX 35800
WEST MONROE, LA 71294-5800

Invoice # 20190135

From 5/11/2019

Thru 5/24/2019

In Reference To: Job 19008 - ANNUAL SUPPORT FOR IR PROJECT
P.O. 4505046900

Professional services

	<u>Hours</u>	<u>Amount</u>
Curtis J. Marshall	5.50	570.79
James Sean Roberts	7.00	726.46
Steven R. Thomas	7.00	867.37
For professional services rendered	19.50	\$2,164.62
Additional charges:		
Daily Expenses - Mileage		23.20
Total costs		<u>\$23.20</u>
Total amount of this bill		<u>✓ \$2,187.82</u>

All amounts are due in 30 days and will be assessed a charge of 1.5% per month for late payment. Please make the check payable to APEC and forward to the address above. We appreciate the opportunity to be of service to you and are looking forward to being of service in the future.

Remit To Address: Durham Funding
for the account of:
Associated Professional Engineering Consultants, LLC
101 Sully's Trail, Bldg. 20
Pittsford, NY 14534

APEC Job No.: 19008

5/11/2019 Thru 5/24/2019



Associated Professional Engineering Consultants, LLC

204 Hiawatha Trail, Springboro, OH 45066
Phone (937) 746-4600 Fax (937) 746-5569

June 10, 2019

GRAPHIC PACKAGING INTERNATIONAL
ATTN: ACCOUNTS PAYABLE
PO BOX 35800
WEST MONROE, LA 71294-5800

Invoice # 20190147

From 5/25/2019
Thru 6/7/2019

In Reference To: Job 19008 - ANNUAL SUPPORT FOR IR PROJECT
P.O. 4505046900

Professional services

	<u>Hours</u>	<u>Amount</u>
Curtis J. Marshall	14.00	1,452.92
James Sean Roberts	26.00	2,698.28
Steven R. Thomas	24.00	2,973.84
For professional services rendered	64.00	\$7,125.04
Additional charges:		
Daily Expenses - Meals / Food		20.77
Daily Expenses - Mileage		89.90
Total costs		<u>\$110.67</u>
Total amount of this bill		<u>\$7,235.71</u>

All amounts are due in 30 days and will be assessed a charge of 1.5% per month for late payment. Please make the check payable to APEC and forward to the address above. We appreciate the opportunity to be of service to you and are looking forward to being of service in the future.

Remit To Address: Durham Funding
for the account of:
Associated Professional Engineering Consultants, LLC
101 Sully's Trail, Bldg. 20
Pittsford, NY 14534



Complete Mechanical Services

Invoice Number: 06-22844

11399 Grooms Road
Blue Ash, OH 45242
Office 513.489.3080
Fax 513.489.3082

SOLD TO Graphic Packaging International
Attn: Accounts Payable
P.O. Box 35800
West Monroe, LA 71294-5800

SHIP TO IR Prep Work & Installation of

ACCOUNT NO.	INVOICE NUMBER	SHIP TO	DATE SHIPPED	TERMS	INVOICE DATE	PAGE
GRAPHIC	4505050560	190250.1		Net 60	5/31/2019	1

ITEM NO.	QUANTITY	DESCRIPTION	UNIT PRICE	EXTENDED
	1	Labor, Materials and Equipment for IR Prep Work & Installation of IR Units 4&5 thru 5-24-19: NTE Amount \$46636.00 Less Prev Invoice \$ 7556.49 Current Invoice \$ 3821.34 Remaining \$35258.17	0.00	0.00*
	37.5	Super	68.00	2,550.00*
	1	Materials	785.87	785.87*
	1	12% M/U	35.36	35.36*
	1	4.5% M/U	150.11	150.11*
STD TOOLS	1	Std. Equipment	300.00	300.00*

* means item is non-taxable

TOTAL AMOUNT 3,821.34

Cutting Edge from concept to completion



Complete Mechanical Services

Invoice Number: 06-22881

11399 Grooms Road
Blue Ash, OH 45242
Office 513.489.3080
Fax 513.489.3082

SOLD TO Graphic Packaging International
Attn: Accounts Payable
P.O. Box 35800
West Monroe, LA 71294-5800

SHIP TO IR Prep Work & Installation of

ACCOUNT NO	PO NUMBER	SHIP VIA	DATE SHIPPED	TERMS	INVOICE DATE	PAGE
GRAPHIC	4505050560	190250.1		Net 60	6/7/2019	1

ITEM NO	QUANTITY	DESCRIPTION	UNIT PRICE	EXTENDED
	1	Labor, Materials and Equipment for IR Prep Work & Installation of IR Unit 4&5 thru 5-31-19. NTE Amount \$46636.00 Less Prev Invoice \$11377.83 Current Invoice \$ 2699.20 Remaining \$32558.97	0.00	0.00*
	3	Super	68.00	204.00*
	31	Fitter/Welder	65.00	2,015.00*
	1	Materials	133.34	133.34*
	1	12% M/U	16.00	16.00*
	1	4.5% M/U	105.86	105.86*
STD TOOLS	1	Std. Equipment	225.00	225.00*

