



ADVANTAGE



PMMI is your answer.

The Association for Packaging and Processing Technologies

- **87** years old (established in 1937)
- **900+** member companies
- **\$83+** million total revenue
- **150+** staff in:
 - Reston, Va. – PMMI Headquarters
 - Chicago, Ill.
 - Mexico City, Mexico



PMMI is your answer.



PMMI Business Drivers equip the makers of packaging and processing technologies to succeed in a competitive global marketplace.

PACK EXPO Portfolio of Trade Shows unites the world of packaging and processing to advance industries.

PMMI Media Group connects manufacturers year-round to the latest solutions, trends and innovations in packaging and processing.



Portfolio of Trade Shows

Unites the world of packaging and processing to
advance industries.

C O - L O C A T E D



Healthcare⁺
PACKAGING
EXPO

C O - L O C A T E D



Healthcare⁺
PACKAGING
EXPO





**MEDIA
GROUP**

TM



PMMI Media Group

Audience Engagement

Quality, original content to educate and engage your customers

Data

250,000+ database enriched with unique first party data to precisely target your ideal audience

Technology

Exclusive marketing tools to streamline campaign planning, execution, reporting and leads analysis



PMMI Media Group

1

Reach **PACK EXPO attendees** year-round, with highly targeted campaigns

2

Increase awareness of your products and brand to **targeted markets** through digital vehicles like **Facebook and brand-safe websites**

3

Drive traffic to your website and trade show booth

Wendy Sawtell can answer questions. Contact her at wsawtell@pmmimediagroup.com



The Official Publication of



The Association for Packaging
and Processing Technologies



Published Quarterly
The Summer issue is out!

oemmagazine.org



The PMMI Media Group editorial staff is always on the lookout for **success stories** in the packaging, processing and automation industries.

Share your story with one of our editors and you just might see it in our next issue!



| Matt Reynolds – 312.205.7918 – mreynolds@pmmimediagroup.com



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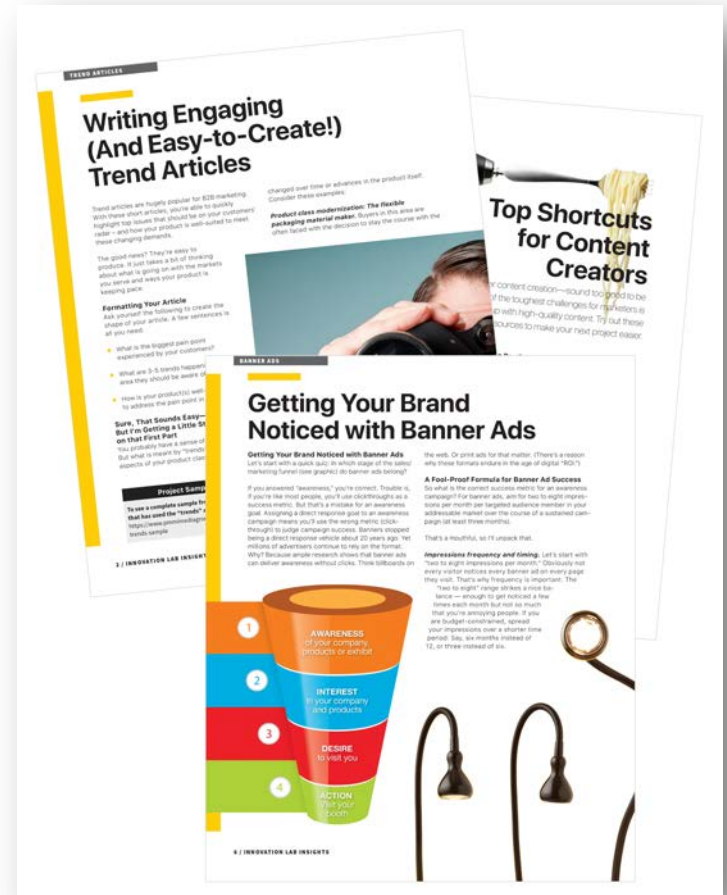


marketing INSIGHTS PMMI MEDIA GROUP

Marketing Insights:

A new resource for industrial marketers, from PMMI Media Group.

Discover trends and tips for getting the most out of your marketing investment by reading the online blog, email newsletter or printed quarterly issue.





New from PMMI Media Group:

- **Mundo PMMI** Spanish language media brand
- For professionals who package, process and automate in **Latin America**

Also available:
Newsletters, Facebook and Web Sponsorships





TM



Focused Resources for Your Business:

- Business Intelligence
- Education & Workforce Development
- Global Marketing
- Industry Services
- Conferences & Events

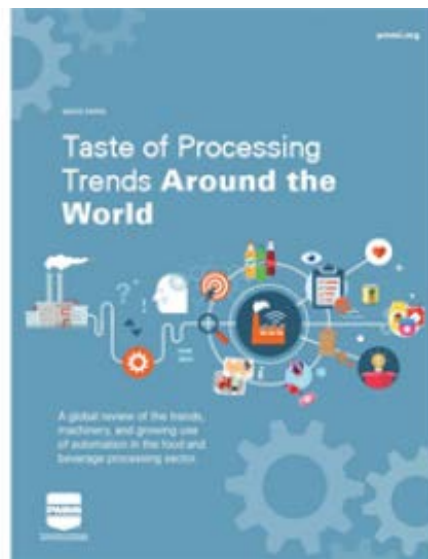


{ Business
Intelligence

PMMI publishes reports on a range of industry topics that are *free* to members!

- Market Assessments
 - E-Commerce
 - Flexible Packaging
 - Nutraceuticals
 - Snack Foods
- Industry White Papers
 - Digital Printing
 - Pharmaceutical Packaging & Processing
 - Personal Care/Cosmetics





Benchmarking and Economic Reports

As part of membership, you receive:

- Quarterly Business Indicators
- Quarterly Economic Outlooks
- Best Practices Surveys
- Vision 2025 Reports
- Top to Top Reports
- Quickie Surveys



Recent Quickie Surveys

- Online Marketing
- Payment Terms
- State Taxes
- Detectable Materials
- Measurement Standards
- Service Technician Hours
- Benefits
- Drug Testing Policies

Want to see how you measure up?
Request one now!

Questions?

