Abakan

Materials. Technology. Performance.

OVERVIEW

Disclaimer

DISCLAIMER

Abakan does not, as a matter of course, make public forecasts or projections as to future financial performance. However, in 2014, due to the pace of business development, management determined to publish certain prospective financial information that projects future financial performance with a view towards keeping those interested in the Company's development abreast of our expectations.

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None of these projections were prepared with a view towards public disclosure though same were prepared on a reasonable basis to reflect the best estimates and judgments available as of the date of preparation to the best of management's knowledge and belief, to indicate the expected course of action and the expected future financial performance of the Company. However, these financial projections are not fact and should not be relied upon as being indicative of future results, and readers are cautioned not to place undue reliance on these financial projections. Neither our independent auditors, nor any other independent accountants, have compiled, examined, or performed any procedures with respect to the financial projections furnished herewith, nor have they expressed any opinion or any other form of assurance on such information or its achievability, and they assume no responsibility for, and disclaim any association with, these financial projections.

While presented with numeric specificity, the financial projections furnished herewith reflect numerous important assumptions, many of which are highly subjective, made by our management in light of business, industry and market conditions at the time of preparation. The assumptions used in preparing the furnished financial projections are included with the projections.

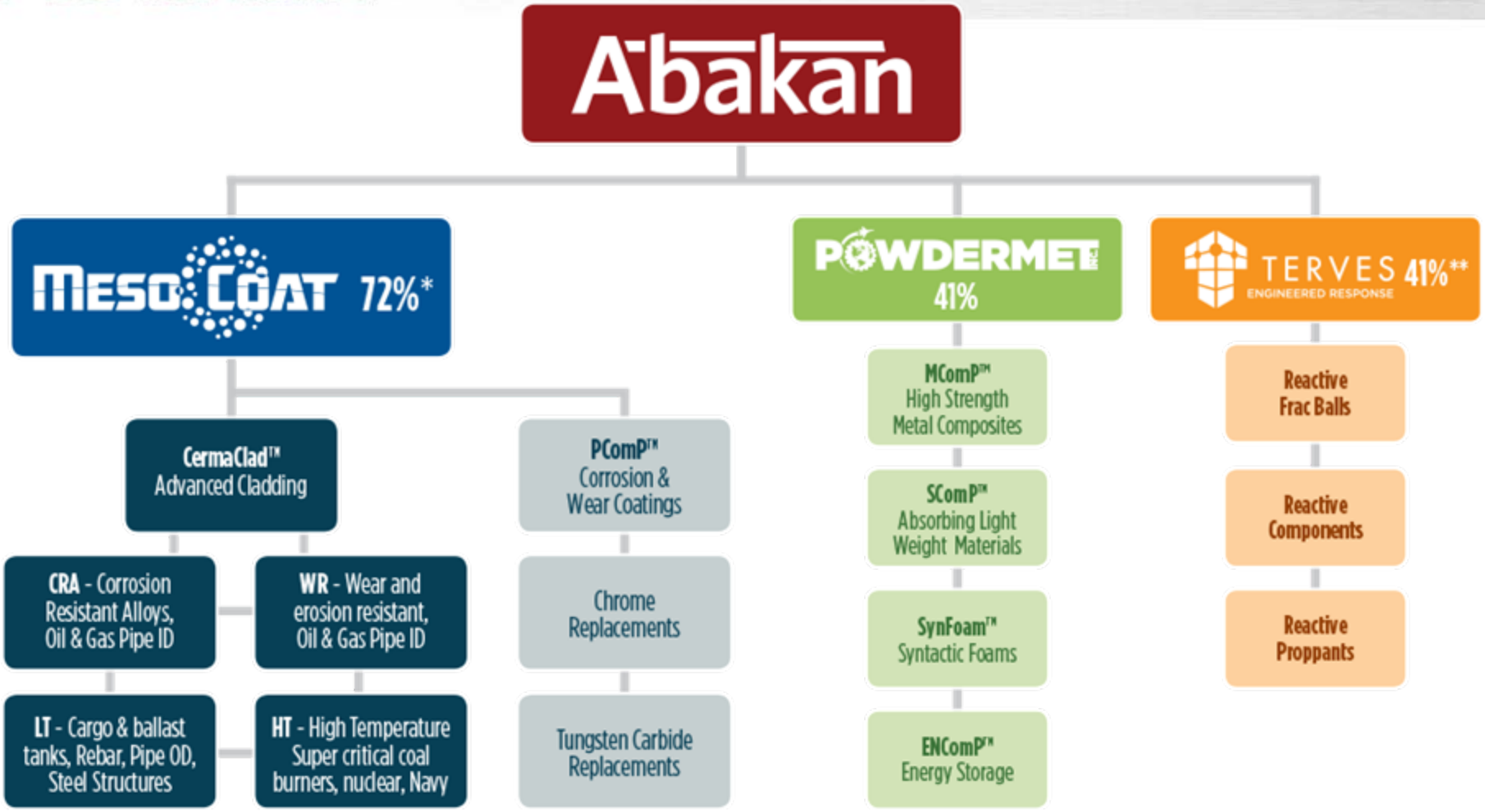
Important factors that could cause actual results to differ materially from such forward-looking statements include, but are not limited to (i) the emergence of new competitive initiatives that result from rapid technological advances, (ii) changes in business conditions and volatility or uncertainty in the markets that we serve, (iii) our ability to execute our business plan, (iv) the extent of adoption of our products and services, (v) fluctuations in the market and pricing for our products and services, (vi) the other risk and uncertainties described in "Risk Factors" in our Annual Report on Form 10-K filed with the Securities and Exchange Commission ("SEC") on August 29, 2013 and our subsequent Quarterly Reports on Form 10-Q filed with the SEC on October 15, 2013 and January 9, 2014. Such forward looking statements are only as of the date made, and we have no current intention to update any forward-looking statements.

Table of Contents

Introduction

- **Through its subsidiaries, Abakan makes:**
  - Metals last longer with high performance, lowest life cycle cost metal coatings and claddings
  - Metals lighter and stronger by using engineered nanocomposites
- **Verified by Independent Third Parties**
- **Each of the three primary product lines sell to several multi-billion dollar markets**
- **Multiple Global Awards**
- **The Smallest Environmental Footprint**

Corporate Structure



*52.5% direct, 19.5% indirect ownership.