* means item is non-taxable

TOTAL AMOUNT 2,699.20

Cutting Edge from concept to completion



Complete Mechanical Services

~~06-22797~~ 06-22797

11398 Grooms Road
Blue Ash, OH 45242
Office 513.489.3080
Fax 513.489.3082

SOLD TO Graphic Packaging International
Attn: Accounts Payable
P.O. Box 35800
West Monroe, LA 71294-5800

SHIP TO IR Prep Work & Installation of

ACCOUNT NO	ITEM NUMBER	SERIAL	QUANTITY	UNIT	TERMS	INVOICE DATE	PAGE
GRAPHIC	4505050560	190250.1			Net 60	5/17/2019	1

DESCRIPTION	QUANTITY	UNIT PRICE	AMOUNT	TAX
Labor, Materials and Equipment for IR Prep Work & Installation of IR Units 4&5 thru 5-10-19:	1		0.00	0.00*
NTE Amount		\$46636.00		
Foreman	23	68.00	1,564.00	1,564.00*
Fitter/Welder	20	65.00	1,300.00	1,300.00*
Materials	1	3,659.75	3,659.75	3,659.75*
12% m/U	1	439.17	439.17	439.17*
4.5% M/U	1	293.57	293.57	293.57*
STD TOOLS	1	300.00	300.00	300.00*

* means item is non-taxable

TOTAL AMOUNT 7,556.49

Cutting Edge from concept to completion



Complete Mechanical Services

Invoice Number: 06-22920

11399 Grooms Road
Blue Ash, OH 45242
Office 513.489.3080
Fax 513.489.3082

SOLD TO Graphic Packaging International
Attn: Accounts Payable
P.O. Box 35800
West Monroe, LA 71294-5800

SHIP TO IR Prep Work & Installation of

ACCOUNT NO	PO NUMBER	SHIP DATE	DATE SHIPPED	TERMS	INVOICE DATE	PAGE
GRAPHIC	4505050560	190250.1		Net 60	6/13/2019	1

ITEM NO	QUANTITY	DESCRIPTION	UNIT PRICE	EXTENDED
	1	Labor and Equipment for IR Prep Work & Installation of IR Unit 4&5 thru 6-7-19:	0.00	0.00*
		NTE Amount \$46636.00		
		Less Prev Invoice \$14077.03		
		Current Invoice \$ 927.72		
		Remaining \$31631.25		
	12	Foreman	68.00	816.00*
	1	4.5% M/U	36.72	36.72*
STD TOOLS	1	Std. Equipment	75.00	75.00*

* means item is non-taxable

TOTAL AMOUNT 927.72

Cutting Edge from concept to completion

Invoice

Invoice Number 0071341
Invoice Date Jul 8, 2019
Supply Date May 20, 2019
Currency USD (US Dollar)
Purchase Order 4505050563
Payment Terms 90 days net

Supplier
MATLOCK ELECTRIC CO INC
2780 HIGHLAND AVE
CINCINNATI, OH 45212-2408
US (United States)
513-673-9510
513-731-9648

Customer
Graphic Packaging International LLC
1500 Riveredge Parkway NW
ATLANTA, GA 30328
US (United States)

Ship To
Graphic Packaging International
407 Charles Street, Dock # 9
Middletown, OH 45042
US (United States)

Phone
513-424-1200

Fax
513-424-1325

#	PO Item	Description	Unit	Qty	Unit Price	Line Total
1	10	LAB & MAT TO RECONDITION 25HP & 40HP FAN	DOL	12,000	\$1.00	\$12,000.00
2	20	CHANGE ORDER PO#4505050563	DOL	2,645	\$1.00	\$2,645.00

Subtotal \$14,645.00
Total Tax Amount \$0.00
Invoice Amount \$14,645.00

Powered by


Invoice

Invoice Number CD99056960
Invoice Date Apr 23, 2019
Supply Date Apr 23, 2019
Currency USD (US Dollar)
Purchase Order 4505057706
Payment Terms 30 days net

Supplier
CORNERSTONE CONTROLS INC
7131 E KEMPER RD
CINCINNATI, OH 45249-1028
US (United States)
513-489-2500
513-489-3693

Customer
Graphic Packaging International LLC
1500 Riveredge Parkway NW
ATLANTA, GA 30328
US (United States)

Customer Tax Identifier
35-2156544

Ship To
Graphic Packaging International
407 Charles Street, Dock # 9
Middletown, OH 45042
US (United States)