Contact: Rebecca Marquez
Business Intelligence Coordinator
571.612.3205

New Sales Tool

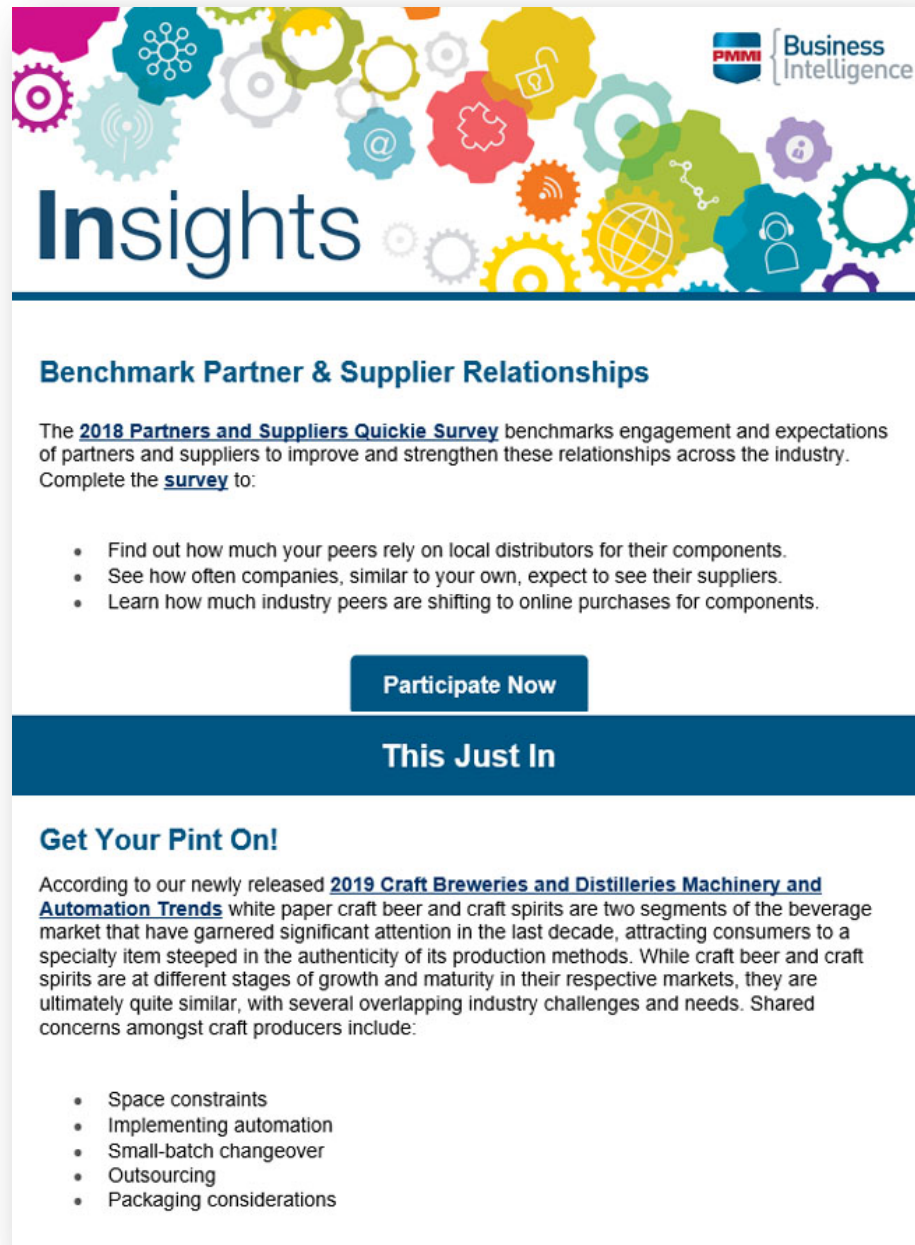
Know the Trends – Share the Trends

PMMI will supply one VIP Comp Code (per member company) for **you to provide to current or potential customers** – allowing them full access to our library of industry and economic reports – absolutely free!

To Request and Use a VIP Comp Code:

1. Email Rebecca Marquez, business intelligence coordinator, PMMI at rmarquez@pmmi.org.
2. You will receive your VIP comp code within 24 hours.
3. Your VIP comp code is unique to your organization not to each individual recipient.
4. Your VIP comp code can be distributed to existing and potential customers so that they can download PMMI's Industry and Economic reports at no cost!



The graphic is a newsletter preview for "Insights". It features a header with colorful gears and icons. The main content area includes a section titled "Benchmark Partner & Supplier Relationships" with a description of the 2018 survey and a list of bullet points. Below this is a "Participate Now" button. The bottom section is titled "This Just In" and includes a sub-header "Get Your Pint On!" followed by a paragraph about craft beer and spirits and a list of bullet points.

Insights

Benchmark Partner & Supplier Relationships

The [2018 Partners and Suppliers Quickie Survey](#) benchmarks engagement and expectations of partners and suppliers to improve and strengthen these relationships across the industry. Complete the [survey](#) to:

- Find out how much your peers rely on local distributors for their components.
- See how often companies, similar to your own, expect to see their suppliers.
- Learn how much industry peers are shifting to online purchases for components.

[Participate Now](#)

This Just In

Get Your Pint On!

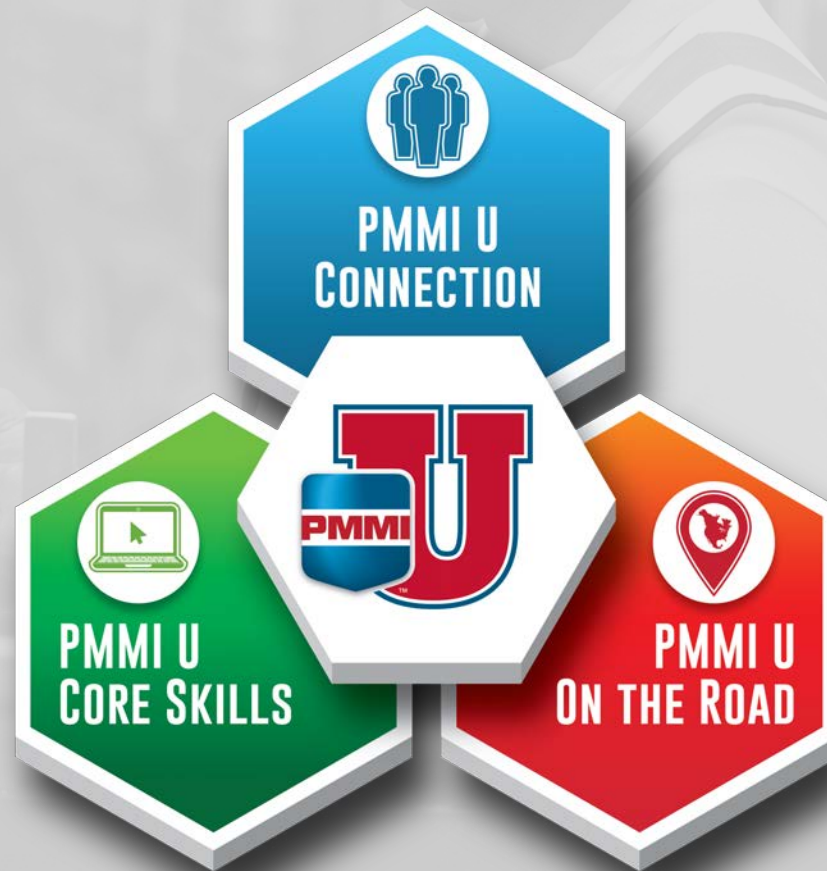
According to our newly released [2019 Craft Breweries and Distilleries Machinery and Automation Trends](#) white paper craft beer and craft spirits are two segments of the beverage market that have garnered significant attention in the last decade, attracting consumers to a specialty item steeped in the authenticity of its production methods. While craft beer and craft spirits are at different stages of growth and maturity in their respective markets, they are ultimately quite similar, with several overlapping industry challenges and needs. Shared concerns amongst craft producers include:

