

REI AUTOMATION

JANUARY 2021

KUKA
OFFICIAL SYSTEM
PARTNER



AGENDA

1. ABOUT REI AUTOMATION
2. COMPANY OVERVIEW
3. FACTS & FIGURES
4. PART OF THE HAHN GROUP
5. GLOBAL FOOTPRINT
6. FOCUS INDUSTRIES
7. PROJECT EXAMPLES
8. INQUIRY CONTACTS
9. MANAGEMENT



REI AUTOMATION



REI Automation, Inc. specializes in designing and building custom industrial equipment, including assembly lines, robotic cells and special-purpose machines.

Our consistent goal is to build elegant, robust systems that provide unmatched value for our customers.

We solve hard assembly tasks within five industries.

robust. elegant. innovative.



Grant Phillips
President



part of the **HAHNGROUP**

COMPANY OVERVIEW | CAPABILITIES



REI Automation, Inc. is celebrating our 30th year anniversary in 2020

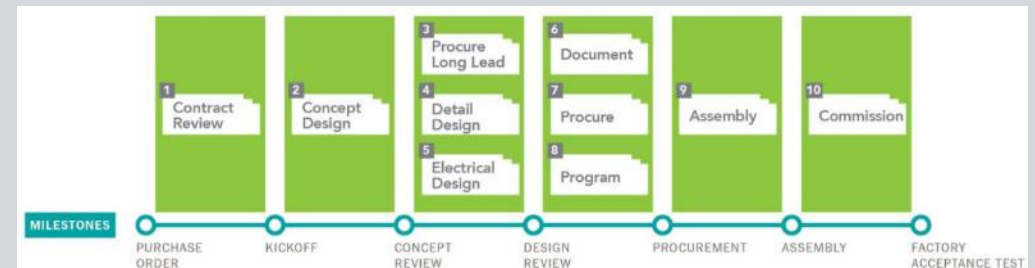
- 8.5 acres campus in Columbia, South Carolina USA
- 40,000 square feet of machine development space
- 75 engineers, technicians and support employees
- Inc5000 2019 Fastest Growing Companies in the US

Turnkey design and build of automated systems

- Mechanical design using SolidWorks
- Electrical design
- PLC, robot and vision system programming

Continuous improvement is the heart of all we do

- ISO9001:2015 registered
- Our Proven10 process is used to track and report project progress



COMPANY OVERVIEW | UNIQUES



REI Automation Solves Difficult Assembly Tasks

- Flexible materials such as fabric and IV bags
- Vision guided positioning and inspection
- Bin picking
- Small part assembly with verification

Part of the HAHN Group

- Global network of support
- Financial strength
- Best practices shared across Hahn Group companies

Core Values

- Collaboration and Kindness are Key Values

Our Promise

- We will provide a robust, elegant solutions for our customers using the correct level of technological innovation