**Terves is 100% owned by Powdermet, therefore Abakan has a 41% indirect interest.

PComP™



PComP™ Awards and Grants

The U.S. Army Features MesoCoat

Coating solutions provided by MesoCoat's technology would directly reduce the cost of corrosion. MesoCoat's PComP™ technology can enhance wear and corrosion resistance, along with reducing spallation in a variety of applications including aircraft materials, landing gears, rail guns, bearings, military vehicles, and ship structures. The nanocomposite materials will replace chrome plating for repairing F-22, F-15, F-16, and F-35 aircraft since DoD has banned use of chrome plating and no acceptable substitute exists for joint fighters. Funds from a DoD program to develop thermal barrier and chrome

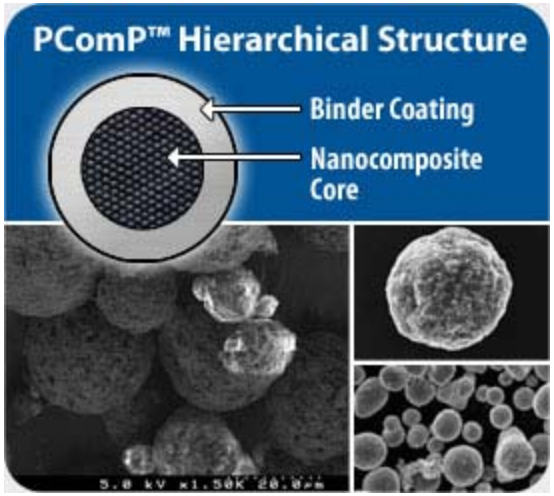
LINK: [US ARMY SBIR Commercialization Brochure]

PComP™ Technology Overview

- **PComP™:** ceramic-metallic (cermet), thermal spray coatings that protect metal by providing wear, corrosion and heat resistance and reduced friction in sliding wear applications replacing electrolytic hard chrome, electroplating, spray and fuse, and thermal spray carbides.
  - **PComP™ T:** Low friction, high corrosion and wear resistance
  - **PComP™ W:** High toughness, nanocomposite carbide for extreme wear
  - **PComP™ M:** High resistance to liquid metal corrosion
  - **PComP™ S:** Low density, corrosion and spallation resistance

Near-Nano Composite Core

- High hardness and wear resistance
- Contains nano-dispersed friction modifiers
- Provides for fast machining



Binder Coating

- Improves adhesion and efficiency
- Provides toughness and resiliency
- Provides corrosion resistance
- Prevents compositional changes

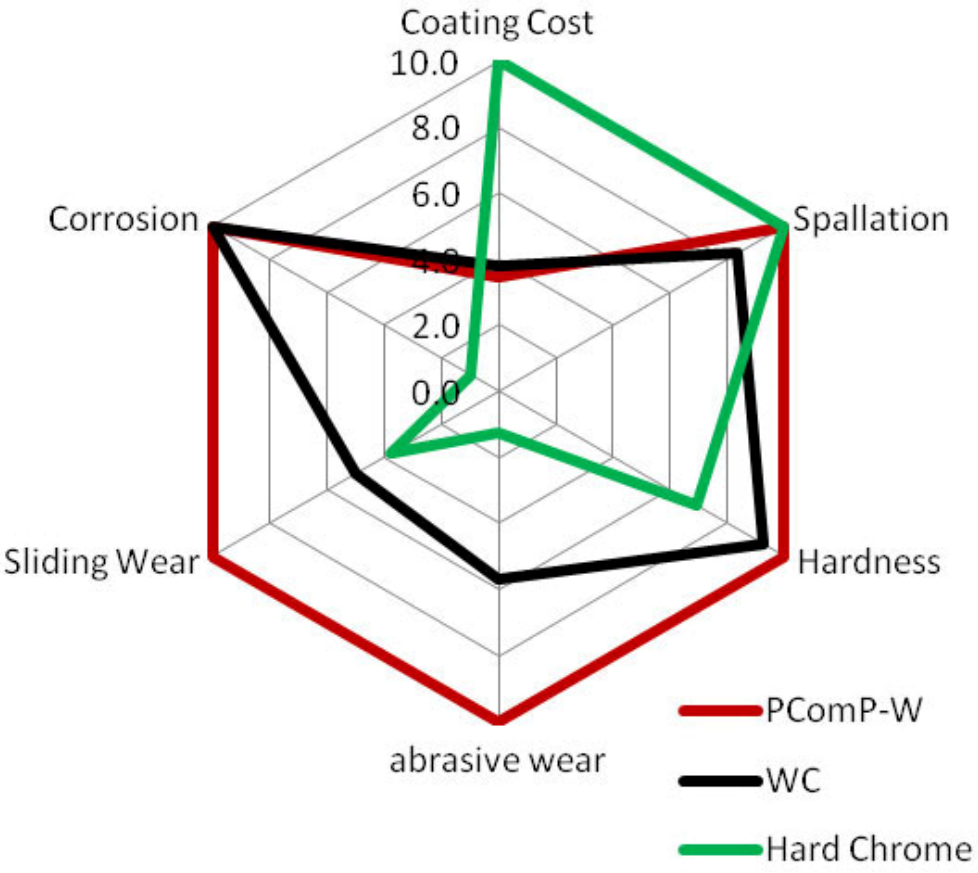
PComP™ Development Roadmap

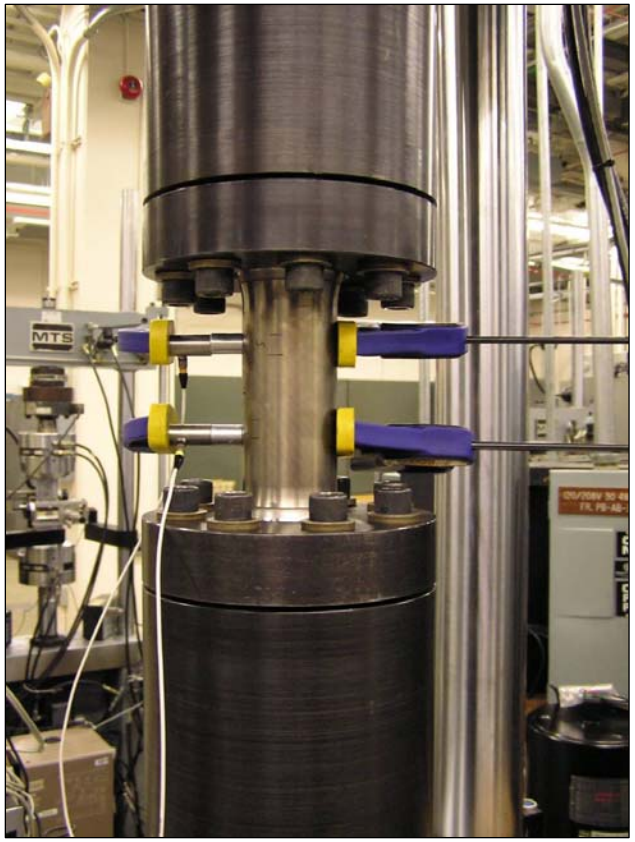
Industry

- **Oilfield, Mining, Industrial, Automotive**
  - Low friction, high corrosion and wear resistance
  - 3-15X extended life
  - Half the cost of tungsten carbide
- **Mining, Oilfield, Industrial, Aerospace**
  - High toughness for extreme wear resistance
  - Up to 80X extended life
  - Lowest life cycle cost solution
- **Galvanizing, Metal Processing**
  - High resistance to liquid / molten metal corrosion
  - 6X+ extended life
  - Lowest life cycle cost solution
- **Aerospace**
  - Low density, corrosion and spallation resistant
  - 2-5X extended life
  - 40% the weight of carbides