- Space constraints
- Implementing automation
- Small-batch changeover
- Outsourcing
- Packaging considerations

Sent to your inbox
every Thursday



Education & Workforce Development



Mechatronics Certification

PMMI currently offers eight assessments:

- Fluid Power 1
- Industrial Electricity 1 & 2
- Mechanical Components 1 & 2
- Motors and Motor Controls
- Programmable Logic Controllers 1 & 2



Online Technical Training

PMMI's eLearning courses help improve efficiency and reduce downtime by keeping your staff up to date on basic skills.

These interactive courses are available anytime online and cover these topics:

- Basic Electrical Components
- Basic Mechanical Components
- Fundamentals of Risk Assessment
- Introduction to Packaging Machinery
- Troubleshooting Packaging Machinery
(Available in Spanish)





NEW Class!

Fundamentals of Field Service helps prepare personnel for the non-technical aspects of being a technician. The course covers customer service, communication skills, troubleshooting techniques and more.

Who Should Attend:

New technicians, Assemblers or Engineers going out on service calls, Technicians who could benefit from a refresher.

See pmmi.org for 2019 dates!





Two-Day, Hands-On Workshops

Risk Assessment Workshops show you how to conduct a risk assessment in your plant that meets both U.S. and global machinery standards.

Certified Trainer Workshops teach technicians how to deliver consistent, high-quality training to others.



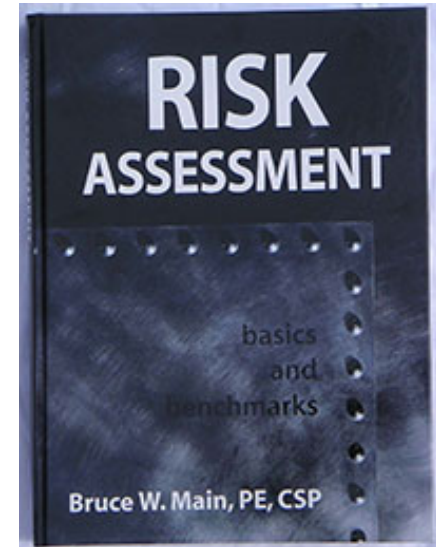


is your answer.

Risk Assessment Workshops

Students learn how to:

- Build better, safer, more productive machines — often at a reduced cost
- Meet customer requirements for documented risk assessments
- Understand the legal implications of risk assessment for new and legacy equipment





PMMI is your answer.

Certified Trainer Course

Students Learn:

- Training techniques including how to teach the adult learner, the 4-step training process, performance checks, and recognition
- To assess needs, build a partnership agreement, and develop a training plan
- To develop training documentation and job aids
- How to identify training/ learning gaps, develop a follow-up plan, and measure training outcomes



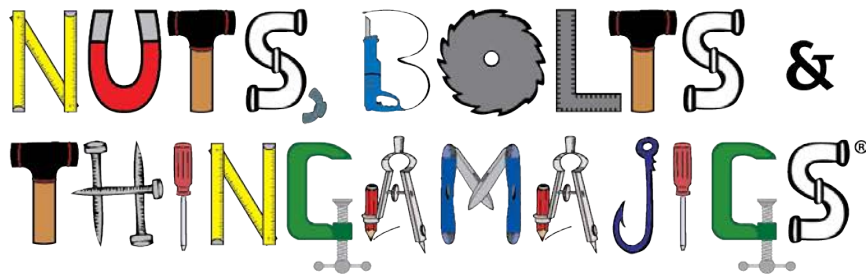
Leadership Development Program

Addresses:

- Supervising direct reports
- Providing and receiving constructive feedback
- Focusing on continuous performance improvement
- Building teams and developing teamwork
- Collaborating with colleagues
- Implementing the vision and mission of their company
- Communicating with and interacting with key customers
- Building relationships
- Acting as leaders in their own companies



20 Manufacturing Summer Camps in 2020-2021





is your answer.



Skills Fund

Investing in the future of our industry

Tuition Reimbursement

Member companies can receive **up to \$1,000 annually** towards job-related education and training costs for their employees, for both PMMI training and training from other sources



Up to **\$10,000** in matching funds...

For members to provide learning and development opportunities to
current employees.



Up to **\$50,000** in matching funds...

For members to actively participate in development of educational programs to engage the *future* workforce in their area.





Member Family Scholarship Program

Eligibility:

- Be an employee or immediate family member of an employee at a PMMI member company.
- Student must be enrolled in an accredited 2 or 4 year college, university or vocational /technical school in a course of study relevant to a business or business-related field with preference given to mechatronics, packaging or processing curriculum.
- Academic Achievement: GPA of 3.0 or higher