REI AUTOMATION | FACTS & FIGURES



75
employees



40.000
square feet
development space



13 countries
part of a
global network



\$ 10 K - \$ 7 M
project value span

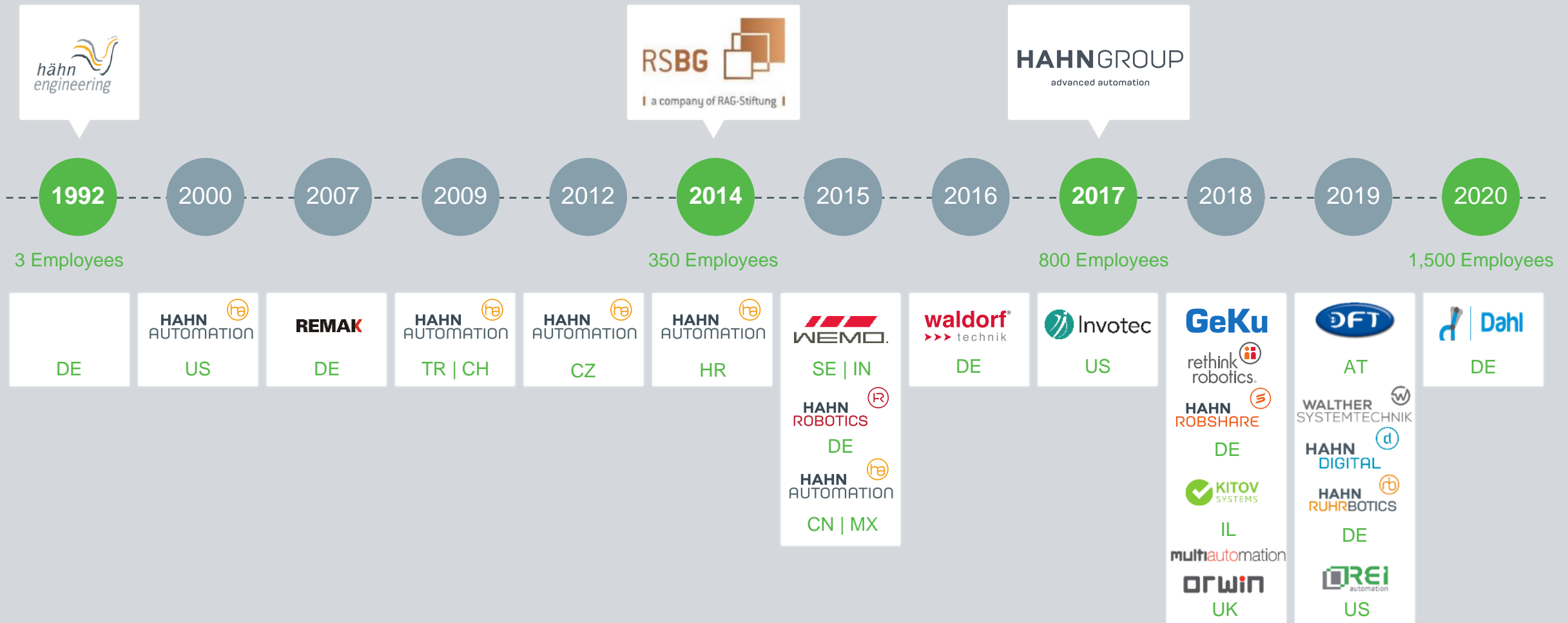
part of the **HAHNGROUP**



HAHNGROUP

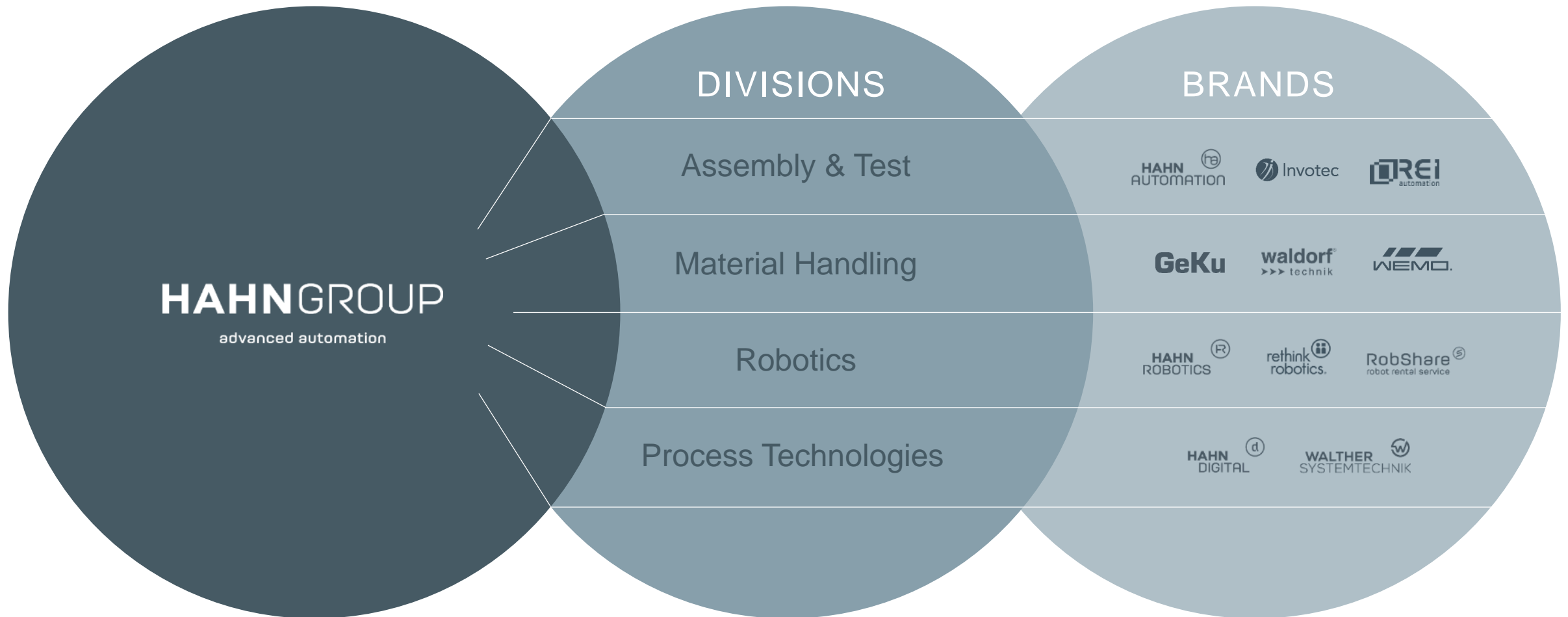
advanced automation

HAHN GROUP | HISTORY



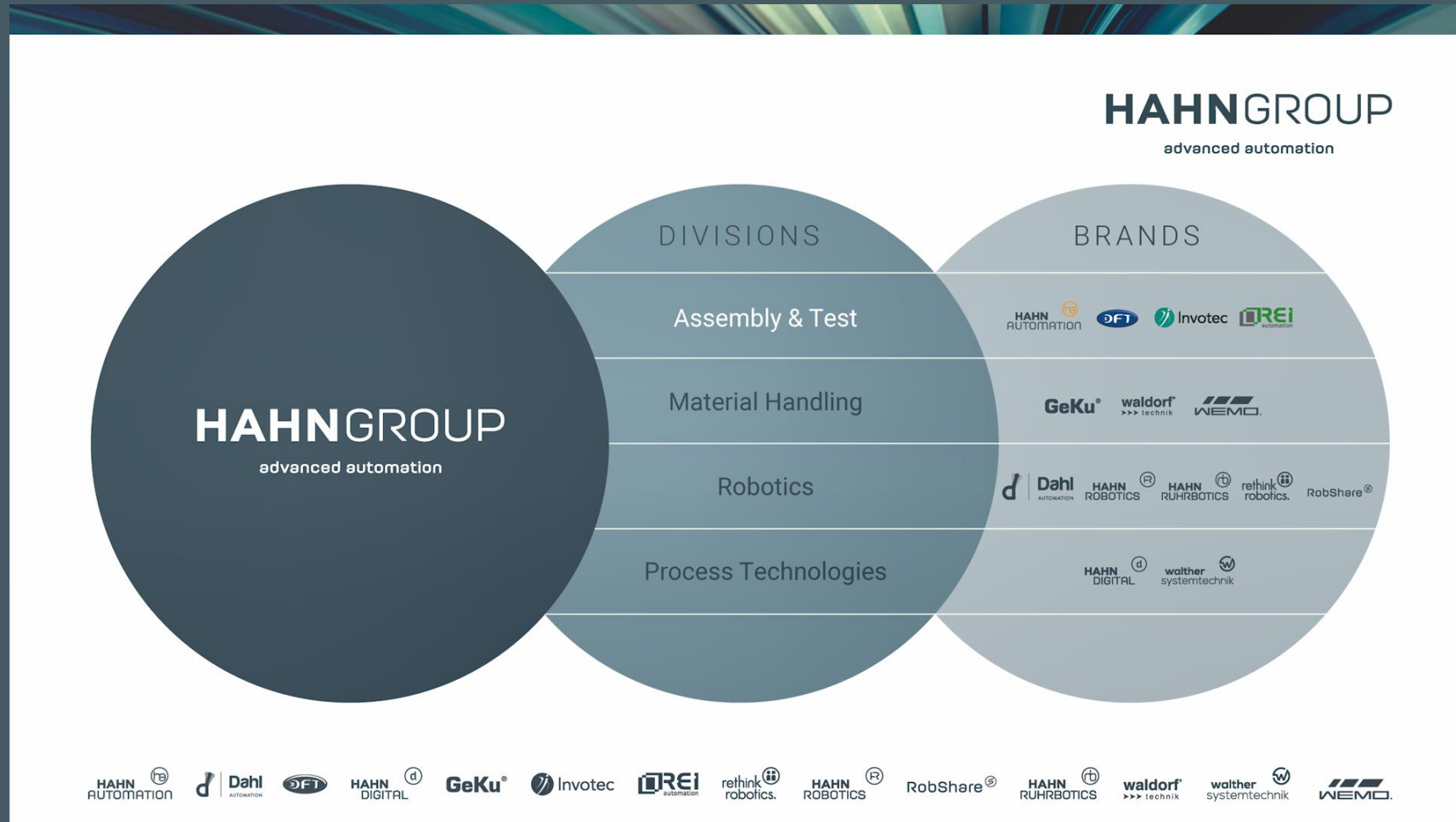
part of the **HAHNGROUP**

HAHN GROUP | DIVISIONS & BRANDS



part of the **HAHNGROUP**

DIVISION | ASSEMBLY & TEST



DIVISION | ASSEMBLY & TEST



