INFOTECH
automation

INFOTECH automation

2024

INFOTECH

COMPANY PRESENTATION

1 COMPANY OVERVIEW
2 PRODUCTS
3 APPLICATION EXAMPLES

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COMPANY OVERVIEW

WHAT WE DO

Infotech designs, produces and delivers high accuracy positioning systems for the automatic execution of precision processes – from stand alone machines to entire assembly lines

Infotech Component Matrix with more than 1000 modules

PLATFORMS – HEAD- / TABLE- / FEEDING-PERIPHERALS

100% DEVELOPMENT IN SWITZERLAND

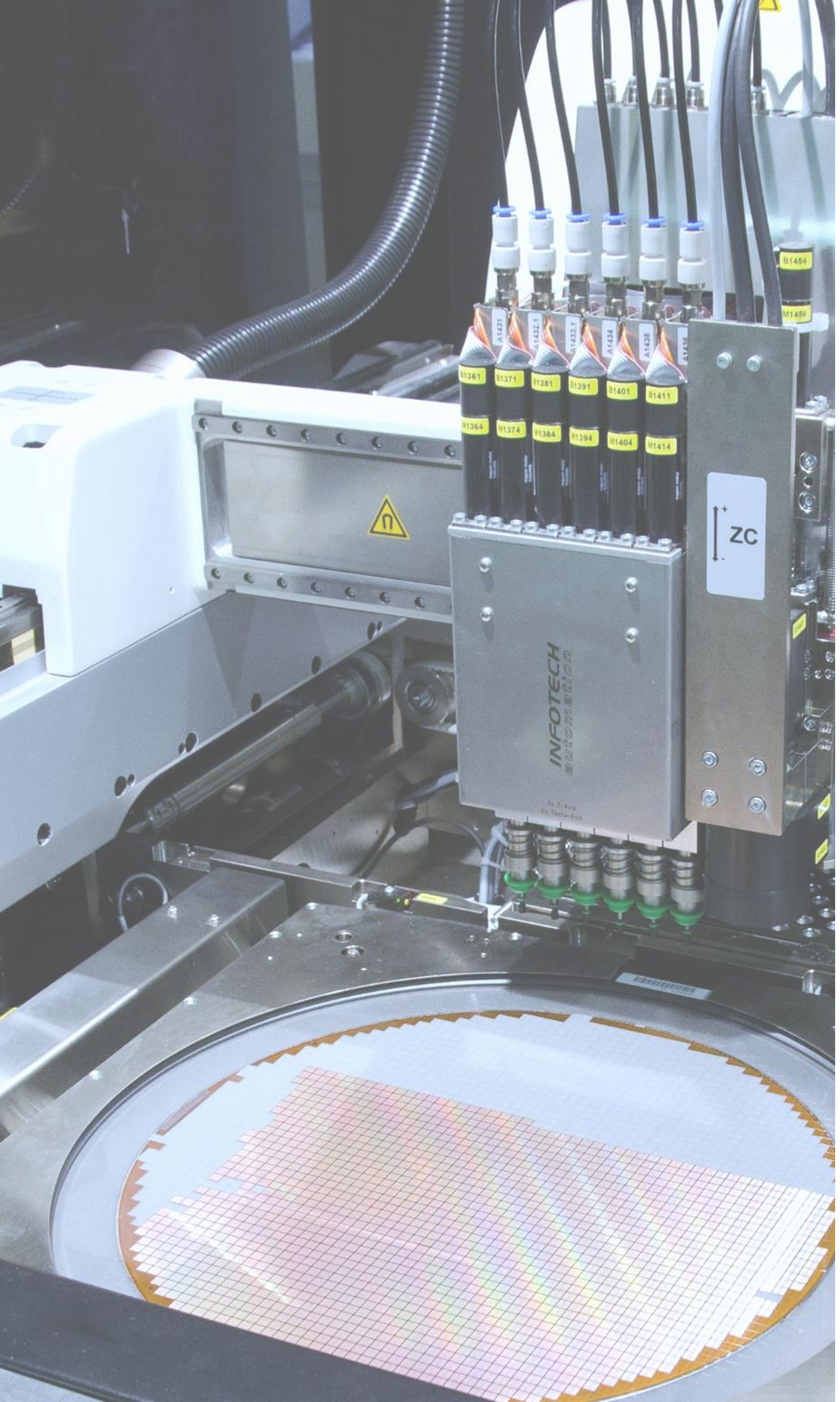
95% PRODUCTION IN SWITZERLAND

> 2280 INSTALLATIONS WORLDWIDE

COMPANY OVERVIEW

HISTORY IN BRIEF

- Technical oriented company with headquarter in Solothurn Switzerland
- Founded 1984, in business for 40 years with 197 employees
- Internationally operating company providing total assembly line solutions to selected customers
- Almost 40 years of experience in providing automation software, engineering and process development for semiconductor- and electronic hybrid manufacturing processes
- Since 2007 optimizing power module manufacturing processes - allowing total line solutions



STRATEGY

- Analyzing the customers process requirements and generate an optimized concept together
