Half-Year Review 2018

RELIABLE ON-SCHEDULE KNOWLEDGEABLE HIGH-QUALITY

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AGENDA

PLIBRICO HALF-YEAR REVIEW AUGUST, 2018

- Our Commitment To You
- Half-Year 2018 YTD Financial Performance
- Product & Quality Update
- Technology Update
- Price Adjustment Notice
- Succeeding Together 2018 Conference
- Marketing Update
- Summary and Next Steps

OUR COMMITMENT TO YOU

Supporting Channels & Markets

Deeper Investment in the Relationship

Continuous Innovation & Improvement

HALF-YEAR 2018 YTD FINANCIALS

HALF-YEAR 2018 YTD FINANCIALS

HALF-YEAR SUMMARY

- 2018 started off strong however, we have run into some headwinds
- Material sales showing signs of market softness
- Couple of losses and challenging projects in Construction have put us behind
- Tariff's have Helped? or Hurt? ... Yes

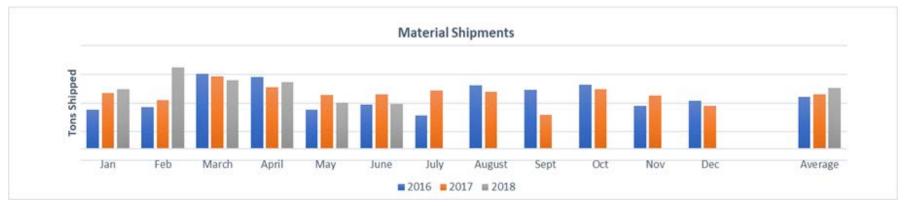
HALF-YEAR 2018 YTD FINANCIALS

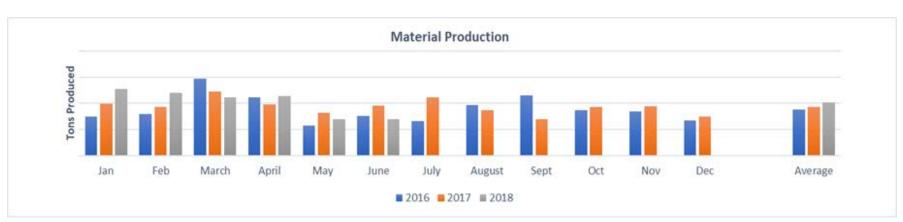
HALF-YEAR SUMMARY

- Total Company Financials
 - Revenue Off 5%
 - Double down on core initiatives
 - Keep focused on full year revenue goal of \$33.6M
- Material Sales
 - Revenue Up 9%
 - Tons Produced Up 4%
 - PliPartners sales ahead of budget 6%
- Construction Sales
 - Revenue Off 10%
 - Indications of customers delaying PM
 - Quote activity levels very strong Big projects in pipeline

MATERIAL SHIPMENTS AND PRODUCTION

AVERAGE VOLUME UP YOY





2018 A Year of Growth – Operational Plan

• Operational Excellence Initiatives

- Complete Office IT infrastructure build-out and ERP implementation
- Develop and execute sourcing strategy
- Develop internal management controls and process for all inventory
- Company wide talent assessment and develop succession plan
- Construction Execute branch level operational excellence initiatives

2018 A Year of Growth – Operational Plan

- Sales Expansion Initiatives
 - Expand territory of partner into Europe
 - Distribution agreement to serve Spain, Poland and Northern European region
 - Grow West Coast revenue by providing local inventory
 - Rebuild go-to-market skill set leadership, talent, process and tools
 - Grow construction revenue by executing the branch level strategies
 - Increase revenue through in-house marketing expertise development
 - Lead generation, nurturing, and conversion