Phone
513-424-4200

Fax
513-424-4325

Line Items

#	PO Item	Description	Unit	Qty	Unit Price	Line Total
1	10	SENSEPOINT CO GAS ANALYZER	DOL	2,776.92	\$1.00	\$2,776.92

Additional Items

#	Description	Type	Amount	Total
1	Freight	Charge	\$16.81	\$16.81

Line Item Subtotal	\$2,776.92
Additional Items Subtotal	\$16.81
Subtotal	\$2,793.73
Total Tax Amount	\$0.00
Invoice Amount	\$2,793.73

Fabrick, Inc.
El Merin
7110 Morgan Rd.
Cleveland, OH 44002-9767

Invoice

Number 149223

Date 4/29/2019

Bill To

Graphic Packaging
International Inc.
Attn. Account Payable
PO Box35800
West Monroe, LA, 71294-5800

Ship To

Graphic Packaging
International Inc.
Middletown Mill (Plant 0034)
407 Charles Street, Dock #9
Middletown, OH, 45042

PO Number	Terms	Customer #	Service Rep	Project
4505064600	2%15days, Net 60 Day	SAP Vender #69802		

Description	Quantity/Hours	Price/Rate	Amount
VE 3008 MQ Controllers	2.00	\$6,518.00	\$13,036.00 ✓
VE 3009 Power Supplies	2.00	\$832.00	\$1,664.00 ✓
VE 3051 Power Carriers	2.00	\$200.00	\$400.00 ✓
PK 0100R PK VIM Module Assm	1.00	\$13,200.00	\$13,200.00 ✓
VE 4027 Virtual I/O Module	2.00	\$3,861.00	\$7,722.00 ✓

Amount Paid \$0.00

Amount Due \$36,022.00

Discount \$0.00

Shipping Cost \$0.00

Sub Total \$36,022.00

Total \$36,022.00

0 - 30 days	31 - 60 days	61 - 90 days	> 90 days	Total
\$36,022.00	\$0.00	\$0.00	\$0.00	\$36,022.00



Complete Mechanical Services

Invoice Number: 06-22814

11399 Grooms Road
Blue Ash, OH 45242
Office 513.489.3080
Fax 513.489.3082

SOLD TO Graphic Packaging International
Attn: Accounts Payable
P.O. Box 35800
West Monroe, LA 71294-5800

SHIP TO I/R Coating Steel Project

ACCOUNT NO	INVOICE NUMBER	SHIP TO	DATE SHIPPED	TERMS	INVOICE DATE	PAGE
GRAPHIC	4505064610	190321.1		Net 60	5/30/2019	1
QUANTITY	DESCRIPTION	UNIT PRICE	EXTENDED			
1	Labor, Materials and Equipment for I/R Coating Steel Project.	36,270.00	36,270.00*			
	Contract Amount					

* means item is non-taxable

TOTAL AMOUNT 36,270.00 ✓

Cutting Edge from concept to completion

EMERSON

ROSEMOUNT INC.
8200 MARKET BOULEVARD
CHANHASSEN MN 55317
UNITED STATES
Tax Reg No: 41-0766812

Invoice - Original

Mail Invoice To:

GRAPHIC PACKAGING INTERNATIONAL INC
PO BOX 35800
WEST MONROE LA 71294-5800
UNITED STATES

Attn: ACCOUNTS PAYABLE

150081358

Invoice Date:
10-JUL-2019

Invoice No:
71488626

Due Date:
09-AUG-2019

Payment Terms:
Payment due in 30 days

Rep Order No:

Sales Order No:
4150-10495-5576077

Customer Order Number:
4505091139

Project No:

Invoice Inquiries: GLANDER, NANCY
Tel: 800-999-9307

Customer/Buyer: Whisman, Anne

Fax: 952-906-8815

Email: NANCY.GLANDER@EMERSON.COM

Sold To: 150189786
GRAPHIC PACKAGING INTERNATIONAL INC
407 CHARLES ST DOCK 9
MIDDLETOWN OH 45042-2107
UNITED STATES

Bill To: 150081358
GRAPHIC PACKAGING INTERNATIONAL INC
PO BOX 35800
WEST MONROE LA 71294-5800
UNITED STATES

End User: 150189789
GRAPHIC PACKAGING INTERNATIONAL INC
407 CHARLES ST DOCK 9
MIDDLETOWN OH 45042-2107
UNITED STATES
Ultimate Destination: UNITED STATES

Ship From:
ROSEMOUNT INC.
6021 Innovation Blvd
Shakopee MN 55379-4676
UNITED STATES

Ship To: 150180789
GRAPHIC PACKAGING INTERNATIONAL INC
407 CHARLES ST DOCK 9
MIDDLETOWN OH 45042-2107
UNITED STATES

Ship Via:
Inland(Origin): FEDEX GROUND-PARCEL-
STD SERVICE
Forwarder:

