

# Delegation Brochure



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# Autarq



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### The Challenge

Acknowledging the industry pain point, Autarq formulated our eco-design rule: A solar roof tile for a roofer without prior solar knowledge. A simple and versatile building product with transparent solar functionality. **Our Credo: Safe, Simple and Beautiful!** 

### **Our Solution**

Autarq - Solar Roofs - Aesthetics Driven by Usability, Centered Around Function. Building Integrated Photovoltaics (BIPV). We are a German ClimateTech company, established in 2012. We've put a lot of effort into making sure that installing roof tiles with Autarq technology is as easy as 1-2-3. Best-in-class shadow resilience. Guaranteed safety at all times due to operating low voltage, < 120 V DC and parallel connection. Energy Efficiency: Dual functionality: 1) Original clay roof tile & 2) solar energy generator – in one. Empowers homes to become energy producers. Promotes decentralized energy generation. Decreases energy transmission losses

### Looking for

Durability & Repairability: Min. > 30 years. Autarq technology (unlike all other competitors) does not use microinverters on the roof, which need to be replaced < 10-15 years.



# **ECODRY** International



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## The Challenge

We are the market leader in Europe for wall dehumidification. Through our patented Ecodry method, we guarantee the reversal of the capillary effect in the wall, which is the most common problem is old buildings. This enables us to permanently preserve historical buildings and cultural assets of great significance to entire regions.

### **Our Solution**

**General Benefits of Wall Drying:** Wall drying prevents structural damage, mold growth, and indoor air quality issues. It extends the building's lifespan, reduces maintenance costs, and improves overall living conditions. Effective wall drying ensures the building remains safe, healthy, comfortable and you can save heating costs.

**Why Ecodry?** Ecodry offers advanced wall drying solutions that are eco-friendly and energy-efficient. Their technology effectively combats rising damp, preventing mold and structural deterioration. Ecodry's systems are easy to install, require minimal maintenance, and provide long-term protection for buildings. By reducing humidity levels in the walls, Ecodry improves indoor air quality and enhances occupant comfort. Additionally, Ecodry's innovative approach reduces operational costs and supports sustainable building management. Their tailored solutions address specific moisture problems, ensuring optimal results for each project.

### Looking for

1. Since 2010, we have a partner with Bedi Vochttechniek B.V. in the Netherlands, who is now seeking additional distribution partners specially in the northern part of Netherlands.

Our customers include property management companies, architects, construction firms, administrators of heritage-listed properties, private homeowners, and real estate investors—all individuals interested in renovating older buildings.
Additionally we are looking for partners, consumers, heritage owners not only in the Netherlands or Germany but all over the world.



# ELA Container



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# ela[container]

### **The Challenge**

Whether for conversions, excess capacity or a large contract, flexible ELA container rooms for industry keep your logistics, selling and production running smoothly. They offer the highest technical standards and equipment details that are tailored specifically to the sector. Storage, office and sanitary containers from ELA are the perfect way to turn room solutions into fully fledged production areas and workplaces.

### **Our Solution**

ELA Container specialises in container-based rooms and buildings to rent or buy in any chosen size and with custom fittings. With 60,000 containers, 1,400 employees and 24 sites around the world, ELA Container has become a leading provider of quality, flexible room modules in Germany. Today, ELA Container is a partner to a wide range of industries, ranging from the construction industry to retail and gastronomy. With its quality, innovation and passion, ELA Container is continually opening up new markets and industries and is winning more and more people round to the effectiveness of mobile ELA room containers.

- Customer Acquisition
- Positioning in the market, brand awareness.
- Connect with potential partners such as... (logistic, electric services, other services)
- Networking with for example knowledge partners as universities, development agencies, vendors
- Closing contracts/ getting clients (different industries)





# HAT GmbH



Dr. Csaba Singer CEO/CTO csaba@h-aero.com +49 1523 3562482 https://h-aero.com/en **h-aero**® Exploration / Communication / Observation /

# The Challenge

Drones and satellites have their respective limitations in terms of temporal or spatial resolution, payload capacity, sensor usage, cost of operations, fuel efficiency or regulatory authorization to operate. All in all, existing systems cannot take full advantage of rapidly advancing sensor and digital technologies.

# **Our Solution**

HAT GmbH has developed h-aero, an autonomously operating flight system to acquire airborne data allowing interchangeable camera and sensor usage. By radically increasing the spatial and temporal range of data collection, it is the first LTA pseudo-satellite at low altitude. H-aero is compact and highly efficient in collecting relevant data for several applications, e.g., industry, agriculture, smart city services or infrastructure assessments. h-aero is affordable, easy to transport and to handle. It will carry diverse payloads and safely store collected data through its own cloud services. This makes h-aero perfect for:

- Airborne surveillance of industrial installations and equipment
- Observation and data acquisition of running processes
- Aerial survey and photogrammetric measurements on ancient structures and monuments (interior and exterior).