PRODUCT & QUALITY

UPDATE



NEW PRODUCTS

IN DEVELOPMENT

PRODUCTS

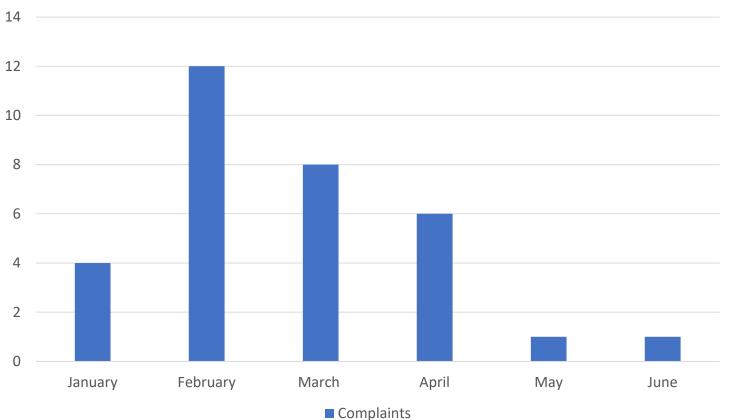
- Plicast Si-Bond SP 90
- Plicast Al-Tuff Floor guard HT
- Sparcon 32-80g
- HW HPV 110 gun mix

					Line			
	compressor	1/4	1/2	Full	Pressure	Gunner	Material	Trial
	<u>size</u>	open	<u>open</u>	<u>open</u>	(psi)	<u>Rate</u>	comments	<u>comments</u>
A1	975		YES (1)	YES (2)	38,42	7	Pligun HyMOR 8A	
A3	975	YES (5)	YES (3)	YES (4)	60,60,60	6	Trial mix #2 for Florida, abrasion resistance	
A2	975		YES (6)	YES (7)	60	4	Trial mix for Florida, abrasion resistance	
B1	975		YES (8)	YES (9)	65	7	Trial mix for BBMI, A/T version of Pligun HyMOR 8A	
C1	975		YES (10)	YES (11)	60	7	Trial mix for BBMI, 70% version of A2	Most Plibrico mixes were similar
31-80 G	975		YES (12)	YES (13)	55,63	8.5	Sparcon 32-80 G, Standard mix for trials A, B, C	Gunner liked this a bit better
D1	975		YES (14)	YES (15)	60,63	5	Trial mix #1, 110 MW gun mix	
110 G	185		YES (16)	YES (17)	40,40	5	Standard mix for 110 gun trials	975 Compressor overheated.
D2	185		YES (18)	YES (19)	40,40	6	Trial mix #2, 110 MW gun mix	best of 110 mixes
D3	185		YES (18)	YES (19)	40,40	4	Trial mix #3, 110 MW gun mix	inconsistent
E1	185			YES (20)	45	9	Pligun Tuff mix with A/T additive	
HR 2700	185			YES (21)	43	8	QUALITY: HyREZIST 2700 KK, to check rebound rate	Gunner: 5-7% rebound
Aarcon 2	185			YES (22)	43	4	QUALITY: gunnability check for Aarcon 2	Difficult to gun
3000 G	185			YES (23)	43	6	TECH SERVICE: Rescobond 3000 G	
UNO MG	185			YES (24)	45	7.5	TECH SERVICE: Exoset UNO MG 18FEB26	Gunner Likes UNO better
UNO MG	185			YES (25)	45	7.5	TECH SERVICE: Exoset UNO MG 18JUL05	
UNO AG	185			YES (26)	45	8	Exoset UNO AG 15MAY21, Salem request to gun	

PLANT QUALITY

From Q1 Update – experienced increase in quality complaints

- Implemented root cause and corrective action process
- Developing plant wide SOP's and implementing training program.



Corrective Action Requests

TECHNOLOGY

NAV UPDATE

NAV UPDATE

LIVE AS OF JULY 9, 2018

- In May we shifted our focus to launching material manufacturing and operations in July
- Live as of July 9, 2018:
 - Processing Orders
 - Issuing PO's
 - Production Scheduling
 - Managing Inventory
 - Receiving Money
 - Paying Bills
- Construction Offices Scheduling launch in January 2019
 - Provides time for additional learning and training sales orders, purchasing, invoicing, payroll
 - Lessons learned from material manufacturing and operations

NAV UPDATE

LIVE AS OF JULY 9, 2018

• How does this impact You?