Ship Date:
10-JUL-19

Shipment No:
60829376

Freight Payment Terms:
Inland(Origin): Prepaid And Add To Invoice

Commercial Invoice No:
Tracking No: 479943155652

Customer Line No	Order Line No	Invoice Line No	Description	Qty	Unit Price (USD)	Total Amount (USD)
10	1.1	1	3051SFC1CS020N065T32JA1A3E5M5 Compact Orifice Flowmeter UOM: Each HTS/HS: 9026102040 US ECCN / ECCN: EAR99 / Shipping Terms: Incoterms: FCA:Shakopee,,MN,US Unit: Tag: Serial: COO:	2	7,351.07	14,702.14
			1 WIRE : 19SHFE0011195 US			
			2 WIRE : 19SHFE0011196 US			

Order Note(s):

Seller's published Changes, Cancellations and Storage Fees Policy shall apply and is available upon request.
Buyer acknowledges preference that Rosemount arrange shipping using Rosemount carriers, and that Rosemount will bill freight/shipping charges prepaid and added to invoice. Buyer agrees to pay such charges. Because Rosemount is billed by its carriers in consolidated monthly statements, Rosemount cannot provide Buyer with shipping bills or other documentation.

Please Remit To:
ROSEMOUNT INC.
PO BOX 730156
DALLAS TX 75373-0156
UNITED STATES

IMPORTANT NOTICE: Emerson DOES NOT change bank accounts on short notice and all changes will be communicated in advance by written communication on Emerson company letterhead through mail courier/post and not email/phone.

Total Amount: Fourteen Thousand Seven Hundred Fourteen Dollars and Sixty Eight Cents (USD)

Subtotal (USD): 14,702.14
Freight & Handling (USD): 12.54
Tax (USD): 0.00
Total (USD): 14,714.68

Emerson Process Management is committed to customer service excellence. Please click [HERE](#) to take a four question customer satisfaction survey on your invoice process.

Ohio Insulation

Date	Invoice #
08/26/2019	11499

[illegible]

Phone #	Fax #	E-mail
937-274-7700	937-274-3068	admin@ohioinsulationmfgco.com

MARSDEN, INC.
6800 WESTFIELD AVE.
PENNSAUKEN, NJ 08110-1532
TAX ID# 22-1816030

Invoice

Date	Invoice #
8/11/2019	00013526

Bill To
GRAPHIC PACKAGING INTERNATIONAL INC> PO BOX 35800 WEST MONROE, LA 71294 ATTN: ACCTS. PAYABLE

Ship To
GRAPHIC PACKAGING INT'L INC 407 CHARLES ST MIDDLETOWN, OH 45042

Sales Rep	Terms	P.O. Number	Ship	Via	F.O.B.	Project
	Net 30	4505106421	8/11/2019			V-9756
Quantity	Description				Price Each	Amount
	MARSDEN IR SYSTEM SERVICE CALL - K. PUTSCHER 7/29/19 - 7/30/19					
	TRAVEL TIME					
8.0	7/29/19 - 8.0 HOURS @ \$120.00 PER HOUR				120.00	960.00
7.0	7/29/19 - 7.0 HOURS @ \$140.00 PER HOUR (OT)				140.00	980.00
3.0	7/30/19 - 3.0 HOURS @ \$120.00 PER HOUR				120.00	360.00
	WORK TIME					
5.0	7/30/19 - 5.0 HOURS @ \$120.00 PER HOUR				120.00	600.00
	TOTAL TRAVEL & WORK TIME:					2,900.00
	EXPENSES:					
1.2	AIRFARE:				275.00	330.00
1.2	CAR RENTAL:				308.67	370.40
1.2	FOOD:				34.20	41.04
1.2	LODGING:				148.40	178.08
1.2	AIRPORT PARK:				72.00	86.40
1.2	TOLLS:				5.00	6.00
90.0	MILEAGE: 90 MILES @ .60/MILE				0.60	54.00
	INVOICE TOTAL:				0.00	3,965.92
				PAYABLE IN US DOLLARS	Balance Due:	\$3,965.92

Ohio Insulation

Date	Invoice #
08/26/2019	11498

Customer P.O #	Terms	City	Customer Project	Job #
4505119464	Nct 90	MID	5308 - #4 & 5 IR DUCTWORK	
Description	Unit Price	Amount		
BILLING FOR INSULATION INSTALLED TO DATE	2,083.00	2,083.00		
Balance Due		\$2,083.00 ✓		

Phone #	Fax #	E-mail
937-274-7700	937-274-3068	admin@ohioinsulationmfgco.com

MARSDEN

Gas IR Drying System

Offer#GP102114-GJL

For

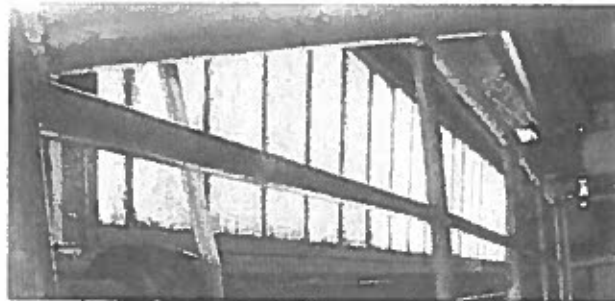


GRAPHIC PACKAGING
HOLDING COMPANY

Middletown Boxboard Mill
Middletown, OH

“Marsden IR System 3rd Drying Frame Add-On”

40” MD Gas IR Drying Frame



*Submitted By: Gerard J. Lucidi
Title: President & CEO*

Date: October 21, 2014

MARSDEN, INC. prepared this offer, and all referenced documents, for the exclusive of Graphic Packaging International No reproduction, alteration or disclosure of any of this offer's contents, outside of the intended user, is allowed without prior written consent from MARSDEN, INC.