Product Stage

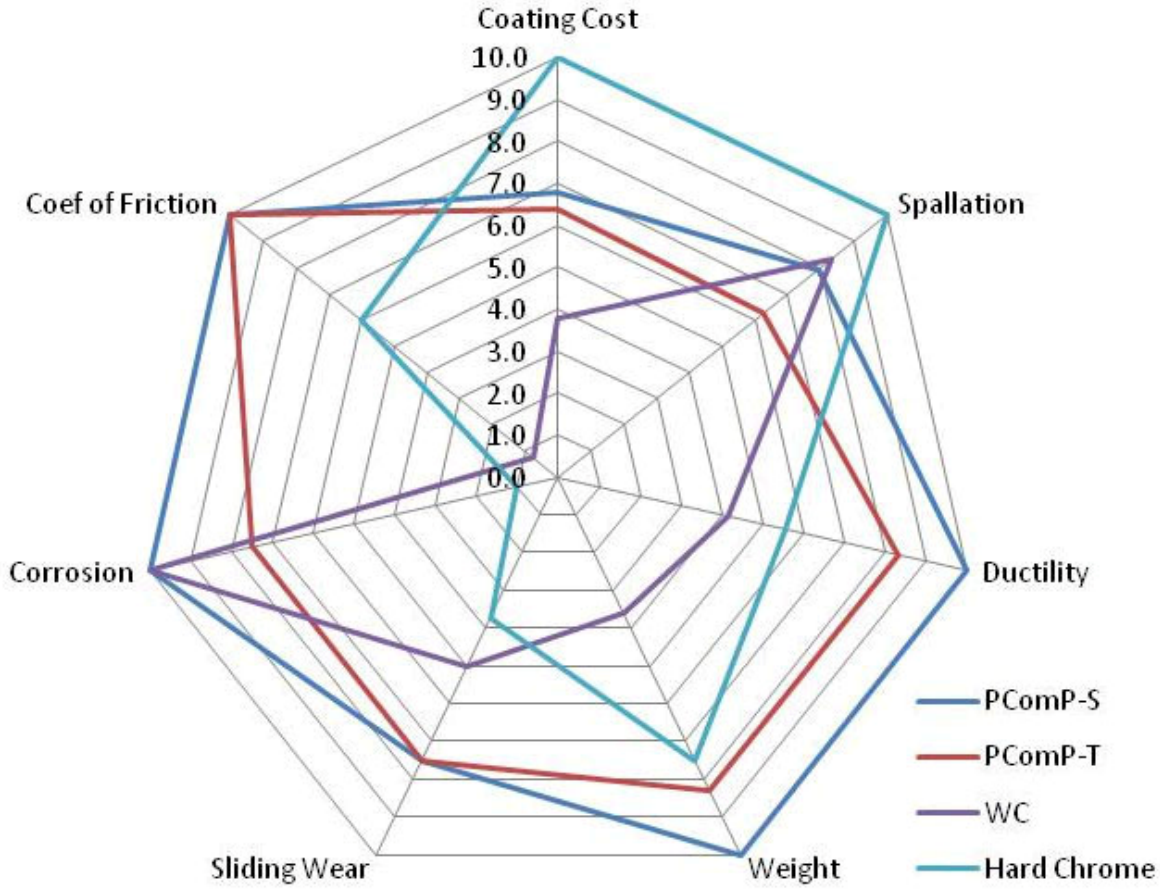
PComP™ W





Spallation Test of PComP™
The independent Testing for PComP™ was completed at the University of Dayton Research Institute

PComP™ S and T



PComP™-T coated plunger
Independent Testing for PComP™ T by the Oil Services Industry

PComP™ - Value Proposition

- **Performance**
  - Significantly extended life of components
  - Unique: Provides both hardness and toughness
  - Environmentally friendly
  - No toxic waste stream
- **Cost**
  - Significantly reduces downtime
  - Important cost savings due to reduced inventory needs
  - Up to 50% cheaper than hard chrome replacements
  - Lowest life cycle cost solution
- **Time**
  - Higher spray efficiency, easier to grind and finish – saves approximately 30% time
  - Drop in replacement for current thermal spray powders
  - 90% reduction of turnaround time over electro-plating

PComP™ Growth Capital Requirement

PComP™

(Estimated Investment $3.24 million) → ~$36 million annual revenues

Expand powder production to 18 tons in FY 2014:	$0.04 million
Expand powder production to 60 tons in FY 2015:	$1.0 million
Expand powder production to 120 tons in FY 2016:	$0.6 million
Expand powder production to 180 tons in FY 2018:	$0.4 million
Add one PComP™ thermal spray coating booth in Cleveland in FY 2015 and one in 2016:	$1.1 million

Funding for the above growth is anticipated to come from a combination of new capital and loans, for example MesoCoat has recently applied for a new $1.5 million loan from the State of Ohio, to ramp up PComP™ powder production. Also MesoCoat has been approached several times about partnering with an entity that has both financing and distribution channels.

PComP FS Summary

PComP™ & Thermal Spay Projections ($000's)	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
Revenue					
PComP™ Powder	*	3,200	6,900	11,400	19,100
Thermal Spray Service - Cleveland		2,300	7,900	10,900	12,000
Total Revenue		**5,500**	**14,800**	**22,300**	**31,100**
Gross Profit		1,400	3,700	5,600	7,500
EBITDA		**700**	**2,400**	**3,900**	**5,500**

- Separate divisional statement for FY 2014 has not been kept; projected commercial revenues for FY 2014 are $465 thousand.
- The Cleveland PComP™ powder production is currently limited to 500 lbs per month production. By May 2014, the current expansion will increase the production to 3,000 lbs per month. The company plans to increase this capacity to 10,000 lbs a month with an additional $950k equipment expansion in fiscal year 2015. Future expansion plans are reflected on the previous slide. The demand is expected to be realized through introduction of the powders through thermal spray shops and directly from customers as the product becomes proven and widely accepted.
- The Cleveland location currently has one spray booth which is used for testing and fulfilling small orders. The company will hire a seasoned sales representative to help bring thermal spray customers to our location. This coating facility will be used for driving adoption of PComP™ thermal spray coating powders, and will also be used for providing coating services using coating powder from other manufacturers. We plan on expanding this facility by adding one additional booth in fiscal 2015 and another booth in the future as the demand increases.

CermaClad™



CermaClad™ Awards

There is an Urgent Need for Our Products

The first truly scalable metal coating technology for applying high performance materials to protect metal assets.