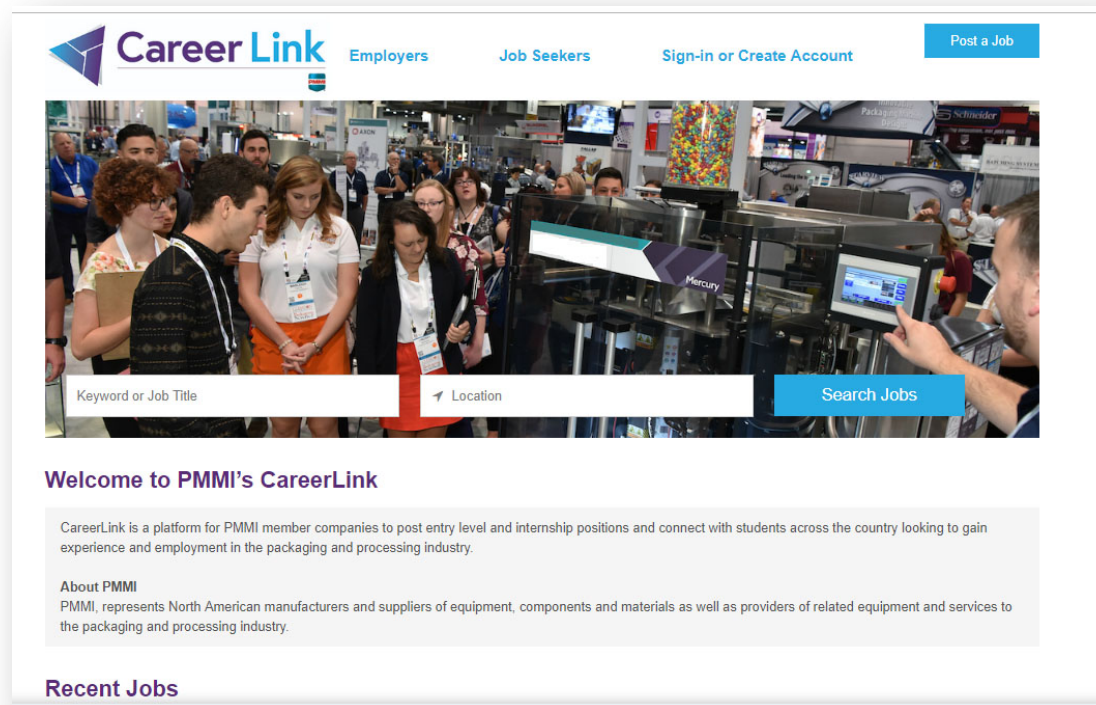
TEN \$5,000 scholarships currently available!



Online Job Board

Post entry level and internship positions and connect with students interested in the packaging and processing industries

careerlink.pmmi.org





Career Link LIVE

Purdue University Northwest STEM Career Fair

September 5, 2019

Hammond, Ind.

University of Illinois Chicago Engineering Career Fair

September 18, 2019

Chicago, Ill.

CareerLink @ PACK EXPO

September 23 - 24, 2019

Las Vegas, Nev.

Open to CPGs



careerlink.pmmi.org



PMMI is your answer.



HOW-TO GUIDE FOR INTERNSHIPS

A RESOURCE FOR DEVELOPING A SUCCESSFUL INTERNSHIP
PROGRAM TO DEVELOP FUTURE ENTRY-LEVEL EMPLOYEES.





Scholarships

PMMI awards over **\$300,000** in scholarships each year to students studying packaging, processing, engineering and mechatronics at over 60 U.S. colleges and technical schools.

- Tuition scholarships
- Travel scholarships for students attending PACK EXPO Trade Shows





{ Global
Marketing

Global Marketing Reports:

- Guide to Global Markets
- Global Packaging Trends
- Market Assessments for:
 - Brazil
 - Canada
 - Colombia
 - Mexico
 - Thailand
 - India



Export Assistance

Members can:

- Exhibit in the PMMI pavilion at international trade shows
- Use the International Trade Show Assistance Program (*General Members Only*)
- Try Export Experts and get your toughest export questions answered
- Access agent directories
- Access research on key international markets

7 PMMI Pavilions in 2019

EXPO PACK Guadalajara

Guadalajara, Mexico
June 11 - 13, 2019

Envase Argentina

Buenos Aires, Argentina
Sept. 10-13, 2019

ProPak Asia

Bangkok, Thailand
June 12 - 15, 2019

GulFood Manufacturing

Dubai, UAE
Oct. 2019

FISPAL Tecnologia

Sao Paulo, Brazil
June 25 - 28, 2019

Andina Pack

Bogota, Colombia
Nov. 19 - 22, 2019

ProPak China

Shanghai, China
June 19 - 21, 2019

14 Additional Shows Supported by Trade Show Assistance

ProPak Philippines

Jan., 24 - 26 2019
Manila (Philippines)

PackPlus

28 – 31 August 2019
New Delhi (India)

PPMA Show

1 – 3 October 2019
Birmingham (UK)

ProPak Vietnam

19 - 21 March 2019
Ho Chi Minh City (Vietnam)

FachPack

24 – 26 September 2019
Nuremberg (Germany)

Agroprod mash

7 – 11 October 2019
Moscow (Russia)

TAIPEI PACK

19 – 22 June 2019
Taipei (Taiwan)

PackEx India

13 – 15 September 2019
Mumbai (India)

ProPak India

21 - 23 October 2019
Mumbai (India)

RosUpack

18 – 21 June 2019
Moscow (Russia)

ProPak Myanmar

12 - 14 September 2019
Yangon (Myanmar)

Interpack

7 - 13 May 2020
Dusseldorf (Germany)

EAST PACK Indonesia

20 – 23 June 2019
Surabaya (Indonesia)

Saudi Agro-Food/ Saudi Food-Pack

21 – 24 October 2019
Riyadh (Saudi Arabia)

Int'l. Agents Reception at PELV

Date: Tuesday, Sept. 24
Time: 4:00 p.m.
Location: International Business Center

Register and get a directory of agents attending.

Set up meetings in advance and meet in person without any international travel.





{ Industry
Services

CPA, The Association for Contract Packers & Manufacturers

PMMI provides association management services to the **CPA**.

MISSION STATEMENT: CPA's mission is to enable its members to maximize business opportunities and growth beyond industry norms and greater than they can accomplish alone.

CPA's objectives include:

- Establishment of ethical standards among contract packagers and their clients
- Programs to increase knowledge and expertise within the industry
- Promotion of the effective use of contract packaging services.

Institute of Packaging Professionals

PMMI provides association management services to the
Institute of Packaging Professionals (IoPP).

MISSION STATEMENT: The Institute of Packaging Professionals is dedicated to creating networking and educational opportunities that help packaging professionals succeed.



Cold Pressure Council

PMMI provides association management services to the **Cold Pressure Council**.

MISSION STATEMENT: To lead, facilitate and promote industry standardization, user education and consumer awareness of High Pressure Processing.

CPC members can use the High Pressure Certified logo on products.



ColdPressureCouncil.org



is your answer.



Campbell's

evolution
FRESH™



WLF West Liberty Foods®



 **Hiperbaric**
HIGH PRESSURE PROCESSING


suja



The Packaging Management Council (PMC) provides a roundtable for senior packaging leaders to exchange information on trends and issues that will enhance member company knowledge related to packaging and operations. It seeks to raise awareness of the role that packaging professionals play in delivering all types of products to businesses and consumers.

MEMBERS

3M

ACH Food Companies Inc.

Bedford Systems LLC

BIC Consumer Products USA

Bush Brothers & Co.

Campbell Soup Company

Colgate-Palmolive

ConAgra Foods, Inc.

Energizer

Freshpet

General Mills

Hershey Foods Corporation

Hollister Incorporated

Jamssen Ortho LLC

Johnson & Johnson

Johnsonville Sausage LLC

Jurst Borm

McCormick & Co., Inc.

McNeil Consumer Healthcare

Mead Johnson Nutrition

Medtronic

Merck

MillerCoors

Newell Rubbermaid

PepsiCo

S.C. Johnson & Son Inc.