Proposal Index

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1.0 - Scope of Supply

One Marsden Gas IR Drying Frame containing the following features and equipment:

1.1 - Drying Frame

One (1) 40" MD x 126" CD Gas IR Coating Drying Frame will be supplied. The Drying Frame will have nine (9) 40" MD x 14" Marsden Modular IR Emitters. The Drying Frame will be operated from the existing controls supplied as part of the initial installation.

The Drying Frame will have stainless steel, dropped, insulated ends for rope protection.

The ignition will use a direct spark ignition system with a proving pilot as is currently installed on the existing IR Drying Frames.

1.2 - Drying Frame Retraction

Clamshell retraction of the Drying Frame will be achieved by using a pneumatic cylinder to move the frame away from the sheet. Flexible connections (3' of each) are provided for piping and ducting from the Drying Frame to field mounted piping and exhaust header.

1.3 - Air Scrubbing System

The Drying Frame is equipped with an air scrubbing system consisting of air delivery nozzles on one end of the Drying Frame and an exhaust box on the opposite end of the Drying Frame.

1.4 - Add-On Combustion Equipment

- One (1) Honeywell Flame Safeguard
- One (1) Ignition Transformer

1.5 - Support Frames

Tubular steel frame with flanges mount to exiting machine framework to support the IR Rows in location parallel to the sheet. Approval drawings will show Marsden-supplied framework.

1.6 - Preassembly, rewiring and prepiping

Of all equipment as feasible for shipment. Loose assemblies will be specified for shipment.

2.0 - Optional Equipment

2.1 - 14" CD Profiling Zones

The Drying Frame can be equipped to provide CD zone control for moisture profile control. Profiling actuators will allow for the individual control of each emitter providing 14" CD moisture profile control.

A customer supplied 4-20 mA signal will adjust the output of each individual emitter. Additional I/O will be supplied by Marsden as well as reprogramming the PLC to accommodate this control.

3.0 - Engineering and Design

3.1 - Drawings

Mechanical layout, piping, ducting, electrical schematics and assembly drawings will be provided. Drawings will be submitted for approval regarding scope of work and dimensions. Drawings will be submitted per the following schedule:

Approval Drawings:	4-6 weeks after receipt of PO
Certified Drawings:	2 weeks after acceptance of Approval Drawings
As-Built Drawings:	2 weeks after shipment

Approval drawings will contain the date in which drawings must be returned to Marsden, to maintain the promised delivery date. Delays in returning approval drawings may affect promised ship dates.

AutoCAD version 2014 provided for the above drawings.

3.2 - Quality Assurance & Control

Marsden, Inc. attained its ISO 9001 Certification in November of 1996. Its Quality Policy ensures the continuous commitment to being the preferred supplier of gas infrared heating equipment used in industrial applications by delivering our product to our customers which sets the standard in the industry for safety, performance, reliability and value.

Marsden also successfully completed the required testing to apply the CE Mark for systems installed within the European Union.



4.0 - Facilities Required - Customer Supplied

FACILITIES REQUIRED FOR 3rd DRYING FRAME:

- 4.1 - Maximum Natural Gas Consumption: - 2,811 CFH at less than 5 psi.
- 4.2 - Combustion Blower - Existing
- 4.3 - Exhaust Fan - Existing
- 4.4 - Ducting - From module exhaust port to exhaust fan, including flexible ducting
- 4.5 - Piping - To and from main gas supply and Marsden-supplied assemblies (main gas train, secondary trains), and flexible piping
- 4.6 - Wiring - From control panel to gas valves, solenoid valves, flame rods, spark plugs, ignition transformers, IR Sensors. Marsden stocks high temperature flame rod and high temperature, high voltage ignition transformer wire.
- 4.7 - Other - Motor starters, enclosure for ignition transformers, compressed air line, roof outlet for exhaust fan .
- 4.8 - Signals - Minimum speed, coating present, remote emergency stop, sheet break, and loss of tension signals

NOTE - Facilities required are subject to engineering changes. Approval drawings will show all customer-supplied items.

5.0 - Start-Up Services

Marsden can provide a start-up technician for up to three (3) weekdays for System check-out and to supervise personnel commissioning the Marsden Drying Frame. Additional start-up service days, as requested by written order, will be billed per the attached Technical Assistance Sheet.

