

# BASALT REBAR MANUFACTURING PROGRAM

MANUFACTURER OF THE Z<sub>e</sub> BRAND OF CONCRETE REINFORCEMENT PRODUCTS

















# JOINT VENTURE INVESTMENT OPPORTUNITY

**Investment Contact:** 

DA@zahtechnologies.com

Website: www.zahtechnologies.com

zäh technologies

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Spartanburg, SC

\*Forward looking statements are not guaranteed.

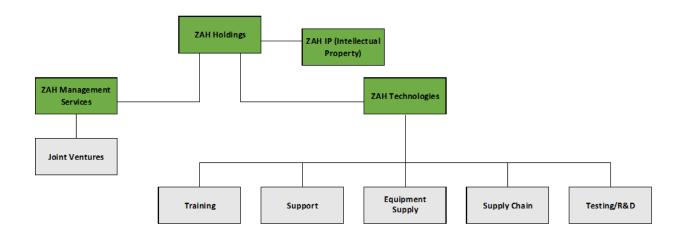
#### **Legal Disclaimer**

Some of the statements contained in this document, including information incorporated by reference, statements which discuss future expectations, and other statements which contain forward-looking information are subject to known and unknown risks, uncertainties and other factors which are generally beyond the Company's control. Because of this, the Company's actual results could differ materially from those contemplated by the statements.

The market analysis and financial projections presented herein represent the Company's research, best judgment and reasonable assumptions of future events and circumstances; all other information contained herein has been obtained from sources deemed reliable. The forward-looking information is based on various factors and was derived using numerous assumptions. However, considering the risks, assumptions, and uncertainties involved, there can be no assurance that the forward-looking information contained in this business plan will in fact transpire or prove to be accurate. The Company makes no representation and undertakes no obligation to update the forward-looking information contained in this Plan to reflect actual results, changes in assumptions, or other factors that could affect these statements.

To accommodate our rapid growth, ZAH has restructured their corporate structure. Investments in operational capital will be made into ZAH Holdings, whereas Joint Venture agreements (the building of Rebar Manufacturing Plants) will be through ZAH Management Services.

ZAH Technologies provides all aspects of the turnkey manufacturing program.





## **SUMMARY**

ZAH Technologies is advancing the use of Basalt Fiber Reinforced Polymer (BFRP) Rebar as a Higher Performing, Longer Lasting, Green Solution to the \$6 TRILLION annual cost of rust and corrosion across our planet's infrastructure – primarily caused by steel rebar.

The use of this Disruptive Technology creates an exclusive opportunity for an investor to enter a Joint Venture with ZAH; to establish and grow a successful basalt rebar manufacturing plant.

## The Business Opportunity:

- We provide a <u>Tailored Business Model</u> that allows our Joint Venture Partners to earn potentially significant profit from a ZAH-Built, basalt rebar production plant. The standard sized plant will be capable of generating more than \$100 million in gross revenue.
- Your <u>Initial Investment is 'Senior Secured'</u> by the assets of the Joint Venture <u>and Prioritized</u> with 60% of the Joint Ventures EBITDA distributed against the outstanding balance of the Initial Investment. This continues until your investment is paid back fully with interest.
- We provide **Exclusive Geographical Territories** for our Joint Venture Partners to operate and sell without fear of competition from other ZAH partners or entities.
- We provide our Joint Venture Partners with exclusive access to our Intellectual Property, Proprietary Processes and Equipment and Technologies. We also provide continuous Training, Support, Service, and full-time access to our Expertise.
- This **Proprietary Program** generates **Multiple Income Streams** for our Joint Venture Partners.

## **Market Opportunity Size**

The Global Steel Rebar Market Creates nearly \$300 Billion in Annual Revenue

- The performance data shows that Basalt Rebar is an excellent building code approved replacement for steel rebar in most if not all applications.
- Immediate opportunities for substantial impact lie within the coated steel segment (epoxy coated, galvanized steel, and stainless-steel), a **\$90 Billion Annual Market**

## **Program Mission**

- To Educate on the Values of Using Basalt Products as Concrete Reinforcement over Steel Rebar and Welded Wire Mesh, and Develop Strategies for its Continued Growth and Marketability
- To Establish Regional Joint Ventures; helping to Build, Develop, and Champion Production Plants
- To Produce and Continuously Enhance Proprietary Manufacturing Equipment
- To Develop New and Continually Improving Basalt Products for Industry
- To Supply Periphery Manufacturing Equipment and Supplies to Support our Joint Ventures
- To Provide our Partners with Extensive and Ongoing Training and Technical Support
- To Control the Basalt Rebar Raw Materials Supply Chain
- To Provide our Partners Access to Allied Reinforcement Products
- To Provide Ongoing Equipment Maintenance and Repair Services



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## THE OPPORTUNITY

# **Joint Venture Summary**

Total Investment\*

\$8M - \$18M

ZAH Technologies is seeking Joint Venture partners to establish and develop basalt rebar manufacturing plants throughout the world. Each joint venture will include a protected territory and access to ZAH's exclusive program.