### Looking for

HAT GmbH would like to network or partner with local authorities, cities, companies or universities, who have need in:

- Airborne surveillance of industrial installations and equipment
- Observation and data acquisition of running processes
- Aerial survey and photogrammetric measurements on ancient structures and monuments (interior and exterior)
- 3D models and support for planning tasks Airborne ad-hoc mobile network nodes and data relays (4G / 5G / SatCom)
- PoC's









# Heine Ingenieure



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# The Challenge

- Recording of non-existent building data with the help of laser scanning to determine the operating costs
- Make buildings more efficient
- CAFM Introduction, which is absolutely need
- To optimize work processes, improve building efficiency and reduce costs in companies
- Train customers in the use of BIM, Support customers in the implementation of building data in a CAFM system,
- Creation of energy-efficient building schedules

### **Our Solution**

At a time when businesses are becoming more complex and facility management requirements are increasing, efficient management of buildings and facilities is essential. Our services are:

- Inventory of buildings
- Laser scanning
- Lifecycle management
- BIM
- Elke Heine is the spokesperson for the Building Smart Northwest regional group Energy efficiency
- Taking a holistic view of buildings

- Getting feed-back for business model B2B Connection with potential (foreign)partners such as Real Estate Companies, Architects, city and municipal administrations as well as companies which use or intend to use CAFM
- Builders who are interested in sustainable, "intelligent" and efficient buildings Customers who are looking for more information and assistance in the field of building management and real estate to participate in our lectures, training courses and workshops, both digital and physical.
- Heine Ingenieure would like to find a deeper understanding of the market to utilize synergies and develop the market



# MIG MbH



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material innovative gesellschaft mbh

#### **About Us**

MIG Material Innovative Gesellschaft mbH (MIG) is a research-driven manufacturer specializing in advanced building materials that enhance sustainability, safety, and energy efficiency in buildings. The company's innovative solutions include chromium (VI) reducing agents to minimize toxicity in cement and a thermal insulation coating system to improve energy performance and fire protection.

#### **Our Mission**

Both founders brought extensive experience in the construction chemical industry, focusing on developing sustainable materials to enhance building performance and promote health. Since its inception, MIG has been committed to creating construction materials that improve environmental sustainability

#### **Chromate Reduction System**

MIG's chromate reduction system, utilizing tin (II) sulfate and antimony (III) oxide, offers superior and durable reducing power compared to iron (II) sulfate. This state-of-the-art technology has established MIG as an industry leader in high-quality, customized chromate reduction.

#### Thermal Insulation Coating System

Continuously innovating, MIG has expanded its product line to include a sustainable thermal insulation coating system. This system enhances energy efficiency, fire protection, corrosion resistance, and health promotion for various surfaces. The coating system, launched in 2009, features a thin-film heat-reflective finish coat and a range of functional plasters with properties such as dehumidification, thermal insulation, and fire resistance. The technology has gained significant traction both nationally and internationally.

#### **Our Technologies**

Dipl.-Chem.Ing. Burkhard Brandt's invention of chromate reduction based on tin (II) sulfate paved the way for new generations of chromate reducers. MIG also developed a unique production process for antimony (III) oxide-based chromate reducers in a dust-free encapsulated form. Another major innovation is the DHMb® Double Hybrid Membrane technology, a micro-porous membrane in the thermal insulation coating system that manipulates thermal radiation and regulates moisture, enhancing energy efficiency.

# Nesseler Bau



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## **The Challenge**

The façade of a building is the interface between the inside and the outside. In addition to meeting the building physics requirements as an envelope and the structural demands as a supporting framework, it serves as the building's calling card. To create sustainable buildings, it is necessary to use new materials and to develop façades as durable and resource-efficient components.

### **Our Solution**

The substitution of conventional steel reinforcement in concrete façades with textile reinforcement makes it possible to construct very slender and sustainable components. The slender design also enables significant resource savings in concrete, as the carbon reinforcement does not require a protective concrete cover and cannot rust. Additionally, the slim design reduces the wall thickness, leading to increased interior space within the building. The newly developed carbon façade is highly durable, low-maintenance, and exceptionally robust, with a service life exceeding the typical 50 years. Furthermore, the components of the façade can be separated by type after use, enhancing recyclability and resulting in a low overall CO2 footprint. In short, the newly developed carbon concrete façade from the nesseler Group is a sustainable and robust system.

- We are seeking feedback from the Dutch market on our newly developed carbon façade product.
- We aim to establish connections with builders (clients) and professionals in the Dutch construction sector.
- We are looking for architects interested in durable and sustainable concrete façades.
- We are seeking partners and suppliers to develop our products for the Dutch market





# PMF Housing



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# PMF CONDABLE BUILDINGS

### The Challenge

Building envelopes should consume less energy for heating and cooling, cause little gray energy, be easy and quick to produce for different purposes adapted to regional needs. We have implemented these development goals in several years of research and development with institutes at RWTH Aachen University, BASF, Pile Fabrics and others, patented them and launched them on the market in 2022.

### **Our Solution**

We use wood for the frame and polyester or PET for a 3-dimensional fabric, which is stretched into the frame. The fabric is filled with polyurethane foam under pressure. We can use up to 50% recycled PU for our floor elements and are developing this use for the wall and roof elements. Our elements consume less energy in production than solid parts and fewer materials than conventional timber frame constructions, as the PU core in the frame acts as insulation and thermal insulation and is impermeable to wind and water vapor. This avoids the known moisture and mold damage of conventional timber construction methods and thus enables a service life of > 100 years. Less material usage and simple production design reduces costs, resulting in lower prices than many conventional construction methods.

This also applies to the installation of technical building equipment, interior fittings and the installation of facades. As the PU core does not rot and the rest of the construction is protected from weathering, produced elements can be reused in parts or as a whole. As a manufacturer, we are therefore happy to take back any produced elements for new productions. Our climate-positive buildings can be operated with a high degree of energy self-sufficiency using PV systems.

- Positioning in the market, raising awareness, feedback for our innovative building system B2C & B2B
- Contacting and Networking potential partners for cooperation, e.g. carpenters, timber construction companies
- Networking with knowledge partners, e.g. universities, development agencies, to further develop our construction system
- Contacting and Networking potential interested parties for our construction system: architects, property developers, real estate developers, private builders, vacation park operators, local authorities

www.gtai.de/mep