- Configuring a total solution based on the Infotech component matrix which is adding value and is reducing the total cost of ownership for the lifetime of the production equipment or the production line
- Focusing on selected customers planning early and treating the supplier on a fair bases, understanding that their products can be produced more efficient, in higher quality and repeatability, more dynamic and more flexible – resulting with lower cost of ownership using Infotech products

INFOTECH IN BRIEF

100%
Development at Infotech

>95%
Production in Switzerland

40
Years Infotech AG

>2280
Installations worldwide

1056
Years of experience in automation

197
Employees

>40
Support engineers worldwide

>50%
Engineers

>20
Countries

HISTORY

1984
Company registration

1999
Repositioning Infotech AG in Solothurn Switzerland

2001
Desktop, Component Matrix

2003
Production cells

2007
Production lines

2009
Fully automatic watch assembly lines

2015
First pharma assembly line

2017
Fully automatic Power Module production line with 12" Wafer Bonder

2020
Hybrid Bonder: Die Bonding and SMD assembly

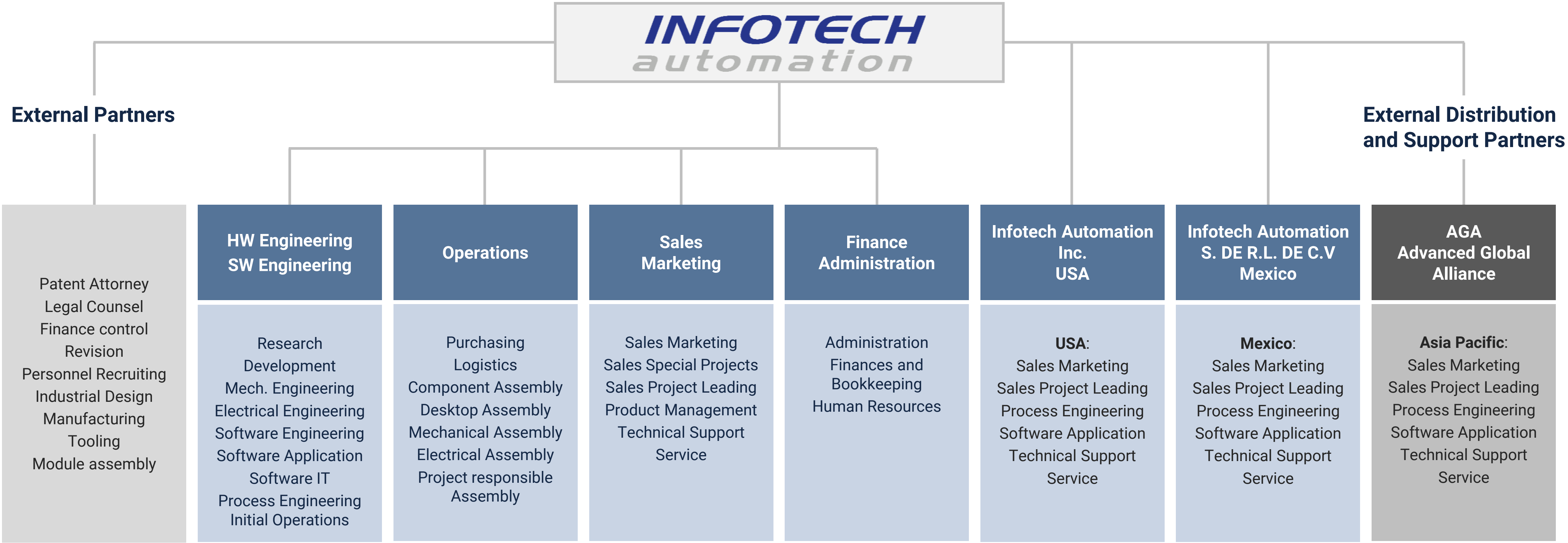
2021
3D printing system for multimaterial designs