- Inventory
 - Full inventory visibility across all locations PliPartner, Construction Operations, Manufacturing
 - Potential to consume from any location
- Communication Response
 - More responsive information exchange Invoices, Material Order and Transfer Acknowledgments
- Process Improvements
 - All geared for quicker, more accurate and responsive, information and order fulfillment

PRICE ADJUSTMENT

SEPTEMBER 1, 2018



- Due to macroeconomic events, Plibrico has announced a price adjustment on refractory materials, which will become effective September 1, 2018.
- The tightness of mineral availability from China has had an impact on both foreign and domestic supplies and pricing
 - On average, as of January 2018, refractory raw material prices have increased by over 20% as compared to January 2017
- At the beginning of 2018 Plibrico decided to hold its pricing steady anticipating mid-year relief
- Unlike past mineral supply cycles, this time the changes appear long lasting
- Plibrico is no longer able to absorb the significant cost increases

- Advanced notice of price adjustment was released back in June
- The official notice of price adjustment will be released August 1 with the adjusted prices going into effect on September 1, 2018
 - Updated price list was released with notification
- Price adjustment execution:
 - PliPartner orders received and entered into the Plibrico system on August 31, 2018, eod, or earlier will receive current pricing
 - PliPartner orders received and entered into the Plibrico system on September 1, 2018, or later will receive adjusted pricing
 - Irrespective of shipment date, all current price shipments must be completed by December 31, 2018
 - Consignment Orders

- Price Adjustment corresponds with raw material composition and market informed pricing
- On average, materials will increase by about 5%
 - Not across the board increase; some up, some down, some no change
- For Example:
 - Plicast Al-Tuff 40 current price \$1.097/lb, has been adjusted to \$1.184/lb
 - A 8% 9% increase for this product and a few similar materials
 - This is a specialized product bases on high purity alumina, and the market is experiencing up to 27% increases for similar products
 - Plibrico 60 AB current price of \$0.460/lb, has been adjusted to \$0.483/lb
 - Price adjusted around 5% for this product and a few similar materials
 - The market is seeing increases for bauxite and mullite-based products like these of up to 17%

- For Example:
 - Plicast LWI 24 current price of \$0.374/lb, has been adjusted to \$0.385/lb
 - A 3% adjusted price for this product and a few similar materials
 - Market increases for insulating monolithics like these have been up to 10%
 - Plicast HyMOR 3100 Special KK current price of \$0.591/lb *no change in price*
 - Pligun Tuff Mix current price of \$0.395/lb *no change in price*
 - Pligun SiC HP8 current price of \$1.798/lb, has been adjusted down to \$1.20/lb
 - Despite some competitors increasing the pricing on SiC products like these by almost 16%, thanks to some valuable feedback from our partners
- Additional questions please contact your Plibrico Territory Manager or Norm

SUCCEEDING TOGETHER 2018 CONFERENCE AWESOME EVENT!



A UNIQUE APPROACH



Succeeding Together 2018 Conference, sponsored by Plibrico

October 11 – 13, 2018

Gaylord Opryland Resort in Nashville, TN

The goal of the Succeeding Together 2018 Conference is to increase attendees business success level through:

- Sharing new and useful business and industry knowledge
- Deepening the understanding of Plibrico's value added proposition
- Strengthening the partnership and working relationship within the PliPartner Network

PLIPARTNERS

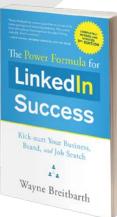
The content packed agenda includes sessions that are structured to be highly relevant and actionable, with information attendees can begin to use in the field immediately. At the end of the conference attendees should:

- 1. Leverage Plibrico value added services to a greater degree
- 2. Better navigate challenges, opportunities and pitfalls of refractory installation and maintenance
- 3. Begin developing an effective LinkedIn strategy to accomplish business development goals
- 4. Increased skills and knowledge in corundum growth prevention, bake-out and material selection
- 5. Leave the conference learning two new subjects and two new ideas

CONFERENCE **SPEAKERS**



- Wayne Breitbarth is the CEO of Power Formula LLC He is an experienced businessman, speaker, and author who has shared his passion for social media with more than 40,000 professionals
- He works with companies to develop a comprehensive strategy for using LinkedIn to increase sales, raise brand awareness, recruit employees and reduce recruiting fees, and discover new markets for products and services.
- Wayne is a CPA, holds an MBA from Marquette University, and has put his expertise into his critically acclaimed book The Power Formula for LinkedIn Success: Kick-start Your Business, Brand, and Job Search, LinkedIn published by Greenleaf Book Group.