As a JV partner, your responsibilities will include providing a factory ready facility, and hiring your local staff\*\* (ZAH will collaborate with your facility upfit and will provide job descriptions and recommended positions). Our experts will then train your staff in our manufacturing process and quality systems. And we will train your management in industry specific manufacturing practices using proven business principles.

Once engaged, ZAH delivers on its turnkey program, which includes custom equipment for production and quality testing, 100+ years of expertise, and ongoing support for the life of the agreement. ZAH also provides all the certified raw materials, supplies, and a suite of allied products at MFN pricing.

#### Your investment will fund:

**Use of Funds** 

Full factory state-of-the-art production and testing equipment, with remote access, designed exclusively to run ZAH's specialized basalt rebar production programs. And our proprietary BFRP Engineering software.

85%

\$6.8M-\$15.3M

Start-up (~90 days worth) production supplies, raw material supplies, testing supplies and safety supplies.

10%

\$800K-\$1.8M

Full staff training to include management, quality assurance, production, supply chain, purchasing, engineering, sales, and marketing. Program Includes manuals, videos, and one on one training with long term support.

5%

\$400K-\$900K

\*Investment dollars vary due size of plant desired, location, and regulatory compliance issues.

<sup>\*\*</sup> Each joint venture partner will be responsible for supplying a suitable building for production to be leased by the JV manufacturing entity. This cost is not included in the investment use of funds. ZAH does however, offer greenfield programs to our joint venture partners at an additional cost, or a working capital Line of Credit for the JV; in which to secure an appropriate facility and / or other working capital needs.

# **Detailed Program Overview**

#### **Regional Joint Venture Partner (Investor) Responsibilities**

Along with the initial investment, your responsibilities will include providing a ready facility for our supplied equipment and with our guidance, a locally hired staff. ZAH Technologies will take care of the rest through its turnkey basalt rebar manufacturing program, built for success and immediate market deployment.

#### Responsibilities of ZAH Technologies to the Regional Joint Venture

#### **Equipment, Supplies, and Materials Provided with Program (Typical)**

- Factory layout specifications with construction support.
- 5-10 Quad ZeLINE Rebar production machines\*
- 1 -2 Dual ZeLINE Shapes machines\*
- Compressed air systems
- Custom tooling, rolling racks, and ovens.
- Custom material handling carts
- ZeLINE Custom EZ Load creel systems
- Zeline Exit and take off systems.

- Detailing and production tables
- Quality control lab equipment
- Safety and storage supplies
- Shop and maintenance equipment
- Packaging materials, tools, and equipment
- Startup raw material supplies
- Clean up cart and materials
- Much more!

#### Proprietary Technology and Support Provided with Program (Typical)

- Dedicated Program Support Manager
- Production supporting computer hardware and software.
- Manufacturing engineering and process controls support
- ZePRO BFRP software use and support
- Program and Event mapping tools
- Supply chain management tools
- Run plan coordination support

- Quality Control testing and program management support
- Operations and Equipment Manuals
- Quality Assurance Manual
- External product testing support
- New product development
- Access to all new Certifications and "in use" Approved Applications
- Access to white papers and all test reports and support documentation

#### **Program Training**

ZAH provides BFRP industry leading management and training for the Joint Venture at an enterprise level. The executive managers will learn about standards, language, and how to navigate this complex industry. And the production management and staff will be trained on ZAH's production processes and procedures. We offer training at our state-of-the-art facilities in South Carolina, USA, (ZAH University) and/or provide onsite management and staff training at the new Joint Venture facility.



<sup>\*</sup>Proprietary and Exclusive Equipment Only Available Through ZAH's Program (quantities may vary based on plant size).

#### **Detailed Program Overview (Continued)**

#### **Ongoing Support**

Throughout the process ZAH will be there to fully support the business. We make available to all of our partners:

- Technological support w/ remote troubleshooting
- Equipment repair and maintenance
- Standard Parts availability
- Management support

- Sales and Marketing support
- Engineering support
- Supply Chain support
- Quality Control support
- Much more!

#### **Supply Chain**

Our industry leading standards for certified materials will put the new venture in a position to provide the highest quality and performing BFRP products. And our Joint Venture partnership receives "most favored nation" In-Network pricing, optimizing the potential for profit and market competitiveness. ZAH's Program also includes everything required for multiple revenue streams.