2023
>2’280 systems delivered

Diverse Buffer modules

2023
Foundation of Infotech Automation Inc, USA

ORGANIZATION



External Partners

Patent Attorney
Legal Counsel
Finance control
Revision
Personnel Recruiting
Industrial Design
Manufacturing
Tooling
Module assembly

HW Engineering
SW Engineering

Research
Development
Mech. Engineering
Electrical Engineering
Software Engineering
Software Application
Software IT
Process Engineering
Initial Operations

Operations

Purchasing
Logistics
Component Assembly
Desktop Assembly
Mechanical Assembly
Electrical Assembly
Project responsible Assembly

Sales
Marketing

Sales Marketing
Sales Special Projects
Sales Project Leading
Product Management
Technical Support
Service

Finance
Administration

Administration
Finances and Bookkeeping
Human Resources

Infotech Automation
Inc.
USA

USA:
Sales Marketing
Sales Project Leading
Process Engineering
Software Application
Technical Support
Service

Infotech Automation
S. DE R.L. DE C.V
Mexico

Mexico:
Sales Marketing
Sales Project Leading
Process Engineering
Software Application
Technical Support
Service

External Distribution and Support Partners

AGA
Advanced Global
Alliance

Asia Pacific:
Sales Marketing
Sales Project Leading
Process Engineering
Software Application
Technical Support
Service

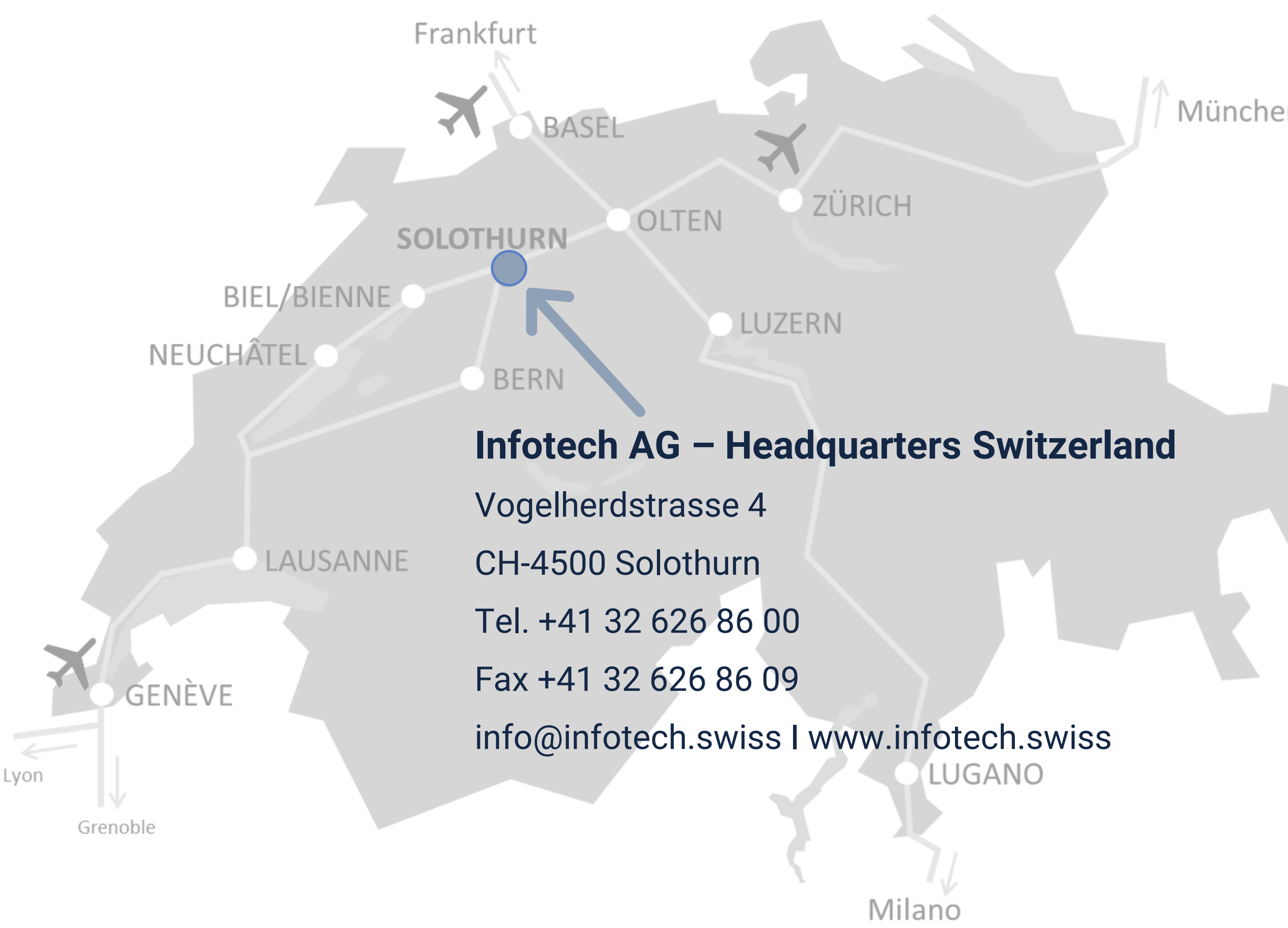
External Partners:
Activities with external companies
and suppliers in the region of Solothurn