Sabra Dipping Company, LLC

Sargento Foods, Inc.

Schwan's Shared Services, LLC

Starbucks Coffee Company

The Boston Beer Company

The Scotts Miracle-Gro Company

Treehouse Foods

White Wave Foods

The Organization for Machine Automation and Control

OMAC is the organization for automation and manufacturing professionals that is dedicated to supporting the machine automation and operation needs of manufacturing.

The objective of the OMAC Packaging Workgroup (OPW) is to maximize the value of packaging and processing machinery by improving automation guidelines and standards leading to improved flexibility, capability, and reduced system integration costs.

The Organization for Machine Automation and Control

Board of Directors

Paul Redwood
Chairman
Church & Dwight, Co. Inc.

John Uber
Board Member
Mettler Toledo

Spencer Cramer
Secretary
ei3 Corporation

John Kowal
Board Member
B&R Automation

Jay Joyner
Vice Chairman
Procter & Gamble

Art Smith
Board Member
Corning

Ron MacDonald
Board Member
Nestlé

Chris Mills
Board Member
E-Technologies



PACKAGING & PROCESSING
WOMEN'S LEADERSHIP NETWORK

Sponsored By 



is your answer.

Packaging & Processing Women's Leadership Network

- 1,100+ professionals in the network
- Executive Council made up of end users/CPGs and PMMI members
- Live events at all PACK EXPO shows
 - 550+ attended the 2018 PACK EXPO International event
 - 120+ attended the 2019 ProFood Tech networking breakfast
- Resources include a quarterly newsletter, website and LinkedIn network with blogs, articles and videos

REGISTER

*Networking Breakfast at PACK EXPO Las Vegas
Tuesday, Sept. 24*

pmmi.org/ppwln





PMMI Technical Services

MISSION: Identify and influence regulatory and standards issues that will impact the industry now and in 3 – 5 years.

PMMI is a member of the American National Standards Institute (ANSI) and participates in the ANSI Company Member Forum, Organizational Member Forum and Consumer Interest Forum

PMMI has been accredited as a Standards Developing Organization (SDO) by the American National Standards Institute since 1972

PMMI standards and technical reports include:

- ANSI/PMMI B155.1 - 2016 Safety Requirements for Packaging and Processing Machinery
- PMMI B155 TR 1 design guidelines for the robotic handling of filled corrugated containers with vacuum
- PMMI B155 TR 2.1 Tolerances For Regular Slotted Containers (RSCs)
- PMMI B155 TR 2.2 Tolerances For Scored And Slotted Corrugated Sheets And Trays

PMMI represents its members with involvement in U.S. and International Standards including:

- ISO TC122 Packaging –
- ISO TC 199 Safety of Machinery
- ISO 31000 Risk Management

WG5 Risk Assessment

- EN/ISO 12100:2010; 22100; Safety of machinery
- ISO 14159:2002 Safety of machinery -- Hygiene requirements for the design of machinery

WG8 Control Systems

- EN/ISO 13849-1:2015 Safety of machinery -
- Safety-related parts of control systems
- ISO 13849-2:2012 -Safety of machinery --
Safety-related parts of control systems
- EN/ISO 13850:2015 Safety of machinery --
Emergency stop function
- EN/ISO 13851:2002 Safety of machinery --
Two-hand control devices

**Goal – Harmonization of
U.S. and EN/ISO Standards**



PMMI is Involved in Additional U.S. and International Standards including:

- **RIA 15.06 Robots**
- **B11 Machinery standards**
 - **B11.0 Risk Assessment**
 - **B11.19 Performance Criteria for Safeguarding**
- **NSF/3A 14149-1 Hygienic design for meat and poultry**
- **MH10.4 – US TAG for RFID, Linear, 2D barcodes**
- **ANSI/ASSE Z244.1 Lockout/Tagout**





Networking and tools to facilitate communication between suppliers and end users.

Participate in an exceptional forum for open dialogue between **manufacturers and OEMs** who share a dedication to operational excellence.

Over **250 companies** collaborate on solving common operational challenges.

Develop best practices and protocols for **free** industry adoption.





Executive Council

Josh Becker

Senior Manager, Packaging Systems
The Hershey Company

Wilken Benjamin II

Principal Packaging Equipment Engineer
Rich Products Corporation

Eric Bliss

Sr. Engineering Manager
Blommer Chocolate Company

Brett Butler

Vice President of Plant Operations
Bumble Bee Foods

Ryan Clemens

Packaging Engineering Manager
Great Lakes Cheese Co., Inc.

James Couch

Director of Operational Improvement
Smithfield Foods, Inc.

Margie Custin

General Manager
Mettler Toledo Product Inspection

David Devries

Engineer
Amway

Patrick Donoghue

Market Manager, Consumer Goods
Lenze Americas

David Drum

Principal Engineer
Kellogg Company

Donald Edsall

Business Development Manager
Schneider Electric

Janet Edwards

Vice President of Operations
Musco Family Olive Company

Executive Council (cont.)

Terry Farris

Director of Engineering
Bush Brothers & Company

Greg Flickinger

Sr. Vice President of Operations
Green Thumb Industries, Inc.

Shawn French

*Director of Packaging
Performance & Technology*
Danone North America

Roy Greengrass

*Director of Manufacturing
Engineering*
Impossible Foods

Dana Greenly

National Packaging Manager
ASCO

Mark Hanley

Sr. Asset Reliability Manager
Land O' Lakes, Inc.

Doug Herald

COO
Ameriqua

John Hilker

SVP Manufacturing
The C.F. Sauer Company

Bob Johnston

Sr. Director
Post Holdings

Paul Kafer

Vice President of Engineering
Darigold

Richard Larsen

*Chief Facilities and Equipment
Officer*
Honeyville, Inc.

Bret Mohar

Vice President of Manufacturing
Amy's Kitchen, Inc.

Executive Council (cont.)

Vince Nasti

Vice President of Operations
Nation Pizza Foods

Chris Nutley

President
MSW Packaging

Narinder Pal Singh

Vice President of Engineering
Olam Americas, Inc.

Carol Pritchett

Manager, Core Technologies
Abbott Laboratories

Warren Pruitt

*Vice President of Global
Engineering Services*
Colgate Palmolive

Jim Prunesti

Vice President of Engineering
Conagra Brands

Lisa Rathburn

Vice President of Engineering
Marzetti Company

Jason Robertson

*Director of Business
Development*
CRB

Hugh Roddy

*Director of Automation and
Reliability*
Chobani

Chad Sayles

*Director of Corporate
Engineering*
Hormel Foods Corporation

Paul Schaum

COO
Pretzels, Inc.