- **Easy Oil is Gone**
  - International Energy Agency estimates that more than **70% of remaining oil and gas reserves across the globe are highly corrosive**
  - Most of the new reserves are corrosive, deeper, hotter, higher pressure, and farther offshore
  - Global oil and gas (CapEx) is expected to increase from **$1 Trillion in 2012 to $1.2 Trillion in 2013**
  - Pipelines constitute roughly **40%** of the global deepwater CapEx; clad pipes would constitute a healthy share of this CapEx

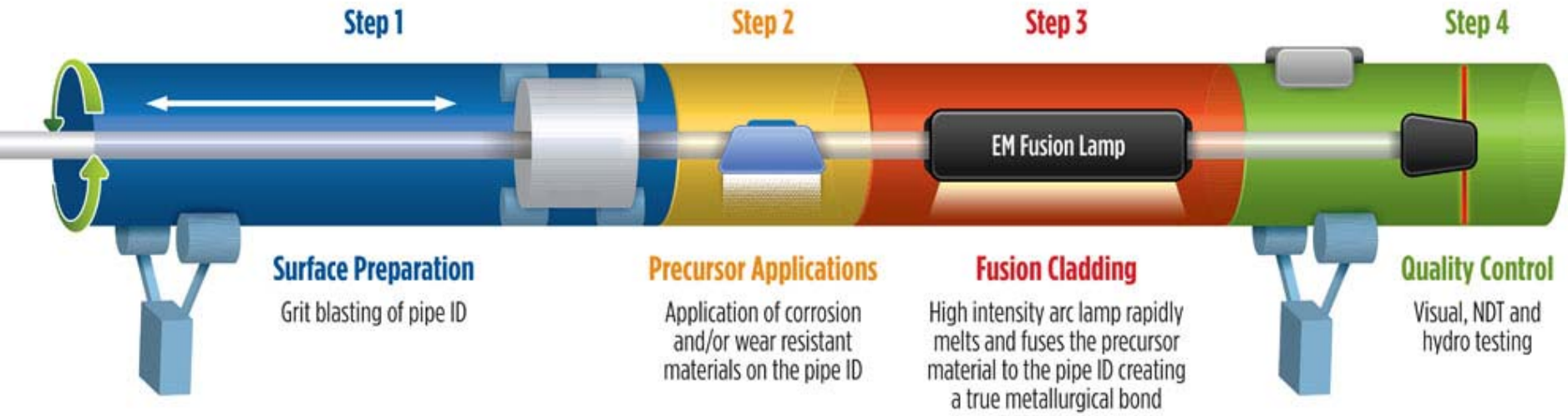
- **Demand-Supply Gap**
  - Our products address the productivity, quality, and lead time pain-points for customers
  - Growing Demand for Clad Pipes:
    - **2010** – Average order: $10M, Largest: $40M
    - **2013** – Average order: $40M, Largest: $300M
    - **2016** – Average order: $60M, Largest: $800M
  - Multiple multi-billion dollar projects delayed due to lack of availability of high quality clad pipe

Articles on Sour Oil & Gas Market Size

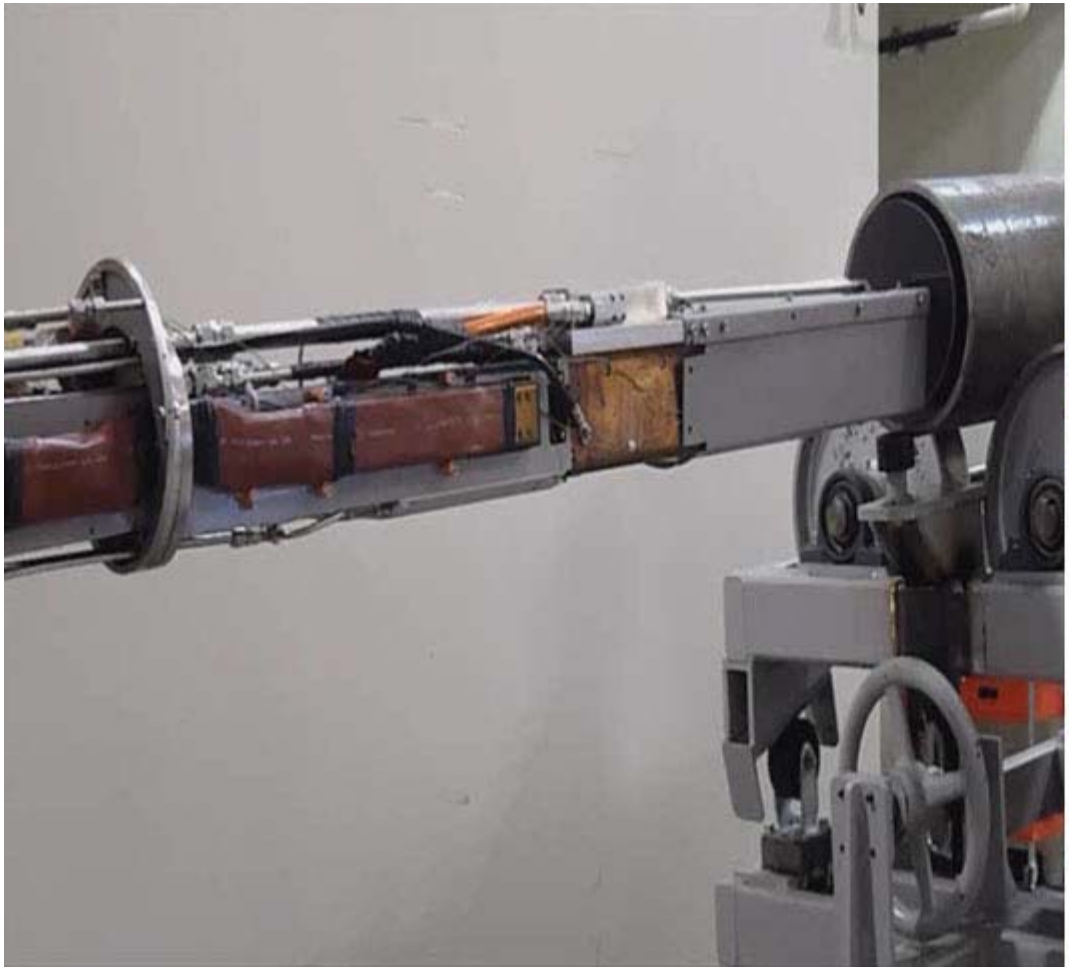
- The Middle East Sour Oil & Gas Upstream Profile
  Source: ArabianOilandGas.com
- Natuna Gas Field, Indonesia
  Source: offshoretechnology.com
- Brazil Moves to Join Other Major Oil Nations
  Source: The Wall Street Journal
- Noble Corp. Provides Further Insight Into Strength Of Offshore Drilling Industry
  Source: Seeking Alpha
- Two Miles of Sea Covers Big Oil's Next-Generation Field
  Source: Bloomberg
- Global Oil and Gas CAPEX to Increase to $1,201 Billion in 2013
  Source: Global Information, Inc.
- Saudi Aramco awards Saipem $300m pipeline deal
  Source: Meed
- Saipem Unexpectedly Cuts Dividend as Net Profit Drops 30%
  Source: Dow Jones
- Saipem Shares Plunge, Profit Warning Could Spell Trouble for Bank of America
  Source: Dow Jones
- Oil-Pipeline Cracks Evading Robotic 'Smart Pigs'
  Source: The Wall Street Journal
- How small science could reshape the oil sands
  Source: Alberta Oil Magazine
- Kashagan oil field articles
  Source: WSJ &Thompson Reuters