Webinar - The Power Formula for LinkedIn Success

Thursday, September 20 at 10:30cst/11:30est - Presented by Wayne Breitbarth

During the 1 hr webinar you will get fascinating information on:

- Using your unique experience and existing relationships to harness the full power of LinkedIn
- Begin developing a strategy for how you can most effectively use LinkedIn to accomplish your business development goals
- Create a compelling profile that will allow people to find you
- How to keyword optimize your profile for increased search ranking
- Understand how to search for prospects on LinkedIn

CONFERENCE SPEAKERS



- **Ruth Engel** specializes in developing refractory solutions by addressing usage, installation and theoretical parameters for a smooth operation and improved refractory life
- She thoroughly familiar with all refractory systems: from alumina (alumino-silicate, alumina-SiC-C), to basic (magnesia, dolomite, mag-chrome), zirconia, alumina-magnesia-carbon, silica, either in brick or monolithic form
- Her extensive use of microscopy to determine refractory and process interactions has led to novel solutions in many different areas
- Ruth Wayne has a BSc. and Masters in Geology from the University of Michigan, she has developed and conducted numerous client and technical societies continuing education and training seminars - further, she has authored many publications and industry articles

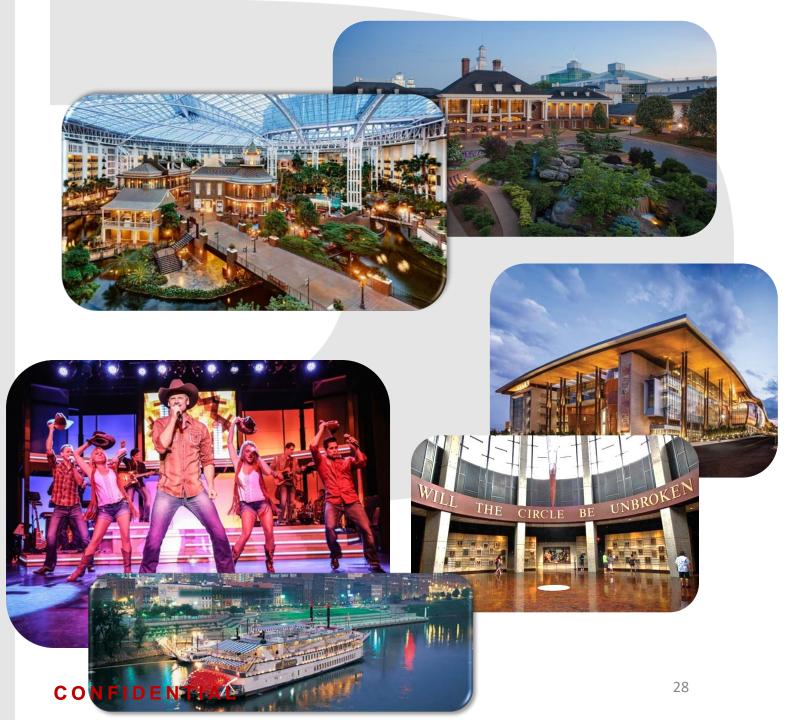
CONFERENCE AGENDA

-		Day 1 - Thursday, October 11, 2018				The Challenge
		1:30	3:00	Installation and		
Start	Finish	Agenda	Leader	3:00	3:30	Networking Br
12:00	1:00	Arrival - Welcome & Lunch				How to Sink A
1:00	1:30	Focus. Roadmap. Vision Plibrico Driving Growth For You	Brad Taylor, President & CEO	3:30	4:00	to Ensure Bake
1:30		Plibrico Departmental Updates		4:00	4:30	The Hot 30 in 3 About In 2018
2:00	3:00	Moving At The Speed of Life: Lessons Learned From Interesting Refractory Cases	Jeff Beetz, GM Operations Norm Phelps, VP Sales	6:30	10:00	Dinner - Gener
3:00	3:30	Networking Break	-	Charle	et a ta b	
3:30	4:00	Meeting Tomorrows Needs: Optimizing New Product Development for Your Success	Plibrico SME	Start 8:30	Finish 9:30	Hosted Breakf
4:00	4:30	Not Just A Buzzword: Co-marketing Strategies and Opportunities for You	Pam Gaul, Director Marketing	9:30	-	Bus Departs fo
		Cut Through The Clutter: Your Guide To Top Plibrico		10:00	12:30	Country Music
4:30	5:30	Refractory Material Uses and Why	Plibrico SME	12:30	2:30/3:00	Lunch - Wildho
6:30	8:30	Welcome Reception	Brad Taylor, President & CEO	3:00	-	Bus Departs ba

	Day 2 - Friday, October 12, 2018								
	Start	Finish	Agenda	Leader					
	8:00	9:00	Hosted Breakfast	Brad Taylor, President & CEO					
	9:00	10:30	5C's Using LinkedIn to Grow Your Business	Wayne Breitbarth, Speaker					
	10:30	11:00	Networking Break	-					
	11:00	11:30	Love the Problem: Conquering Your Customers Corundum Growth and Refractories	Norm Phelps, VP Sales					