Technology partners:

PINK Thermosysteme

Schunk Sonosysteme

LOCATION HEADQUARTERS SWITZERLAND



Infotech AG – Headquarters Switzerland

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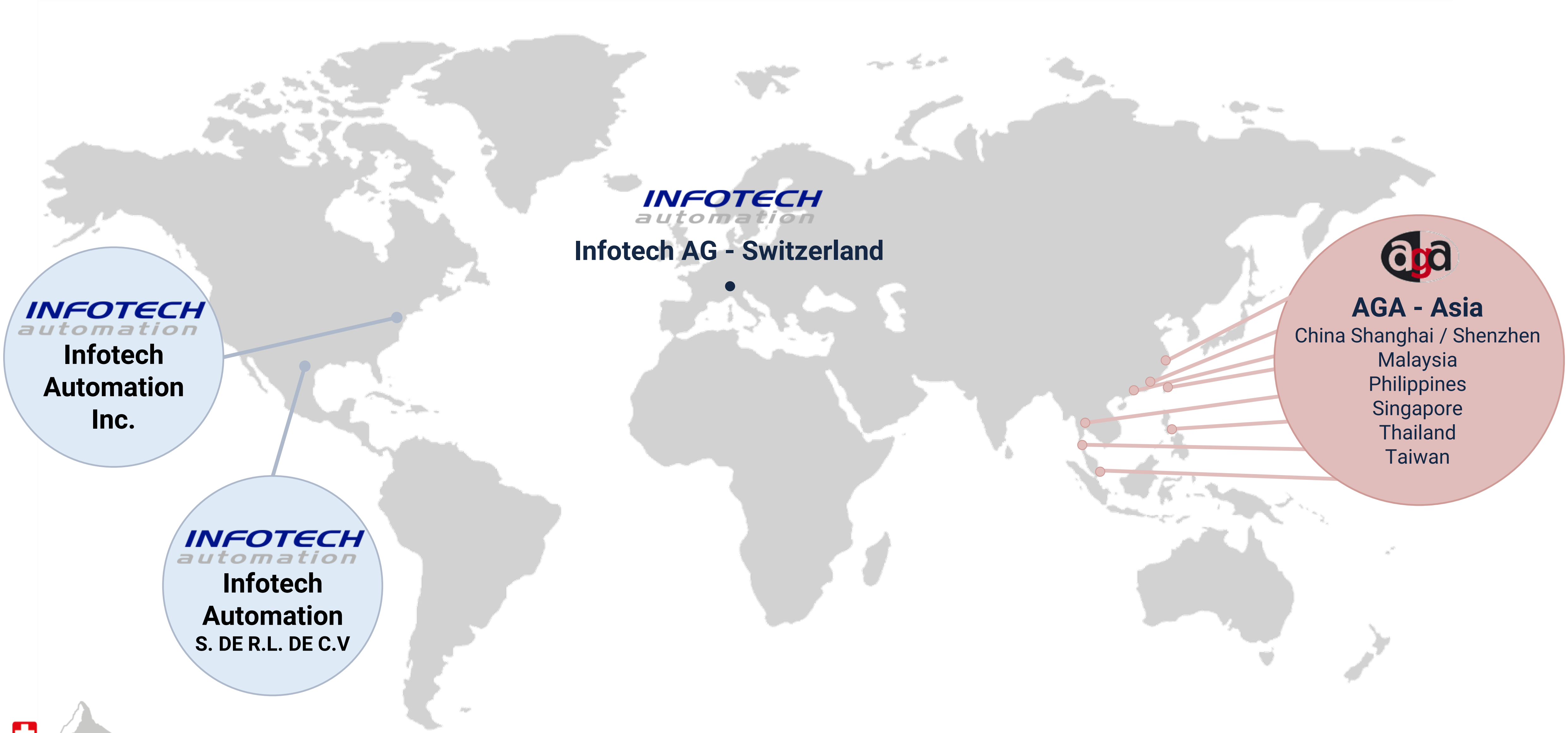
Fax +41 32 626 86 09
info@infotech.swiss I www.infotech.swiss