Scott Spencer

COO
Island Abbey Foods® Ltd.

Executive Council (cont.)

Don Van Tassle

Bakery Director

Gold Standard Baking, Inc.

Philip Vanasse

Director of Engineering

Land O' Frost, Inc.

Tony Vandenoever

*Director of Supply Chain
Engineering*

Tropicana

Chay Vue

Sr. Director of Engineering
Schwan's Company

Robert Washington

*Director of Market Quality and
Compliance*

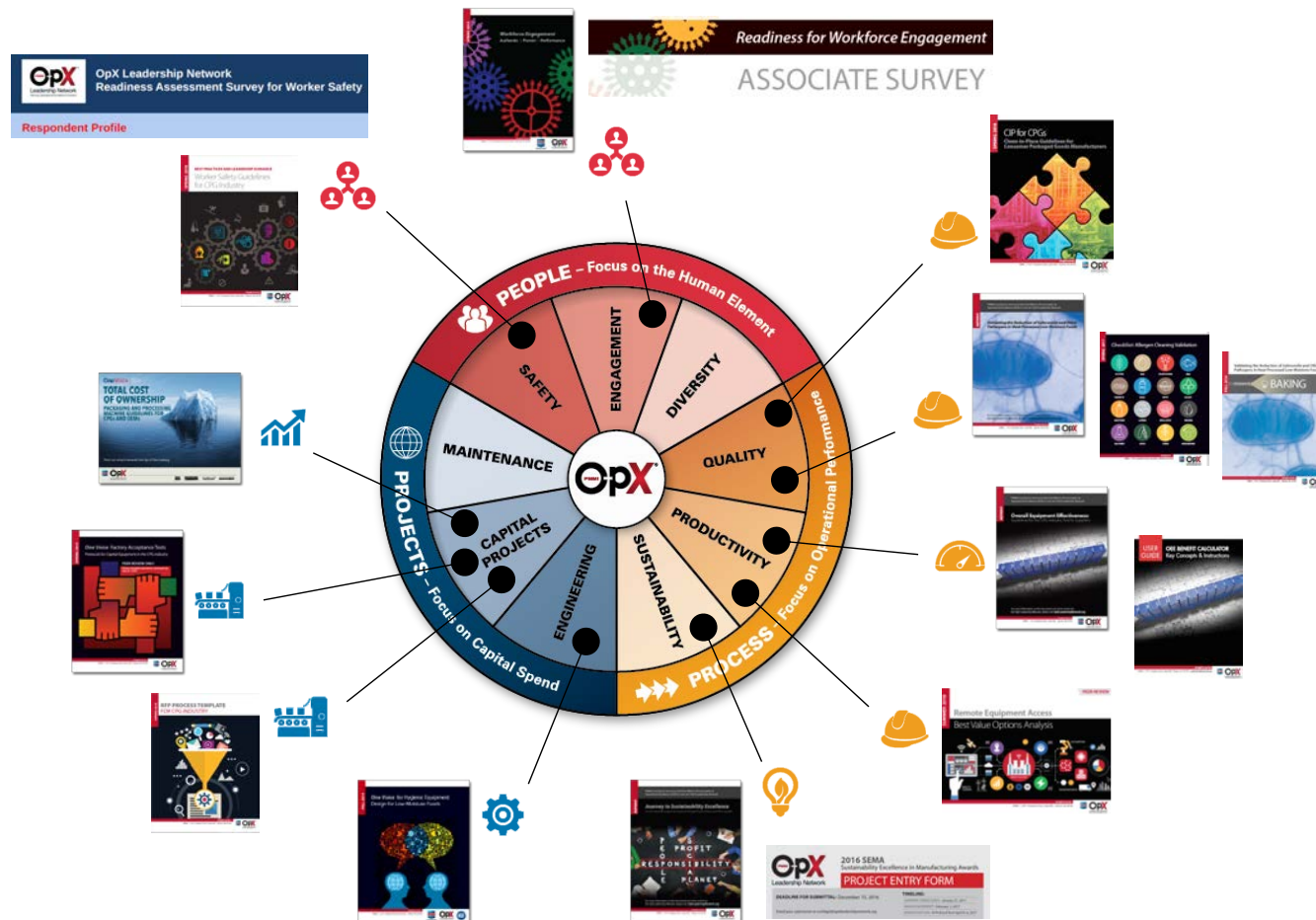
Johnson & Johnson

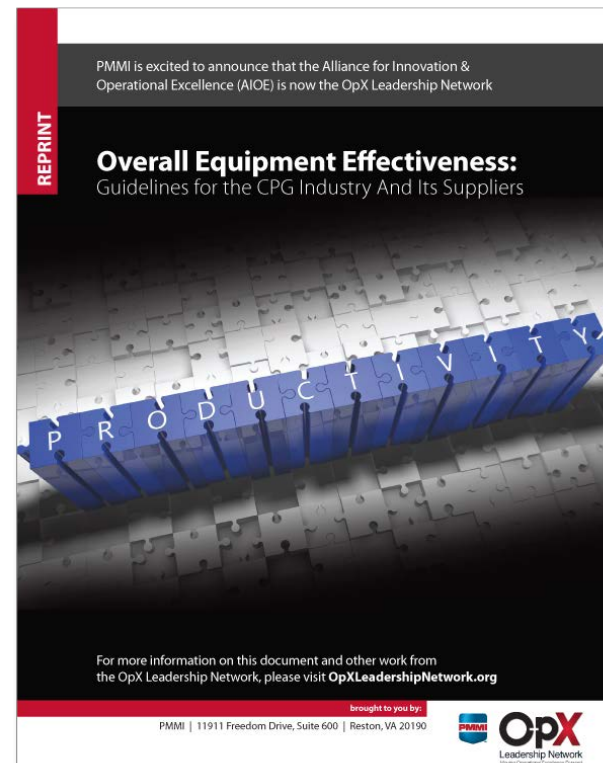
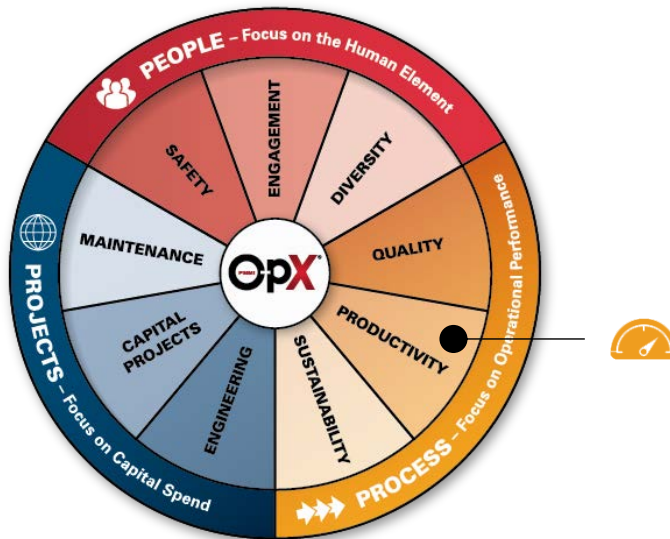
David Watson