	11:30	12:00	Orchestrating Excellence: Your Pathways to Mastering Operational Greatness	Jeff Beetz, GM Operations					
	12:00	12:30	The Path Ahead: Engagement For Lasting Successful and Profitable Relationships	Norm Phelps, VP Sales					
	12:30	1:30	Connection Lunch	-					
	1:30	3:00	The Challenges, Opportunities and Pitfalls of Refractory Installation and Maintenance - Controlling Your Risk	Ruth Engel, Speaker					
	3:00	3:30	Networking Break	-					
& CEO	3:30	4:00	How to Sink A Refractory Project; Proven Methodologies to Ensure Bake-out Failure	Plibrico SME					
	4:00	4:30	The Hot 30 in 30: The Hottest Trends You Need To Know About In 2018	Plibrico Host					
ions les	6:30	10:00	Dinner - General Jackson Show & Boat Cruise	Brad Taylor, President & CEO					
les			Day 3 - Saturday, October 13, 2018						
	Start	Finish	Agenda	Leader					
	8:30	9:30	Hosted Breakfast	Brad Taylor, President & CEO					
keting	9:30	-	Bus Departs for the Country Music Hall of Fame	-					
	10:00	12:30	Country Music Hall of Fame - Private Activity & Entrance	Plibrico Host					
	12:30	2:30/3:00	Lunch - Wildhorse Saloon & Line Dancing	Brad Taylor, President & CEO					
& CEO	3:00	-	Bus Departs back to the Gaylord Opryland Resort	-					

CONFERENCE FUN





MARKETING

ACTIVITY UPDATE

VOICE OF CUSTOMER

GOAL / OBJECTIVE

- Obtain a better understanding of what attributes are important to the audience and the challenges they face daily
- Better understand Plibrico's brand value, awareness of the brand and products in the marketplace
- How the audience defines value and their likelihood of growing and staying loyal
- In their own words, how survey participants think, feel, view Plibrico in the marketplace
- Get a solid understanding of how we can help our audience be successful in 2018

VOC – Partner Network - PliPartner

Key Highlights:

- Most PliPartners have only heard of Plibrico discussed by colleagues a few times in the past six months
- Harbison Walker is the company that comes to mind most often when thinking about monolithic refractory material
- The things PliPartners like best about Plibrico include: Customer Service Questors Relationships Lead Brand Ease of Doing Business Quality Products Materials Plibrico Suppler Responsive
 The things PliPartners would most like to change: Pricing Sales Products Material
 How can Plibrico help the PliPartners win new business: Consistent Refractory Products Line Marketing Pricing
 Material Product Pricing Leads Market Support
 NPS score of 44
- Socially active PliPartners use LinkedIn, Google+, and Facebook spend on average 6.5 hours per week on social media
- The Plibrico website fits their need but is just average with an NPS score of 20
- Top business challenges include:
 - Pricing
 - Acquiring new customers and increasing sales
 - How to best improve our own marketing, expansion of name recognition