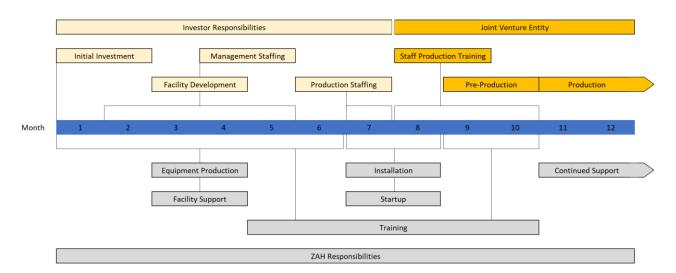
#### **Production Materials**

- Safety Supplies
- Lab Supplies
- Grit coating material
- Equipment parts
- Shapes tooling
- Maintenance supplies
- Production support supplies
- Cleaning systems

#### **Raw Materials & Allied Products**

- Variable Tex Basalt Roving ZeTEX™
- Proprietary Resin Systems ZeMIX™
- ZeGRID Basalt fiber reinforced geo-grid mesh
- ZeMACRO BFRP macro fibers
- ZeMICRO Chopped basalt microfilament fibers
- ZeWRAP Basalt fiber reinforced strengthening wrap – Coming Soon!

## **Joint Venture Timeline (Typical)**

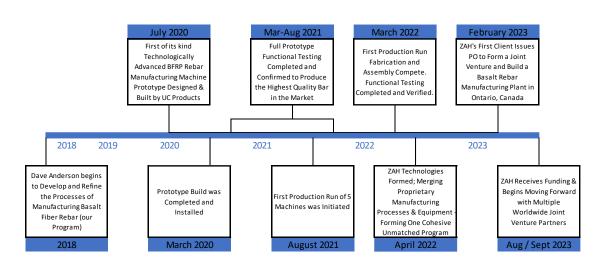




#### **Review of the Basic Joint Venture Structure**

- Turnkey ZAH Built Basalt Rebar Production Plant
- Investment is Senior Secured and paid back with interest.
- Proven Profitable Business Model
- Exclusive Territories
- Potential for generating +/- \$100M/year in Gross Revenue
- Ready Supply Chain
- Proven Proprietary Equipment and Processes
- Multiple Income Streams
- Full training and support

#### **About Us**



#### **ZAH Technologies History**

Formed in April of 2022 ZAH's founding members have been working tirelessly to develop and perfect the Foundational Program that we offer our partners today. Countless hours of research and development, fine tuning, and preparation have gone into this turnkey program to ensure that our JV partners can have confidence in our ability to guide and support their ongoing success.

At the time of their founding, David Anderson, the architect of the proven manufacturing processes and applied basalt technology, joined forces with Kurt Ziemer and James Holder of Upstate Custom Products, the developers of the first technologically advanced machinery, designed exclusively for Basalt Fiber Rebar production. It's this matchless pairing of systems, processes, equipment, and know-how, that enables our partners to stand out, lead, and succeed in the concrete reinforcement industry.



<sup>\*</sup>Detailed terms sheet available upon request.

# **Founding Members**

Translated to English, the German word "zäh" means "tough". That describes our products as well as our founding members who exemplify toughness. Each member wears multiple hats in managing the day-to-day operations of our company and in creating a strong vision for the future. Together the team brings a unique skillset and extensive industry knowledge to the burgeoning BFRP market. They represent more than 100 years of composite, polymer, manufacturing, engineering, and construction experience, and have all been successful in launching numerous startup businesses.



**David Anderson** 

Contact: DA@zahtechnologies.com

Dave's primary focus is forward looking and as the architect of the manufacturing program that ZAH is built on, his vision and leadership helps guide our potential investors and partners into an informed decision based on solid and repeatable results.

His background makes him an industry leader and an expert in fiber reinforced concrete and engineered cementitious composite designs; with more than 30 years of experience as a business leader and manufacturer of fiber and FRP (fiber reinforced polymer) composite materials.

**Kurt Ziemer** 

Contact: KZ@zahtechnologies.com

Kurt is an expert in the fields of composite manufacturing and production operations. His insights on product and production development are unrivalled and he guides both our equipment production team and our product development team.

He brings to our team his unique background as a premier aerospace executive who understands the advantages of precision manufacturing and data processing. And his ability to produce high quality products gives us an edge now and into the future.





**James Holder** 

Contact: JH@zahtechnologies.com

James' focus is primarily inward where he sets the vision for the design and improvement of our equipment offerings and manages the administrative needs of our rapid growth.

His background in equipment design and engineering paired with his extensive management experience gives us a clear advantage in the marketplace. And his commitment to sustainable growth and continuous improvement gives ZAH and our Programs a clear advantage over any potential competitors.





# The Future of Concrete Reinforcement!