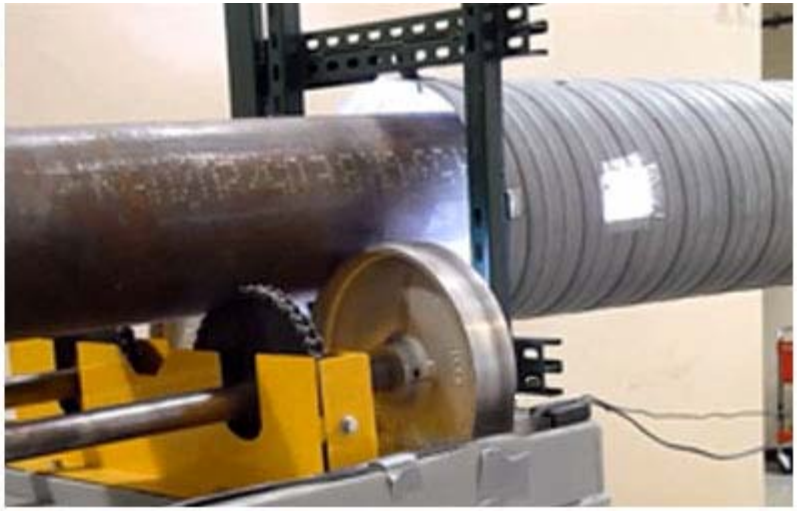
All of these articles can be accessed on our website: www.abakaninc.com/ind_articles.html

Application to Pipe Interior Surface



CermaClad™ Process





CermaClad™ Clad Pipe Manufacturing - Video

http://www.youtube.com/watch?feature=player_embedded&v=ir_WW5qmzKU

This video can also be viewed on our website http://abakaninc.com/videos.html

Imagine Painting a Large Wall

Painting a large wall with a Roller

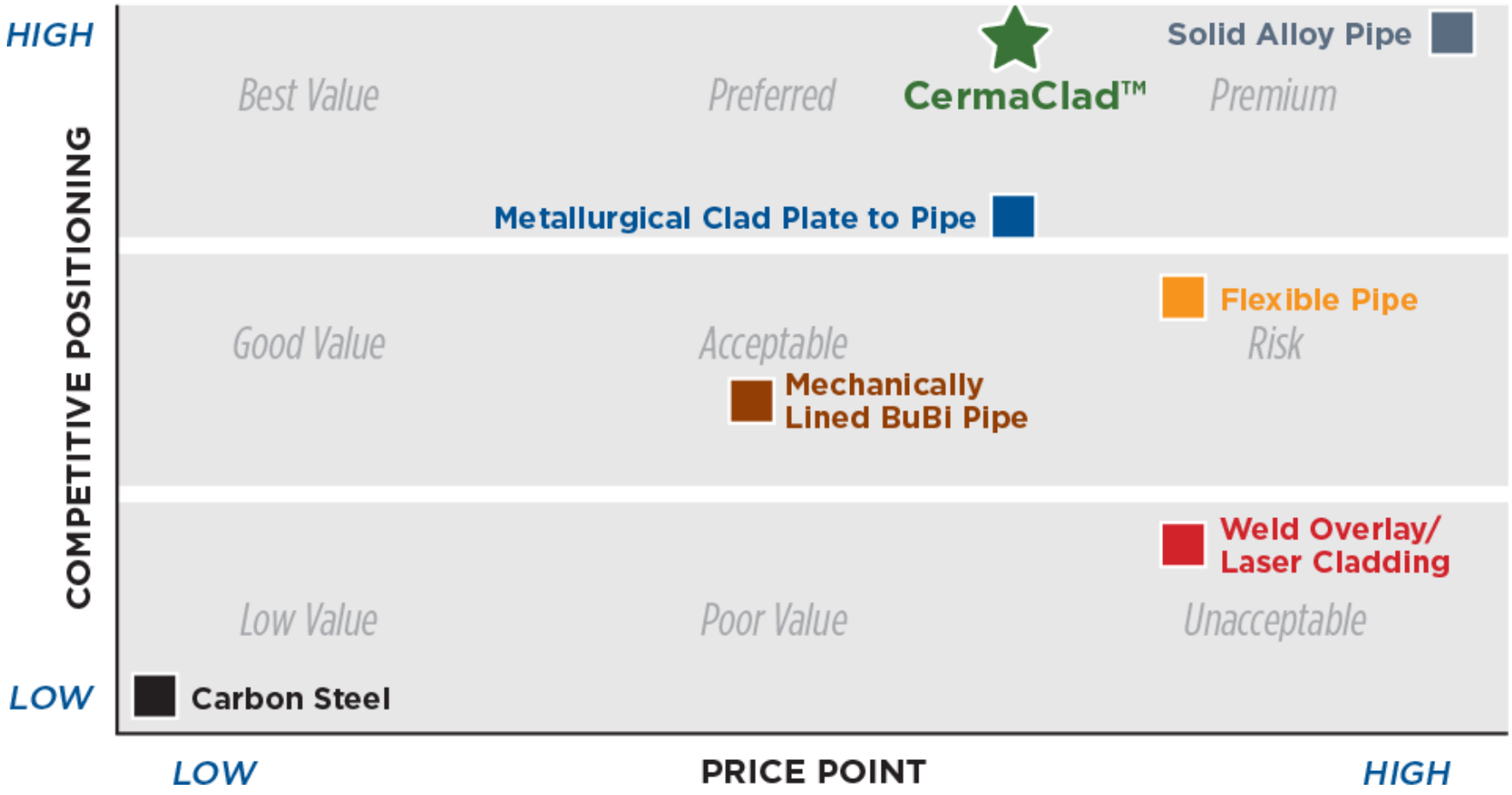
Painting a large wall with a Paint Brush

VS

CermaClad™

Current Cladding Technologies

CermaClad™ Competitive Positioning



CermaClad™ Product Line

	CRA	WR	HT
Purpose	High Corrosion and Fatigue Resistance	High Wear and Erosion Resistance	Heat Resistant Materials
Target Markets	▪ Oil and Gas including downhole ▪ Chemical Plants ▪ Hydroelectric & Power ▪ Nuclear Plants ▪ Transportation	▪ Oil Sands ▪ Mining and Mineral Processing ▪ Construction Equipment	▪ Energy ▪ Pulp & Paper ▪ Nuclear ▪ Navy (landing decks)
World Market Size	$3.8 Billion	$1.2 Billion	$400 Million +
Cladding Thickness	> 2-3mm	up to 15 mm	TBD
Cladding Material	▪ Stainless Steel ▪ Inconel 625 ▪ Incoloy 825	▪ SAM Alloys ▪ Tungsten Carbide with nickel matrix	▪ Aluminides ▪ Nickel Alloys