1,000 employees



Up to € 25 M
Project Value



13 production facilities



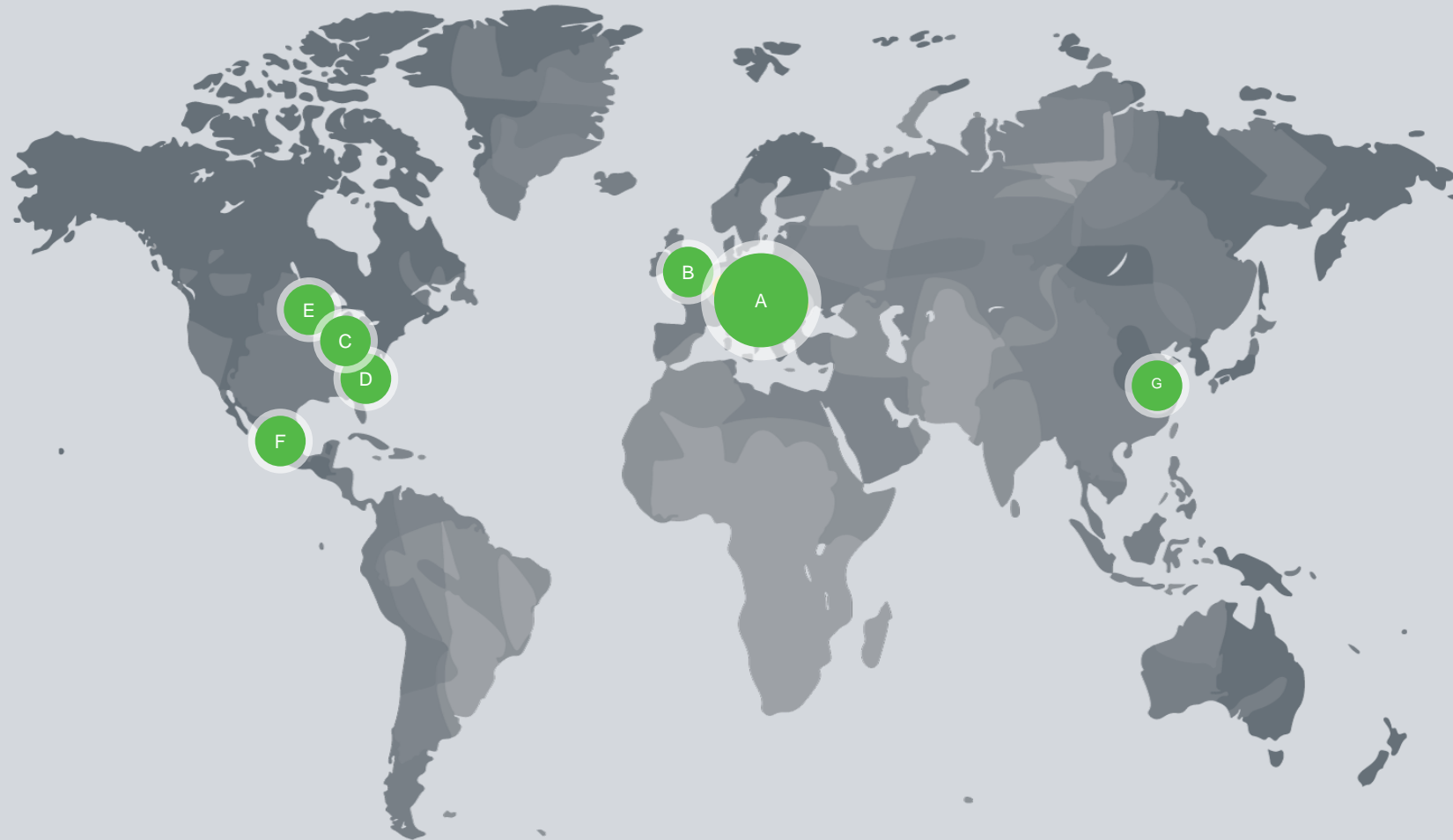
19 sales and
service hubs

Within the Assembly & Test Division, the HAHN Group combines the companies **HAHN Automation**, **Invotec** and **REI Automation**.

In close cooperation with their customers, these **special machine builders** develop **taylor-made production** and **test systems** with robust and reliable **semi- and fully automated** production lines.

part of the **HAHNGROUP**

A&T DIVISION | GLOBAL FOOTPRINT