6.0 - Price Summary

- 6.1 - Drying Frame Pricing:
Price: \$109,997.
- 6.2 - 14" CD Profiling Zones:
Price: \$25,398.
- 6.3 - Terms of Sale:
Thirty percent (30%) included with purchase order, Net 30
Thirty percent (30%) upon submittal of Approval Drawings, Net 30
Thirty percent (30%) prior to shipment, Net30
Ten percent (10%) after successful start up, not to exceed 60 days from delivery.
- 6.4 - Shipping:
Ex Works, Marsden, Inc., Pennsauken, NJ. All freight, duties and taxes are to be paid by Buyer.
- 6.5 - The above prices are valid for a period of sixty (60) days from the date of this proposal.
- 6.6 - Shipment:
Sixteen to eighteen (16-18) weeks from receipt of PO. Firm ship date will be mutually agreed upon at placement of order.
- 6.7 - Included as part of this offer are Marsden's Conditions of Sale.

7.0 – Marsden System Guarantees

7.1 – MARSDEN INFRARED EMITTER 5-YEAR GUARANTEE

Marsden offers a five-year guarantee on the emitter against backfire or burnout.

No Service Plan Required.

7.2 – MARSDEN INFRARED SYSTEM 2-YEAR GUARANTEE

Marsden guarantees a two-year “bumper-to-bumper” guarantee on all Marsden supplied devices.

No Service Plan Required.

7.3 – MARSDEN IGNITION RELIABILITY GUARANTEE

The Marsden ignition system is very reliable. With normal quarterly maintenance, the Emitters will light with excellent reliability.

No Service Plan Required.



8.0 - MARSDEN, INC. - Technical Assistance

	<u>Monday-Friday</u>	<u>Saturday</u>	<u>Sunday/Holidays</u>
<u>Start-Up / Service Technician:</u>			
1st - 8th hrs. **	\$115.00/hr.*	\$135.00/hr.*	\$157.50/hr.*
9th - 12th hrs. **	\$135.00/hr.*	\$157.50/hr.*	\$190.00/hr.*
<u>Site Engineer:</u>			
1st - 8th hrs. **	\$135.00/hr.*	\$157.50/hr.*	\$185.00/hr.*
9th - 12th hrs. **	\$157.50/hr.*	\$185.00/hr.*	\$200.00/hr.*
<u>Consulting Specialist:</u>			
1st - 8th hrs. **	\$168.00/hr.*	\$195.00/hr.*	\$221.00/hr.*
9th - 12th hrs. **	\$195.00/hr.*	\$221.00/hr.*	\$257.00/hr.*

* portal-to-portal, plus transportation and vouchered expenses at cost plus 20%.

** automobile transportation to be reimbursed at \$.60 per mile.

Minimum Billing: Eight Hours Per Day

Terms: Payable upon receipt of invoice.

Cancellations: Scheduled service calls that are cancelled or rescheduled, with less than 72 hours advance notice before the scheduled date, will be billed at the minimum rate which would have prevailed on the originally scheduled date each time a service call date is cancelled or rescheduled.

Currency: U.S. \$

The above Marsden personnel do not perform trade functions (i. e.: pipefitting, electrical wiring, millwright, etc. tasks). Normally such work is performed by the installing personnel. We will be pleased to provide a Quotation for such work as requested.

CONDITIONS OF SALE

1. Marsden, Inc. shall not be responsible nor deemed to be in default on account of delays in performance of this agreement due to causes which are beyond its control and not occasioned by its fault or negligence and which make its performance impracticable, including but not limited to civil wars, insurrections, strikes, riots, fires, floods, explosions, earthquakes, accidents, any act of government, allocation regulations or orders affecting materials, equipment, facilities or completed products, acts of God or the public enemy, failure of transportation, epidemics, quarantine restrictions, failure of vendors (due to causes similar to those within the scope of this clause) to perform their contracts or labor troubles causing cessation, slowdown, or interruption of work provided, such cause is beyond Marsden's reasonable control. The time of shipment named herein is made in good faith. Marsden, Inc. shall, accordingly, make a diligent effort to meet all schedules as set forth, but accepts no pecuniary liability for failure to do so.

2. All prices quoted herein are guaranteed for sixty (60) days from date of proposal.

3. Unless otherwise stated, this proposal has been figured on a straight-time basis and you agree to reimburse us in full for any additional labor costs incurred by us because of overtime work requested by you.

Any state, provincial or federal sales or use taxes which we may be required to pay, shall be charged to you at our direct net cost and are in addition to any prices quoted herein. All shipments shall be made F.O.B. our point.

4. If there are to be one or more deliveries under this proposal, settlement for each invoice shall be made in accordance with the terms of payment specified in the proposal. Transportation risks including fire or any other casualty, after delivery to the first common carrier, shall be the responsibility of the buyer and/or consignee. Claims for factory shortages shall not be considered unless made in writing to Marsden, Inc. within ten (10) days after receipt of the goods and accompanied by reference to our bill of lading and factory order numbers. As all goods are shipped at customer's risk, any claims for damage or shortage in transit must be filed by the customer against the transportation company.