Sources: BCC Inc., GB-325 — Inorganic Metal Finishing Technologies, December 2007; International Thermal Spray Association (ITSA) Presentation, Marc Froning, Past Chairman, ITSA; IBIS World Industry Report; Metal Coating, Engraving, Plating, Polishing & Treating in the US: 33281; May 29, 2009; Research and Markets: Paints & Coatings: Global Industry Guide; DNV Report on Ships

Abakan

Comparison with Current Technologies

Process	Bonding	Process Cost	Productivity	Limitation(s)
Weld Overlay	Metallurgical	Very high	10Kg/hr	Dilution, low productivity
Thermal Spray	Mechanical	High	5Kg/hr	Thickness, bond strength
Vapor Deposition	Metallurgical	High	0.1Kg/hr	Cost, thickness, low productivity
CermaClad™	Metallurgical	low	500Kg/hr	>10” Diameter pipe only
Pipe in Pipe	Mechanical	Very low	High	Bonding, inspection, installation, capital costs, & not used in large-diameter pipe
Roll-cladding	Metallurgical	low	High	Not seamless, large weld area, capital costs, large-diameter pipe
Co-extrusion	Metallurgical	Very low	High	Uniformity of thickness , yield strength, capital costs

CermaClad™ Value Proposition

- **Performance**
  - Easy to bend, reel, inspect, and install compared to mechanically lined pipe
  - Significantly lower amount of weld area compared to metallurgically clad plate to pipe
  - Ability to melt, fuse, and metallurgically bond almost all metals and composites
  - True metallurgical bond, > 30,000 psi
  - Lower corrosion and wear rate due to significantly lower dilution and porosity
  - Minimal heat input to the substrate
- **Cost**
  - Allows application of very thin metallurgical clad layer leading to cost savings
  - High productivity manufacturing process ensures project costs are significantly lowered
  - Low capital investment enables setting-up regional facilities to serve local demand
- **Time**
  - High productivity manufacturing process ensures on-time delivery and shorter lead-time compared to weld/laser cladding
  - Matches line speed of steel mills

CermaClad™ Growth Capital Requirement

- **CermaClad™ Manufacturing Facility Investment**
  (Investment estimate: $36 million) → ~238 million in annual revenues
  - Build a 4-line CermaClad™ CRA manufacturing plant: $23 million investment in land, plant and equipment
  - Expansion of CermaClad™ CRA plant to 8-lines: $13 million additional investment in plant and equipment

CermaClad™ CRA Development Work Report

- **From our November 30, 2013 10Q filed with the SEC on January 14, 2014 we stated;** "MesoCoat has made significant progress in quality control and the reliability of the pipe cladding process, including the development of correlations between control variables, dependent variables, and cladding quality. Our work has generated detailed analytical models of the fusion process that enable us to predict, measure, control, and understand the fusion cladding process, and how that process relates to cladding and base metal quality and performance. Most recently, these efforts have enabled the controlled production of fully clad short sections of pipe with strong metallurgical bond, uniform quality, and good surface finish. Subject to the completion of additional internal testing, clad sections of pipe are soon expected to be released to Petrobras and others for initial qualification."

- **The Latest News from February 2014:** Four months ago we started transitioning from primarily modeling the fusion process to coating longer sections of carbon steel pipe. Presently we are coating the inner diameter of one meter sections of 10" diameter pipe with a nickel chrome alloy "Inconel 625". Over the next month we will start delivering multiple 6" sections of the coated pipe to at least 4 of the world's top ten oil and gas majors for their technical evaluation, these entities and others are watching our progress, ask for samples and have all offered their assistance.

  Focus is mainly in the "overlap area" and base, carbon steel pipe properties needed for pipeline integrity and design requirements. By April it is expected to direct development efforts to cladding of longer sections, leading to achieving full size 12 meter clad pipe with required quality. We are expecting that once they complete their tests and technical evaluation, that more than one will express interest to participate in accelerating readiness for production and participation in all of their growing projects demands for clad pipe.

  Parallel with the development of CermaClad™ 625, we are in the process of modifying our existing cladding equipment to realize second generation equipment that will be more suitable for ensuring a reliable process for the manufacture of a high quality product. Consistent problems stemming from a third party lamp manufacturer have caused us to concentrate our own efforts on developing alternative cladding equipment that will reduce the current risks associated with an unreliable supplier. Our experience has taught us that the complexity of effective lamp systems has been overrated. The good results that we are now able to consistently replicate have come not from equipment sourced from our current lamp manufacturer but from 10 year old systems developed by a company that was acquired by our current lamp supplier. We believe that our own second generation equipment will garner even better results as our process is applied to longer sections of pipe.

CermaClad™ FS Summary

Indonesia P&L ($000's)	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
Revenues	**-**	**-**	**61,800**	**202,900**	**237,800**
Cost of Revenues	-	-	40,300	127,300	148,900
Gross profit	-	-	21,500	75,600	88,900
		-	35%	37%	37%
Overhead Expenses	-	414	4,100	7,800	8,700
EBITDA	**-**	**414**	**17,400**	**67,800**	**80,200**
		-	**28%**	**33%**	**34%**

- NOTES to FS Summary – 100% of the product is Alloy 625 clad pipe. The actual start date is subject to the successful development of the 625 CermaClad™ CRA product. With the participation of a motivated oil industry major management feels that we have a good chance of achieving commercial sales before the time frames projected here.
- The projected revenue is based on the company leasing site by September 2014 and the completion of the manufacturing plant by end of March 2015. We anticipate the initial 2 lines will be setup and tested for 5 months and that production will commence in September 2015. After commencement, we are estimating the production capacity for the initial 4 lines will be near 90% after 8 months based on 300 working days per year. There are several milestones coming up in the next 5 months that if accomplished will confirm that the Company is on tract to meet or potentially achieve cash flow earlier the timeframes projected above
- Additional 4 lines are projected to come online 12 months after completion of the first 4 lines, based solely on whether we have been able to deliver product. The entire 8 lines capacity is projected to operate at 85% capacity 15 months after the start of the initial production, again based on 300 working days per year.
- The expansion for the locations is subject to: producing a quality product, delivered on time and adequate funding through private placements, debt, joint ventures or any combination thereof.

Overhead and Administrative Cost

- The company anticipates that the current overhead cost for Abakan and MesoCoat to continue at historical levels with a 4% increase per annum. These costs include general & administrative, professional fees, consulting, payroll and benefits, research & development and stock option expense. The fiscal 2013 cost associated with these areas was $7,464,000. This cost is prior to depreciation, amortization, interest, amortization of debt, non-controlling interest, equity income or loss from the company's Powdermet investment and similar costs as reflected in the historical financial statements below the EBITDA line.