- | | |
|-------------------------|-----------------|
| A. EUROPE | next slide |
| B. GREAT BRITAIN | next slide |
| C. Cincinnati, KY, USA | HAHN Automation |
| Dayton, OH, USA | Invotec |
| D. Columbia, SC, USA | REI Automation |
| E. Minneapolis, MN, USA | Invotec |
| F. Querétaro, México | HAHN Automation |
| G. Kunshan, CN | HAHN Automation |



part of the **HAHNGROUP**

A&T DIVISION | FOOTPRINT EUROPE



A.	Rheinböllen, DE	HAHN Automation
B.	Wiehl, DE	HAHN Automation R&D
C.	Villingen-Schwenningen, DE	HAHN Automation Süd
D.	Newcastle, UK	HAHN Automation UK
E.	Birmingham, UK	HAHN Automation UK
F.	Prag, CZ	HAHN Automation CZ
G.	Kremsmünster, AT	HAHN Automation AT
H.	Zagreb, HR	HAHN Automation HR



part of the **HAHNGROUP**

REI AUTOMATION | FOCUS INDUSTRIES



Automotive



Electronics



Healthcare



Consumer Goods



Nuclear
Decommissioning

EXAMPLE 1 | SUPERCAPACITOR DEVELOPMENT

REI Automation developed the process to assemble a flexible supercapacitors in a new product introduction for a major international manufacturer.