*Vice President of Engineering,
Filling, and Packaging*
Campbell Soup Company

Joe Zembas

Director
The J.M. Smucker Company





Calculators

USER GUIDE

OEE BENEFIT CALCULATOR Key Concepts & Instructions

STEP-BY-STEP 3 Tab: 2. Baseline Data

OEE Benefit Calculator®

PURPOSE OF THIS WORKSHEET: Capture key information about baseline quarter line productivity performance and corresponding product cost information. For further explanation of OEE guidelines, terminology, definitions & calculations, please consult the AOE whitepaper "OEE" at this link 222222

Baseline Data Input Worksheet

Baseline Quarter Start Date: 1/1/2014
Baseline Quarter End Date: 3/31/2014

Plant: Line: Prepared by: Analysis Version:

Baseline Production Line OEE

Baseline Production Line OEE	Baseline Quarter Data			Baseline Average Weekly Performance		
	Units	Hours	% of Scheduled Time	Units	Hours	% of Scheduled Time
Unplanned Downtime						
Line Stoppage						
Quality Loss						
Other Loss						
OVERALL EQUIPMENT EFFECTIVENESS						
OPERATING EFFICIENCY %						

DATA ENTERED **AVERAGES PER WEEK**

OVERVIEW & KEY CONCEPTS

This tab capture baseline data on line productivity performance and corresponding product costs

DATA ENTERED in columns D, E & F are converted to **AVERAGES PER WEEK** in columns H, I & J

This workbook keys off of average weekly performance to predict future productivity, labor crawling & costs

OEE Starter Tool®

Developed by the 25+ CPQ companies and their suppliers who are members of the AOE Operational Reliability Solutions Group. Available for free download.

PURPOSE OF THIS WORKSHEET: Gain a rough estimate of the "size of the prize" of potential savings, to determine the potential payout to be gained through OEE measurement and improvement activities

Plant Name: Production Line: Date Prepared: Prepared by:

Data Required to Estimate the "Size of the Prize"

Basic Financial Data	Total	\$/Unit	Data Source
Annual Budget Units Produced			Annual Budget
Annual Budget Line Production Hours			Annual Budget
Annual Budget Production Units/Hour	0		
Annual Budget Raw Material \$/Unit			Annual Budget
Annual Budget Production Labor Wages & Benefits \$/Unit			Annual Budget
Total Raw Material & Direct Labor \$/Unit	\$0	#VALUE!	

Raw material efficiency loss %: Budget Standard Cost Detail

Raw Material Zero-Loss Opportunity \$/Unit: \$0

Target Production Speed in Budget Units per Hour: Standard Operating Procedures

Production Line Efficiency %: 0.0%

Production Labor Zero-Loss Opportunity \$/Unit: \$0

Estimated "Size of the Prize" at Different Levels of Line Efficiency Improvement

10% Reduction in Line Efficiency Loss

Raw material efficiency improves to	#VALUE!	
Production line efficiency improves to	10.0%	
Raw Material Yield Savings \$/Unit	#VALUE!	#VALUE!
Production Labor Savings \$/Unit	#VALUE!	#VALUE!
Total Savings \$/Unit	#VALUE!	#VALUE!

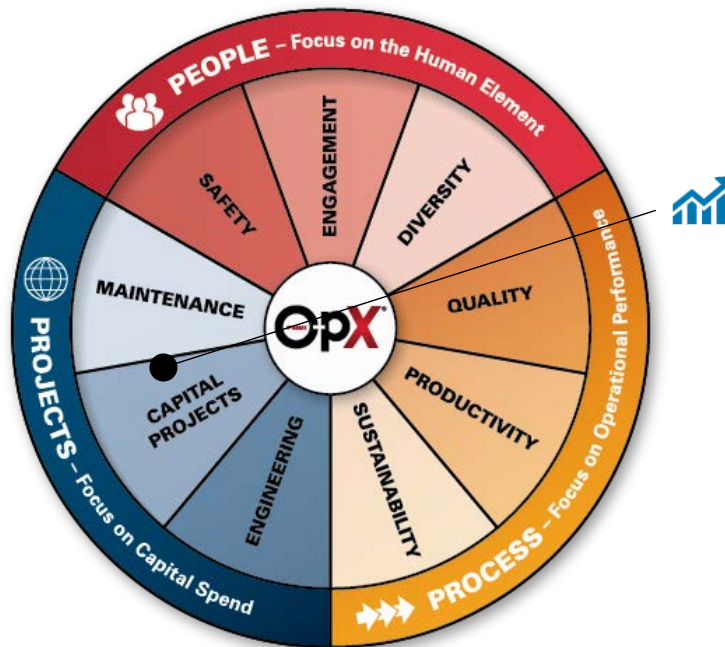
25% Reduction in Line Efficiency Loss

Raw material efficiency improves to	#VALUE!	
Production line efficiency improves to	25.0%	
Raw Material Yield Savings \$/Unit	#VALUE!	#VALUE!
Production Labor Savings \$/Unit	#VALUE!	#VALUE!
Total Savings \$/Unit	#VALUE!	#VALUE!

Target % Reduction in Line Efficiency Loss

Raw material efficiency improves to	#VALUE!	
Production line efficiency improves to	0.0%	
Raw Material Yield Savings \$/Unit	#VALUE!	#VALUE!
Production Labor Savings \$/Unit	#VALUE!	#VALUE!
Total Savings \$/Unit	#VALUE!	#VALUE!

Total Cost of Ownership



Definitions and Guidelines
Checklists





OpX Leadership Network
TOTAL COST OF OWNERSHIP CHECKLIST

Visit opxleadershipnetwork.org for many more valuable resources, including a [playbook](#) on how to get the most out of your Total Cost of Ownership Checklists.

Characteristic (direct costs or cost implications)	Information Provided By:	Status on Track? Y/N	Importance to Project Success H-M-L
Example		Y	

*The level of detail should be discussed and agreed upon by CPG and OEMs.

Characteristic (direct costs or cost implications)	Information Provided By:	Status on Track? Y/N	Importance to Project Success H-M-L
Engineering Costs (External)	CPG Internal		
Health, Safety & Environmental (HSE)	CPG provides their HSE requirements and the OEM need to provide their information as it applies to the CPG. Both come to agreement.		
Specific Controls	OEM provides their standard. CPG provides their requirements.		
Changeover Options	CPG provides the expected rate and requirements for changeovers. OEM provides design capabilities.		