- MesoCoat's new manufacturing and testing facility for CermaClad™ 625 cladding was opened in fiscal 2013 at a cost of over $5,000,000. The facility costs are included in the above administrative cost. The company expects to continue research and development using that facility's one line with partial use for small production orders. Limited production is anticipated to commence after the company successfully develops and tests a full length clad pipe using the CermaClad™ 625 fusion system. Anticipated revenue for limited production from one line would initially be approximately $3 million in revenue and increase to $8 million over a period of years.

Management

Management Team

- **Robert Miller**
  CEO, Director – Abakan Inc.
  - Principal investor in over 50 business ventures
  - Founded corporations and listed numerous companies on the NASDAQ, AMEX and senior listings on the Toronto Stock
  - One of the most experienced private investors in Miami, having raised over $400 million in early-stage investment capital

- **Stephen Goss**
  Director – Abakan Inc. and MesoCoat Inc.
  - Worked 35 years as an executive for multinationals in both Brazil and Venezuela
  - Subsequently consulted to international conglomerates operating in South America
  - Fluent in 5 languages and recipient of an OBE “Order of the British Empire”

- **Mario Medanic,** CermaClad™ Product Line Manager
  - GM of Cladtek Bimetal Manufacturing, one of the largest clad pipe manufacturers
  - Set-up and managed one of the world’s largest clad pipe facilities with over $200M revenue
  - 25 years of experience in coatings, offshore rigs, oil and gas, and shipbuilding

Management Team

- **Dr. Evelina Vogli Ph.D** – MesoCoat, Head of R&D
  - Chief Technology Officer & Head of Coating Technologies, Institute of Materials Engineering, Dortmund University, Germany 2002 to 2010
  - Has 20 years of experience in R&D with the last 10 years also in management.
  - The results of her works have been documented in more than 170 peer reviewed publications

- **Curtis Glasgow,** GM – PComP™ Coatings
  - Over 25 years of multi-functional experience in the thermal spray coating industry
  - Built and set-up the largest aerospace coating facility in Canada
  - Worked for leading material science and thermal spray companies: Union Carbide, Praxair Surface Technologies, and Deloro Stellite (largest thermal spray company)

- **Andy Sherman** CEO – Powdermet Inc. & MesoCoat Inc
  - Over 25 years of experience in metal coatings, hierarchical structure composites and nanotechnology
  - Core member of several DOE and other planning and safety committees
  - Expert in nano-composites with more than 15 patents and over 100 published papers

Independent Directors

- **Jeffrey Webb**
  - Current VP of FIFA, past Chairman of FIFA's Internal Audit Committee
  - Business Development Manager and a Director of Fidelity Ltd.
  - Extensive experience in the international banking sector, direction of investment banking activities alongside corporate finance and risk management.
  - Over two decades of accounting, management and consultancy experience.

- **Raymond Tellini**
  - Managing member of Brennecke Partners LLC, a private investment firm located in New York that makes specialty finance and growth capital investments.
  - Independent management oversight with an expert accounting background garnered over two decades of accounting, management and investment experience.
  - Heads Abakan's audit committee, serves on compensation & nominating committees.

Board of Advisors

- **Reg Allen**
  - Chief Executive Officer of Vortek, a Canadian technology company that had developed the world's most powerful arc lamp
  - Authority on applications of the focused arc lamp system that is employed by Abakan
  - 30 years experience working with engineering related solutions
- **Damian Kotecki, Ph.D., PE**
  - 43 years of welding expertise, including welding research, pipeline failure analyses, welding training and specifications, welding procedure development, quality assurance, and stainless/high alloy welding filler metal and product development
  - Co-authored the leading textbook on stainless steel welding
  - Former president of the American Welding Society
  - Ex-Technical Director For Stainless & High Alloy Product Development at world's largest welding equipment and consumable manufacturer: Lincoln Electric
- **Andrew C. Hall**
  - Founder and managing partner of Hall, Lamb and Hall P.A., based in Miami, Fla., where he specializes in complex commercial litigation, professional negligence, securities litigation and arbitration and international cases
  - Named one of "The Best Lawyers in America" by Best Lawyers for the past decade

Board of Advisors

- **Dr. Sam Thomas**
  - Won seven teaching excellence awards as a professor of banking and finance at the Weatherhead School of Management at Case Western Reserve University in Cleveland, Ohio
  - Actively engaged with corporate strategists, institutional investors, financial advisors and money managers and is known for his ability to materially integrate academic research with product development
- **James Rodriguez de Castro**
  - Highly-experienced international trader and businessman with far-reaching investments connecting him with an extensive network of operators in Asian oil and gas logistics, steel treatment and fabrication
  - 14 years spent with Merrill Lynch based in Japan and Hong Kong: Head of Global Markets, New Initiatives and Advisory, Pacific Rim; Head of Trading, Equity Derivatives, CBs and Index Arbitrage, Asia; and Head Trader, Japanese Equity Derivatives
- **Vinod Gupta**
  - Currently the chairman of the Ohio Board of Regents, where he also chairs the Commercialization Task Force and serves on the Shared Services Task Force.
  - Entrepreneur-In-Residence (EIR) for the Cleveland-based venture development non-profit organization, Jumpstart Entrepreneurial Network (JEN) Advisors
  - Founding president of the Columbus based Asian-Indian Alliance

Addressable Markets

Potential Coating Markets

CermaClad™ (Metal Cladding)

- **Oil and Gas ($2+ billion)**
  - Pipes, Risers, Flowlines
- **Oil Sands ($300 million)**
  - Slurry lines and components
- **Mining ($1+ billion)**
  - Wear plates, screens, beds
- **Nuclear and Energy Generation ($1+ billion)**
  - Heat Exchangers, Pressure Vessels, Tanks, Reactors
- **Shipbuilding ($10+ billion)**
  - Ballast and Cargo tanks
- **Infrastructure ($10+ billion)**
  - Rebars, Structures, Components

PComP™ (Metal Coating)

- **Replacing Chrome ($3.2 billion)**
- **Energy, Oil and Gas ($1+ billion)**
  - Mandrels
  - Plungers
  - Gate Valves
  - Expansion Valves
  - Sucker Rods
  - Pumps
- **Aerospace ($1+ billion)**
  - Actuator Hydraulics
  - Cylinders
  - Landing Gear
  - Gas Turbines
- **Industrial equipment and general hydraulics ($1.8+ billion)**
- **OEM, MRO ($1+ billion)**

Sources: BCC Inc., GB-325 — Inorganic Metal Finishing Technologies, December 2007; International Thermal Spray Association (ITSA) Presentation, Marc Froning, Past Chairman, ITSA; IBIS World Industry Report; Metal Coating, Engraving, Plating, Polishing & Treating in the US: 33281; May 29, 2009; Research and Markets: Paints & Coatings: Global Industry Guide; DNV Report on Ships