Customer Feedback

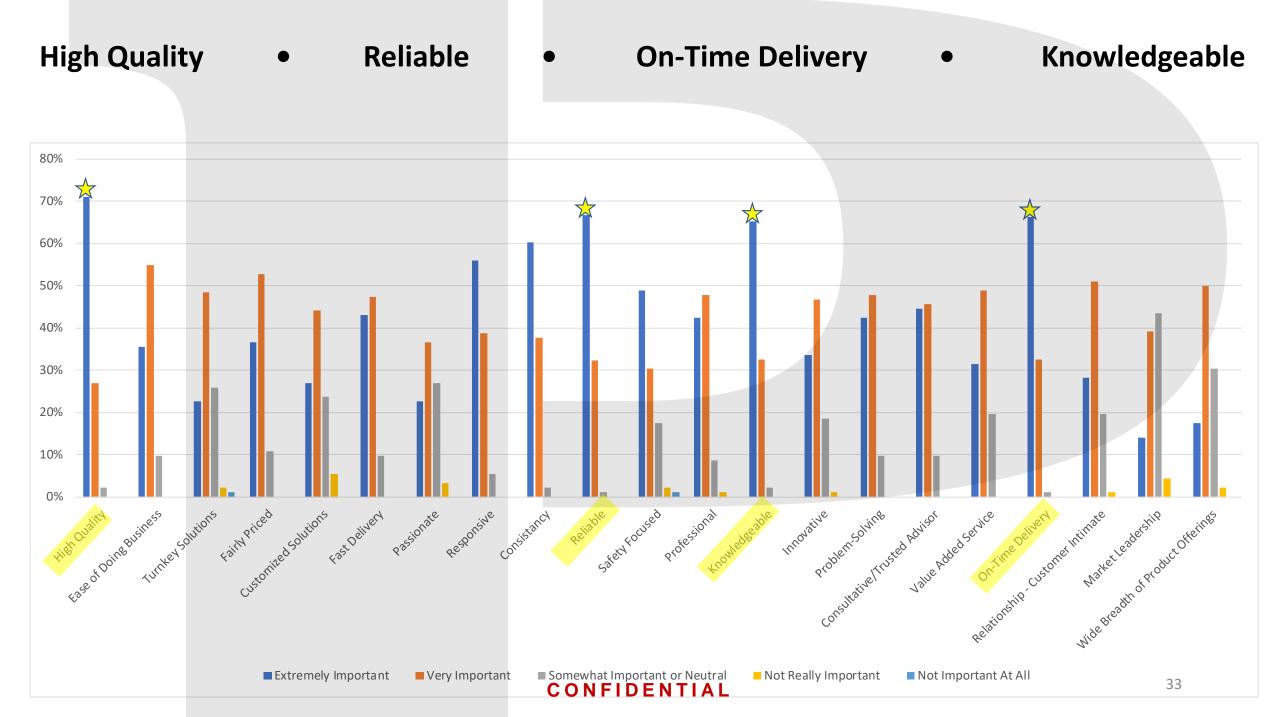
"Plibrico set the standard in refractory installation for us, and many others. In my opinion, their plastic refractories are still some of the best."