5. If shipment or any other act or condition affecting payment for the goods or any part thereof shall be delayed on account of the buyer, payment therefore shall become due as if shipment has been made. In case of delay in shipment at the instance of the purchaser, a reasonable storage charge shall be made and such storage will be at the risk of the buyer.

6. We guarantee that the goods manufactured by us shall be of first class materials and workmanship, made in conformance to standard industry practices. Outside purchased equipment and accessories, if any, are guaranteed only to the extent of the original equipment manufacturers guaranteed. The guarantee period of the goods, except as otherwise limited by such original equipment manufacturer's guarantee, is one (1) year from the date of shipment, unless the parties otherwise agree in writing.

Any claims in connection with our guarantees must be submitted in writing within fifteen (15) months after shipment and our liability with respect to any such guarantee shall be limited, at our option, either to repayment of the purchase price received by Marsden, Inc. for the goods involved or to the repair thereof or the replacement thereof of goods conforming to such guarantees.

SHORTAGES:

Claims for shortages and/or incorrect shipments will not be considered unless reported in writing to the seller within ten (10) days after receipt of equipment.

RETURN OF PARTS OR EQUIPMENT TO COMPANY PLANT:

Customer is encouraged to inspect equipment prior to shipment. Permission to return any parts or equipment must be obtained in writing, including an agreement as to which party shall bear the freight expense for said return, prior to shipment to Marsden, Inc.

TITLE AND RISK OF LOSS:

Title and risk of loss of the equipment covered by this quotation shall pass from the seller to the buyer in accordance with the terms F.O.B., F.A.S., C & F, C.I.F., etc., as specified herein. On shipments within the Continental United States of America, these terms shall be interpreted according to the U.S. Uniform Commercial Code, and on shipments outside the Continental United States of America, these terms shall be interpreted according to the Revised American Foreign Trade Definitions of 1941.

CONDITIONS OF SALE

Under no circumstances will the seller be liable for the following: (a) Failures not reported within the guarantee period: (b) Failures or damage due to your negligence, accidents, abuse, improper installation (unless installation made by us), improper operation, or abnormal conditions of temperature, moisture, dirt or other general design parameters: (c) Equipment which has in any way been readjusted, altered, or repaired without our written consent: (d) Expenses incurred by you in an attempt to correct or repair any alleged defect without written consent: (e) Any losses, costs, expenses, liabilities and damages, including but without limitation to, loss of use or profits, damage to persons or property, any liabilities you may have to your customers or third persons, and all other special or consequential damages, whether direct or indirect.

No liability whatsoever of the seller shall attach until said products have been paid for in full, in accordance with the terms of payment of this proposal.

THE ABOVE GUARANTEE PROVISIONS ARE EXCLUSIVE AND IN LIEU OF ALL OTHER GUARANTEES EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY GUARANTEE OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE.

7. Title to all materials, systems, and system parts of this proposal shall remain in us until the full net price has been paid, whether or not said materials, systems and system parts become components of other systems or system parts.

8. Accepted orders are not subject to cancellation or change without our being reimbursed for any and all expenses including commitments we made to our suppliers or subcontractors. In the event of cancellation, you agree to pay such charges in full within thirty (30) days after our acceptance of said cancellation.

9. If this proposal includes installation or erection of any equipment, you are to furnish all labor and material to safely unload and store said equipment. You are to provide adequate protection against all weather conditions.

You agree to furnish all necessary cranes, hoists and scaffolding at the job site. Where erection of equipment necessitates the use of an existing crane, you agree to provide for our use of this crane or an adequate substitute during straight-time hours.

In the event such crane equipment is unavailable to us during straight-time hours, you agree to pay for the difference between overtime or premium labor hours and straight-time hours. We are

not to be responsible in any way for excavations, foundations, masonry, supports, wiring, plumbing, or piping, or any portion of the cost thereof, or for the procurement of any licenses or permits therefor.

10. You agree to assume full responsibility for, and to provide and maintain adequate insurance against, loss or damage by fire or other cause on all equipment furnished by Marsden, Inc. in the amount of the installed value until full payment of the quoted price is made to us. We agree to cover all labor to be furnished by us from our payroll with worker's compensation insurance according to the laws of the state in which this contract is being performed, and with public liability insurance to such limits as we determine. You agree to carry any other compensation insurance for any other labor and such public liability and any other insurance which you deem necessary under this contract, and to provide in such policies against any right of subrogation against us (where possible without substantial extra premiums).

11. Any term or condition contained in any purchase order or other communication by customer which is at variance with these terms and conditions is agreed by customer to be superseded and controlled by those contained herein. No representations or guarantees other than those contained herein shall be binding upon us unless made in writing and signed by an authorized official of Marsden, Inc.