#1 – Oil and Gas

- The **global oil and gas capital expenditure (CapEx)** is expected to increase from $1,036 billion in 2012 to $1,201 billion in 2013, registering a growth of 15.9%.
  - Driven by reserves that are deeper and farther away from the shore
  - Largest proportion (39%) of deepwater investment to be directed towards pipeline installations – clad pipes would constitute a healthy share of this offshore pipeline investment
  - $225 billion of projects announced over the next 5 years by our technology development partner: Petrobras S.A
- **Easy oil and gas is gone**
  - International Energy Agency estimates that 70% of the oil and gas fields being developed are sour & acidic
  - Significantly Challenging Environments
    - *Corrosive, deeper, hotter, higher pressure, farther away from the shore, oil sands, and shale*
- **Clad pipe**
  - Clad pipes are the best option for production and transportation of sour oil and gas
  - Five years ago, the average requirement for clad pipes was for 3 to 5 kilometers whereas the largest requirement was 20 to 30 kilometers for each project
  - Today, we are seeing the average requirement being in the tens of kilometers and the higher end to be hundreds of kilometers for single projects
  - Leading O&G companies are evaluating capacity and availability of clad pipes for their projects, several projects delayed due to lack of quality clad pipes.

#2 – Alberta Oil Sands

- **Oil sands production to double (or more) by 2021**
  - In 2011, Alberta's production of crude bitumen reached over 1.7 million bbl/day; of this surface mining accounted for 51 percent and in-situ for 49 percent.
  - By 2021, crude bitumen production is expected to more than double to 3.7 million bbl/day.
- **Clad Pipes**
  - Clad pipe requirement to grow concurrent with the increase in production; increasing the estimated market size from $225 million to approximately $700 million
  - Clad pipes are rotated three times per year and then replaced as wear and abrasion erode the pipe
  - Next-generation 'Silver Bullet' materials being developed by MesoCoat are expected to provide 3X life at 2X cost, which would save producers hundreds of millions of dollars in downtime costs
  - Annually, more than $2 billion downtime costs are due to pipeline maintenance
- **Strategy**
  - Setting up a R&D facility in Alberta, partially financed by the Government of Alberta
  - Self finance a manufacturing facility or partner with a coatings company or end user

#3 – Mining & Heavy Industry

- **Market Size**
  - Corrosion and wear resistant coatings represent an estimated $1 billion market for both mining and heavy industry
- **Clad pipes and plates**
  - Clad pipes for slurry lines (some as long a 600 km's)
  - Clad plates for excavators, buckers, bed liners
- **Component Coating and Repair**
  - Coating and repair of gates, valves, hydraulics, and drilling tools.
- **Strategy**
  - JDA with largest equipment manufacturer: Caterpillar Inc.
  - Solution providers for some of the largest component manufacturers

#4 – Aerospace & Defense

- **Market Size**
  - Cost of corrosion to the DoD is $23 billion/year
  - The DoD is the single largest customer of the protective coatings, estimated at over $500 million/year
- **Solution**
  - PComP™ coatings for aerospace and army (landing gear, turbines, hydraulics)
  - CermaClad™ for ships (initially ballast and cargo tanks, decks)
  - US Army featured PComP™ as the ideal chrome replacement (Toxic chrome plating is federally regulated in the US and banned in parts of Europe)
- **Strategy**
  - Continue working on JDA's with Army, Air Force and Boeing to be specified for use
  - Partner with General Dynamics, Northrop Grumman, Goodrich and Messier Dowty

#5 – Shipbuilding

- **Market Size**
  - Coatings cost "AT LEAST" 10% of the total shipbuilding costs
  - Corrosion related maintenance, repair and downtime costs roughly 1-3X of the capital cost of ship over its design life
  - Shipbuilding is a $160 billion industry and even at a conservative coatings cost @10%, this represents a $16 billion market
- **Solution**
  - Change the way ships are made
  - Coat large portions of the ship with CRA clad steel (100-200 micron thin cladding) instead of applying multiple layers of paints
  - Offer 5-6X design life at approximately 25% additional cost
  - Recent IMO-PSPC regulation requires 15 years design life for ballast tanks, which is very difficult to achieve with current coating solutions
- **Strategy**
  - Work with Lissotschenko Mikrooptic GmbH's superior thin claddings
  - Partner with large ship brokers, and shipyards
  - JV with regional shipbuilding yards

Summary

Snapshot of CermaClad™ Cladding Plant

8-line Clad Pipe Manufacturing Facility Snapshot *

- Equipment investment: $36 million
- Production Volume:
  80 km's of 10" clad pipe
- Revenues: $238 million
- Gross Profit: $89 million
- EBITDA: $80 million

* All figures are estimated and assume full production

Snapshot of PComP Coating Facility

180 ton PComP™ Powder Production Facility *

- Additional Equipment Investment: $2.4 million
- Revenues: $19.1 million
- Gross Profit: $3.3 million, 17%
- EBITDA: $2.4 million

* All figures are estimated and assume full production

3-Cell PComP™ Coating Services Facility *

- Additional Equipment Investment: $1.1 million
- Revenues: $12 million
- Gross Profit: $4.2 million, 35%
- EBITDA: $3.2 million

* All figures are estimated and assume full production

Existing, Planned & Possible Manufacturing Facilities

Existing

- **R&D Center – Euclid, Ohio**
- **Plant 1 – Euclid, Ohio**
  - 1 Line CermaClad™ CRA
  - 1 PComP™ Thermal Spray cell (Going to 2 cells in 2015)
- **Plant 2 – Euclid, Ohio**
  - 18 tons PComP™ Powder Production (Going to 180 tons in 4 years)

Planned

- **Plant 3 – Batam, Indonesia**
  - 8 Line Cell CermaClad™ CRA
- **Plant 4 – Houston, Texas**
  - 4 Cell PComP™ Coating Facility
- **Plant 5 – Brazil**
  - 4 Line CermaClad™ CRA

Possible, but not projected

- **Plant 6 – Mexico**
  - 4 Cell PComP™ Coating Facility
  - 4 Line CermaClad™ CRA
- **Plant 7 - Alberta, Canada**
  - 4-8 Line CermaClad™ WRA
  - 4 Cell PComP™ Coating Facility
- **Plant 8 – Batam, Indonesia**
  - 320 tons CermaClad™ powder production
- **Plant 9 – Middle East**
  - 4 Line CermaClad™ CRA
- **Plant 10 – Brazil**
  - 4 Line CermaClad™ WRA

Summary

- **Materials. Technology. Performance.**
- **Multi Billion Dollar Markets**
  - Highest performance and value, low cost solutions
- **Lowest capital costs in the Industry**
  - 1/10th of competing technologies
  - Profitable at 10% capacity v/s 65%
  - Allows setting-up of regional facilities to meet the local content requirement
- **Validated industry need, Fortune 100 clients**
- **Experienced management team**
- **Exceptional multi-national network of sponsors and partners**
- Opportunity to **deploy strong cash flows** from early success **into other meaningful industry verticals**