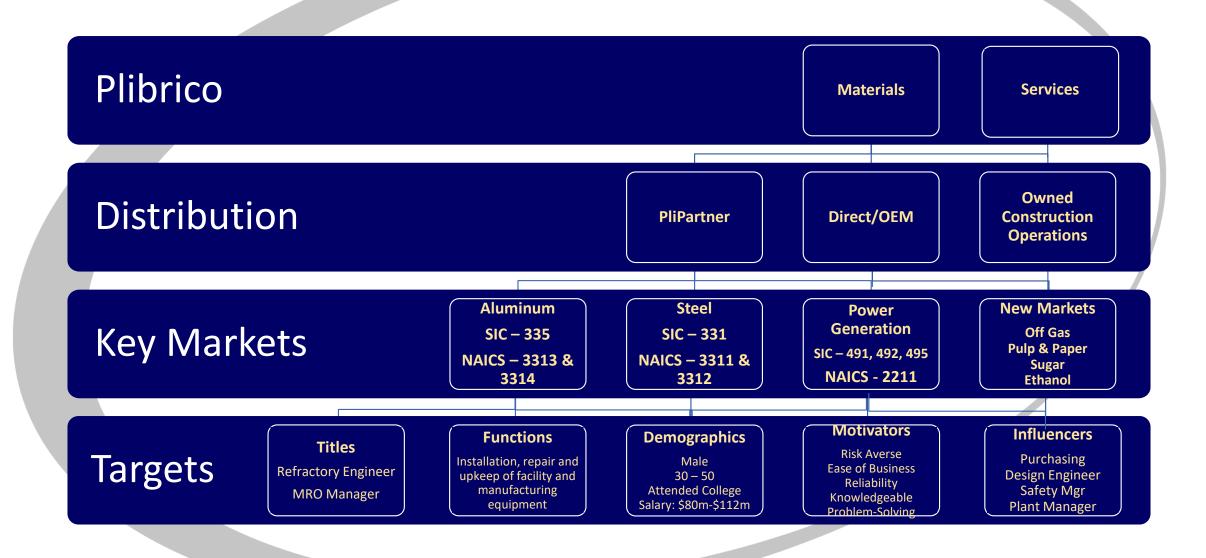
"Personalized service and valued expertise"

"Longevity of the brand, recognition in the marketplace, willingness to consign materials, engineering capabilities, respected technical department, familial environment."

"I knew who I could call for information or pricing and delivery needs whenever I needed. Now I don't know my contact." Key Highlights:

- Plibrico has a strong brand recognition
- The majority of customers, over 60% have not heard of Plibrico within the past six months
- Harbison Walker is the company that comes to mind more than twice as often when thinking about monolithic refractory material
- Socially active they use LinkedIn and Facebook, and spend on average 3.5 – 6.5 hours per week on social media
- Top business challenges include:
 - Pricing
 - Hiring a dependable work staff
 - Acquiring new customers and increasing sales
 - How to best improve our own marketing, expansion of name recognition





The marketing goal for 2018 is to build a strong structurally sound foundation that can support the market awareness and engagement activities required to:

- build a relationship with our audience
- connect, motivate and engage customers/prospects
- build and convert pipeline of material and service prospects

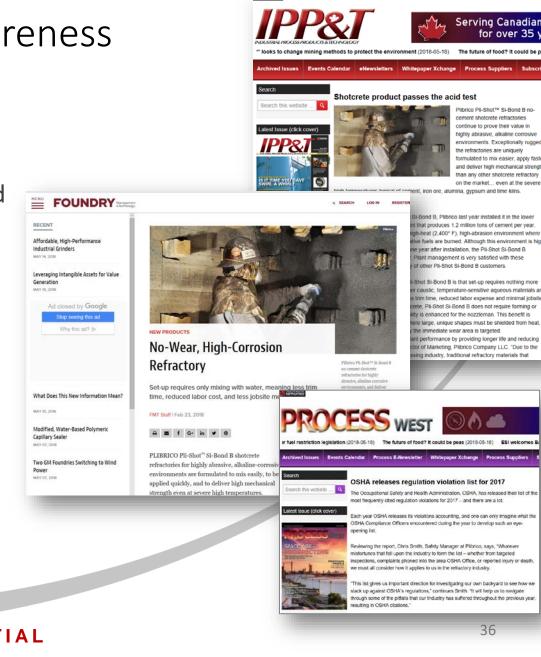
With the net result of driving increases in Plibrico material and services revenue.