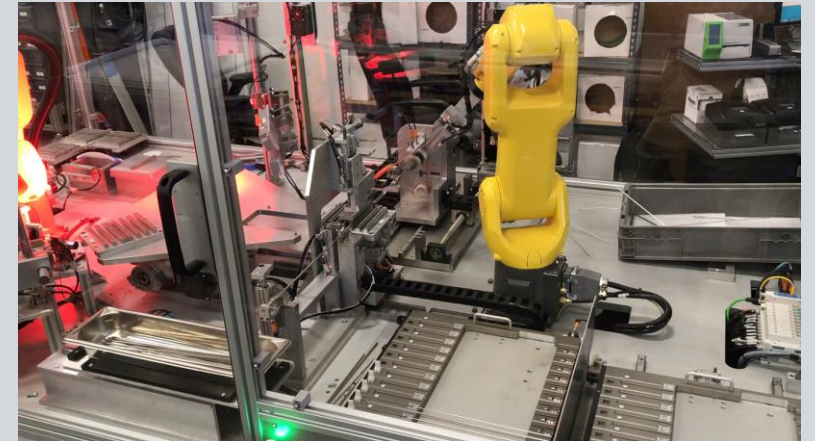
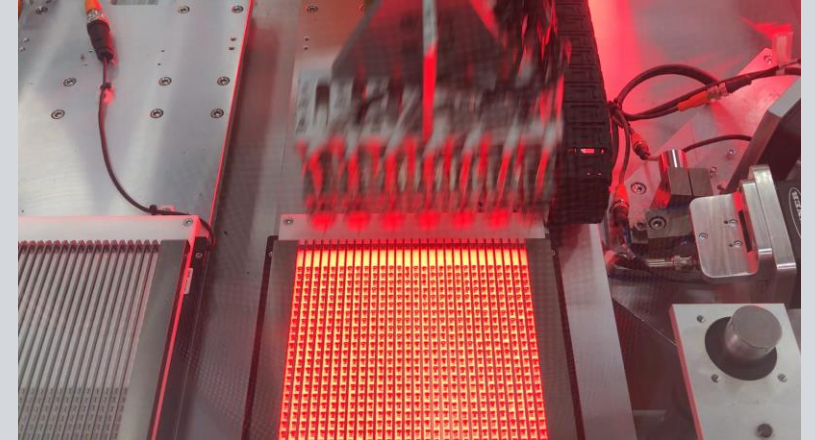
- Product sizes varied from 1 cm to 10 cm square in size with variable stack heights of conductors and insulators
- Six (6) FANUC LR Mate six-axis robots were used for the assembly process for three (3) identical machine systems
- An outer wrapper was formed to variable heights -- using a servo-press -- and indexed between assembly stations using a precision link indexing conveyor
- REI developed a laser cutting, ultrasonic welding and folding were developed to form the product automatically



EXAMPLE 2 | FIXATION DEVICE ASSEMBLY

REI Automation developed an automatic assembly process for fixation staples into the orthoscopic tool magazine.

- 100% inspection for fastener head mold quality
- Automatic orientation of the fastener into an assembly fixture
- Micro-torque control of the insertion of the driving screw
- Automatic insertion of the fastener/driver assembly into the gun magazine
- Automatic assembly of retention clips with vision verification



EXAMPLE 3 | SHARPS DISPOSAL CONTAINER

REI Automation developed an automatic assembly system for sharps disposal container lids.

- Vision-guided input directly from the mold machine to a two-lane indexing conveyor
- Bin picking for the insertion of two types of valves
- Heat staking and corona treatment of the plastic
- The gasket dispensing process requires the continuous flow of lids to keep the dispense system from clogging
- Automatic offload and stacking of completed assemblies



EXAMPLE 4 | BOTTLE CASSETTE LOADING

REI Automation developed a robotic system to automatically load cassettes for pharmaceutical bottle handling

- Incoming screw conveyor tooled to pre-bend the bottle hanging tab
- Robotic bottle loading of cassettes
- Robotic transfer of empty incoming cassettes and full outgoing cassettes



EXAMPLE 5 | STERILIZER LOADING

- **REI Automation developed a vision-guided robotic irradiation sterilizer loader for bags of eyewash solution bottles and caps.**
- Multi-function gripper to remove the slip sheets, then lift, separate and load bags of bottles and bags of caps into the sterilizer carrier
- Control system for tracking batches through the process
- Automatic stacking and transfer of pallets through the system with zone guarding



REI AUTOMATION | CONTACTS



Graham Chapman

Sales Engineer

gchapman@reiautomation.com

Medical



Rich Horton

Business Development Manager

rhorton@reiautomation.com

Nuclear



Sarah Katherine Gilliam

Sales Engineer

skgilliam@reiautomation.com

Electronics & Consumer Goods



Jarrod Maldonado

Sales Engineer

jmaldonado@reiautomation.com

Automotive



Grant Phillips
President

REI Automation Inc.
1240 Veterans Road
Columbia, SC 29209 USA
reiautomation.com



part of the **HAHNGROUP**

HAHN
AUTOMATION

HAHN
DIGITAL

GeKu®

Invotec

REI
automation

rethink
robotics.

HAHN
ROBOTICS

RobShare®

waldorf
>>> technik

WALTHER
SYSTEMTECHNIK

WEMO.



robust. elegant. innovative.

www.reiautomation.com