The proposal shall constitute the entire agreement between us, superseding all prior quotations and understandings, oral or written. Any questions regarding the interpretation or effect of the contract formed by your acceptance of this proposal and our approval is governed by the laws of the State of New Jersey.

12. Any stenographic and clerical errors contained herein are subject to our correction.

MARSDEN

Gas IR Drying Systems & Services
For



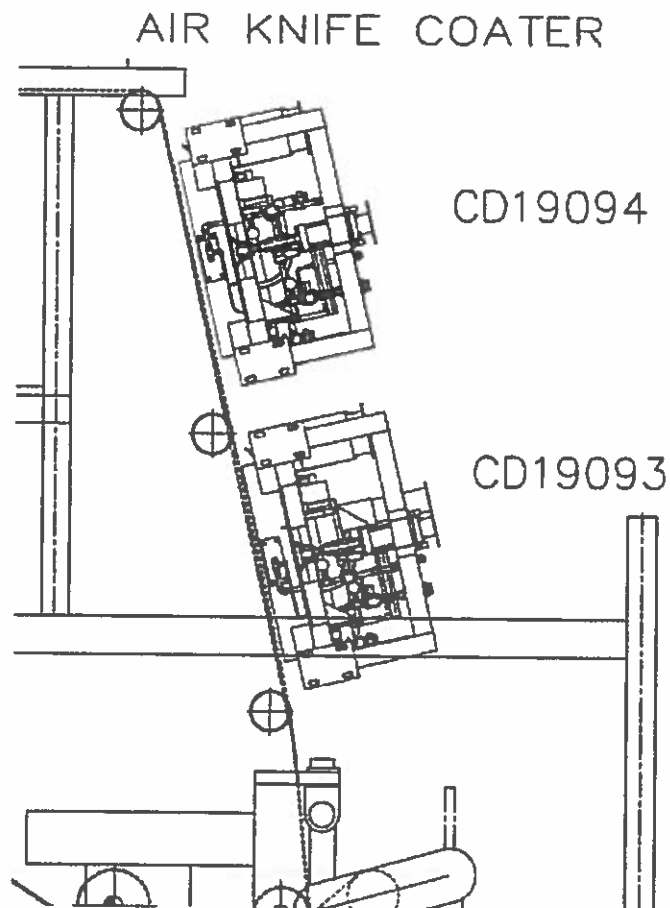
Middletown, OH - USA

Marsden Gas IR Coating Drying System Proposed Services:

1) Summary of Proposed Modifications

Marsden offers to modify an existing Gas IR Coating Drying System currently installed at the Santa Clara Mill in order to fit the Middletown Mill machine to provide additional drying after the AirKnife Coater. The Drying Frames in Santa Clara are wider than the machine in Middletown so the IR Drying Frames need to be shortened or else high temperature (1800°F+) infrared will be directed towards ropes, external equipment, personnel, etc. The combustion support equipment, combustion blower and exhaust fan are adequately sized as is the control panel. The control panel will need some minor electrical changes but there is a PLC and color touchscreen available.

Overall, the two (2) 40" MD IR Drying Frames can be modified to provide additional drying after the AirKnife Coater. Heat transfer calculations will be provided upon receipt of existing process conditions (speeds, coat weights, coating solids, etc.)



2) Budgetary Offer:

The following components would need to be replaced or modified to accommodate the narrower sheet width:

- Main Support H Frames (replaced)
- Modular Emitter Backplates (replaced and will be the same as existing) - *SANTA CLARA as modification*
- Exhaust Boxes (replaced)
- Air Delivery Boxes (modified)
- End Plates (retrofit existing continuous pilots with direct spark assemblies)
- Cooling Air Headers (replaced)
- Zero Regulator Vent Headers (replaced or modified)
- Main Air Header (replaced or modified)
- Gas Header (replaced)
- Emitters (replaced with same emitters as currently installed in the Middletown Mill)

The entire system would be shipped back to Marsden's manufacturing facility in Pennsauken, NJ where the Drying Frames would be retrofitted. The combustion support equipment and controls will be checked out for proper operation. Minor wiring changes in the control panel will be completed as well.

Engineering drawings will be issued to reflect all changes. A complete set of drawings will be issued for future reference and documentation purposes.

Budgetary Price: \$140,000 - \$150,000

(For comparison purposes, a new system with two (2) 40" MD x 126" IR Coating Drying Frames costs \$247,005 so by retrofitting the existing system there is a savings of roughly \$100,000.)

3) Lead Time

Fourteen – sixteen (14-16) weeks after receipt of order.

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Case No(s). 19-2158-EL-EEC

Summary: Application Application to Commit Energy
Efficiency/Peak Demand
Reduction Programs
(Mercantile Customers Only), Duke Energy, Infrared Paper Drying System electronically filed
by Carys Cochern on behalf of Duke Energy