Building Brand Awareness

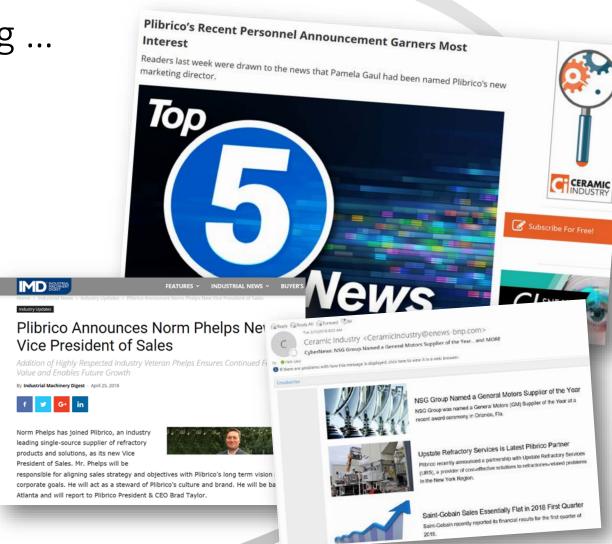
- Identifying Key Media Outlets for Focused Market Approach
- Thought Leadership Market and Refractory Educational Content
- Editorial Calendar
 - 75 Domestic Media Outlets
 - 35 Local Media Outlets
 - 30 International Media Outlets
 - Digital Distribution
 - Social Media
 - Websites



NETWORK

And It Is Working ...

- Brand Awareness
 - Media Reach
 - 2017 0
 - Q1-2018 20
 - Social Impressions
 - 2017 15,301
 - Q1-2018 18,231
- Relationship Building
 - Total Followers
 - 2017 393
 - Q1-2018 511
 - Engagement
 - 2017 197
 - Q1-2018 227



More Exciting Marketing Activities

- The Plibrico Mixer Q3
 - Released in August
- Plibrico Service Opportunity Happy Cart Day
 - St. Jude Children's Research Hospital
 - Help put smiles on some very deserving kids
- Industry Articles
 - Safety Ergonomics in Refractory Construction
 - Best Practices in Refractory Maintenance and Safety



SUMMARY NEXT STEPS

COMMITTED TO GROWTH

OUR PROMISE TO YOU



• We are dedicated to You - our Partners

Plibrico understands that we may not be your only refractory supplier

- Less friction a one company approach
- Provide you with exceptional resources and support
- Plibrico will operate with full transparency
- Continued focus on people, processes and innovation
- Business growth and investment through the lens of our strategy

- 1. One Company
- 2. Live the core values and stay the path
- 3. Grow the business together
 - Work collaboratively across the entire business
- 4. Put a smile on a kids face participate in Plibrico Happy Cart Day
- 5. Accept invitation and attend the LinkedIn webinar

QUESTIONS? - What else do you need for Success?

Next Steps

Thank You For Your Time Today

PLIBRICO

RELIABLE ON-SCHEDULE KNOWLEDGEABLE HIGH-QUALITY

Half-Year Review 2018



Vision The trusted source for refractory solutions.

To deliver profitable, sustainable growth and investment returns by developing, manufacturing, and selling monolithic refractory materials to Plibrico owned and independent installation partners and OEM's throughout North America, and by selling refractory installation and maintenance services to industrial companies in Florida, Ohio, New York, West Virginia, Pennsylvania, Nebraska, Iowa, South Carolina, Alabama, and Georgia. To safely maximize the efficiency, production up time, and safety of our customers' thermal processing operations and capital equipment.

Purpose



Core Values

Honesty, Integrity, Trust and Respect We trust and respect each other-even when we disagree. Our integrity is important to us. We do not compromise it. We believe in doing the right thing.

Safety

We share a personal and professional commitment to protecting the safety and health of our employees, customers and the people of the communities in which we operate.

Positive Attitude

We exhibit a "can do" attitude as we perform our responsibilities and interact with our colleagues and customers.

Fairness

We commit to being fair to our customers, suppliers, employees and shareholders.

Customer Driven

While the customer may not always be right, they are our customer and without them we wouldn't exist. By operating within the framework of our core values, Plibrico and its employees will go out of our way to do what's right.

Employee Focus

We will provide our employees with opportunities to learn and grow personally and professionally. Teamwork, collaboration and accountability will be a priority and we will encourage the expression of new ideas to improve the effectiveness of Plibrico.