Notes:

opxleadershipnetwork.org

OpX Leadership Network
TOTAL COST OF OWNERSHIP CHECKLIST

Visit opxleadershipnetwork.org for many more valuable resources, including a [playbook](#) on how to get the most out of your Total Cost of Ownership Checklists, on both Acquisition and Operations sides.

Characteristic (direct costs or cost implications)	Information Provided By:	Status on Track? Y/N	Importance to Project Success H-M-L	Cost Basis
Example: Maintenance Cost	OEM	Y	M	<ul style="list-style-type: none"> Identify Anticipated Equipment Life Calculate cost basis per year of the Anticipated Equipment Life Provide rationale for calculations

*The level of detail should be discussed and agreed upon by CPG and OEMs.

Characteristic (direct costs or cost implications)	Information Provided By:	Status on Track? Y/N	Importance to Project Success H-M-L	Cost Basis (see above)
Defect (designed loss)	OEM provides machine efficiency, defects per "X" rate. CPG provides minimum requirements			
Scrap (designed waste)	OEM provides machine efficiency, scrap per "X" rate. CPG provides minimum requirements			
General Start-up expenses	OEM and CPG discuss requirements			
Cost of procurement of materials	OEM and CPG discuss tolerance of materials needed			
Throughput machine performance reliability	OEM provides machine efficiency (OEE, design and planned). CPG provide their minimum requirements.			
Rework	Unintentional loss, needs to be extrapolated by CPG based upon its experience			

Notes:

opxleadershipnetwork.org Total Cost of Ownership Operating Cost Checklist | p. 8

REQUEST FOR PROPOSAL

Guidelines Help Deliver Capital Project Excellence



THE CHALLENGE

Clarifying project requirements and minimizing costly misunderstandings between CPGs and OEMs through a rigorous Request for Proposal (RFP) process.



THE SOLUTION

A tool that enables both OEMs and CPGs greater understanding of project requirements, resulting in better outcomes for all stakeholders involved in the process of specifying and executing capital projects.

SEVEN KEY STEPS FOR A CAPITAL PROJECT RFP

1 INVITATION TO PARTICIPATE

CPG provides the bidder with a "high level" abstract of the project, requirements and purpose.

2 COMPANY INFORMATION

CPG provides relevant information of its company, site location and primary contact information.

3 INSTRUCTIONS AND SCHEDULE TO COMPLETE RFP

CPG provides the bidder with specific instructions and an overview of the timeline to respond.

4 DOCUMENTS SUMMARY

CPG provides a summary of the documents that are the basis of this RFP.

5 PROJECT INTRODUCTION

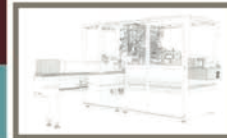
CPG provides a more detailed description of the equipment's requirements.

6 PRODUCT AND PACKAGE DESCRIPTION

CPG provides the bidder with input on product/package final material parameters.

7 PERFORMANCE SUCCESS CRITERIA

Quality, rate, validation and performance requirements are measured.



STREAMLINE YOUR RFP PROCESS

Download the RFP Guidelines and Template and find out how to connect with the OpX Leadership Network at industry events by visiting OpXLeadershipNetwork.org.

Find the OpX Leadership Network group on [LinkedIn](https://www.linkedin.com/company/opx-leadership-network).



MANAGED REMOTE ACCESS: Direct VPN

BENEFITS:

- Leverage External Partners
- Speed to Solution

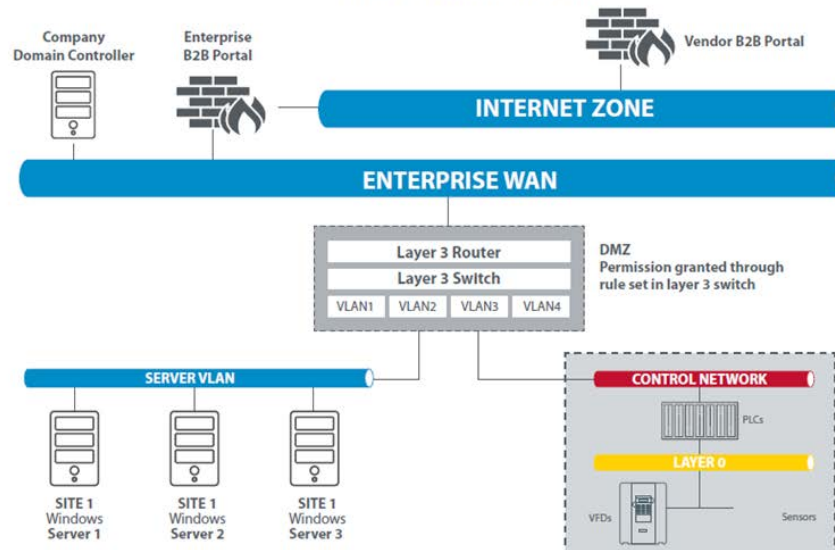
RISKS:

- Password Management
- Support Overhead
- Updating Users

HIGH LEVEL VIEW

TECHNICAL VIEW

B2B CONNECTIVITY



REMOTE EQUIPMENT ACCESS
5 vetted best practices

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Executive Leadership Conference

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SAVE THE DATE:

April 18 – 21, 2020

**JW Marriott Marco Island
Marco Island, FL**

- 160+ executives from 100+ PMMI member companies





PMMI Roadshow

Recently held at B&R Automation Corp., Roswell, GA



pmmi.org/roadshow

*Total Cost of Ownership, Factory Acceptance Test, Overall Equipment Effectiveness





is your answer.

2019 Regional Dinners

July 18, 2019

Royal Canadian Military Institute
Toronto, Canada

August 13, 2019

Lake Elmo Inn
Lake Elmo, Minn.





is your answer.



November 4-6, 2019
Cincinnati, OH

Includes general sessions, strong networking, breakout discussions and a *plant tour* hosted by R.A Jones.



a coesia company

More than 300 professionals attended in 2018 from over 150 member companies

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is your answer.

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- Annual Meeting will be held in Cincinnati, Nov. 4-6

pmmi.org/emerging-leaders-network/awards



On the Rise
AWARDS

Produced by
PMMI Emerging
Leaders
Network



“Emerging leaders are members of your team that show dedication to their company and to the packaging and processing industry through a displayed commitment to learning and professional development.”

PMMI’s Emerging Leaders connect through:

- PMMI Member Meetings
- Networking Receptions at PACK EXPO
- LinkedIn Group



Committees

Members have an opportunity to support the industry by volunteering their time and expertise on one of these committees:

- Business Intelligence
- Education
- Workforce Development
- Global Marketing
- Membership
- Show
- Emerging Leaders
- Strategic Planning
- Industry Relations
- Program Planning





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- Your sales team
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