INTERNATIONAL LOCATIONS



Infotech AG - Switzerland

Infotech Automation Inc.

Infotech Automation S. DE R.L. DE C.V

AGA - Asia

China Shanghai / Shenzhen
Malaysia
Philippines
Singapore
Thailand
Taiwan

REFERENCES

ams
BOSCH
BorgWarner
OSRAM
Opto Semiconductors
STRAMAMPS
Abbott
Point of Care
ATC
ACTRON TECHNOLOGY CORP.
Boehringer Ingelheim
microParts
HELLA
IPG
PHOTONICS
infineon
ReMonta AG
SCHILLER
SMEC
axetris
ADOM
Gesellschaft für VISUELLE DATENKOMMUNIKATION mbH
envisionTEC
ETA
illumina
R.W.
SWATCH GROUP
BYD
ALTATEC
SWISS MICROELECTRONIC
Carsem
HUAWEI
IRIDIAN
SPECTRAL TECHNOLOGIES
Heraeus
KETEK
RMT Ltd
SwissSEM
csem
eyesense
Continuous Photometric Glucose Monitoring
FINISAR
Prismatic
sensors
ROHDE&SCHWARZ
SEMIKRON
DANFOSS
Continental
FISBA
CENTILLION
ELECTRONICS
CREE
JOHN DEERE
MACMIC
国家电网
STATE GRID
TESAT
SPACECOM
T. I. P. S.
TE
connectivity
DELTA
Smarter. Greener. Together.
Hitachi Energy
Seventstar
starpower
TONG HSING ELECTRONICS
中国中车
CRRC
Sanan IC
TELEDYNE e2v
Everywhereyoulook™
TDK
HARTING
NARI
南瑞集团
NARI GROUP CORPORATION
MONDAINE
Swiss Watch
Schnaithmann
USI
UAES
II-VI LASER ENTERPRISE
vitesco
TECHNOLOGIES
Wolfspeed
NeoPhotonics
KISTLER
MAPAL
OptoTech
GERMANY
STMicroelectronics
Fraunhofer
IZM
KERN-LIEBERS
FIRMENGRUPPE
mb-microtec
excellence in micro-technologies
onsemi
THOMMEN
Medical
UNIVERSO
XENON
ZF

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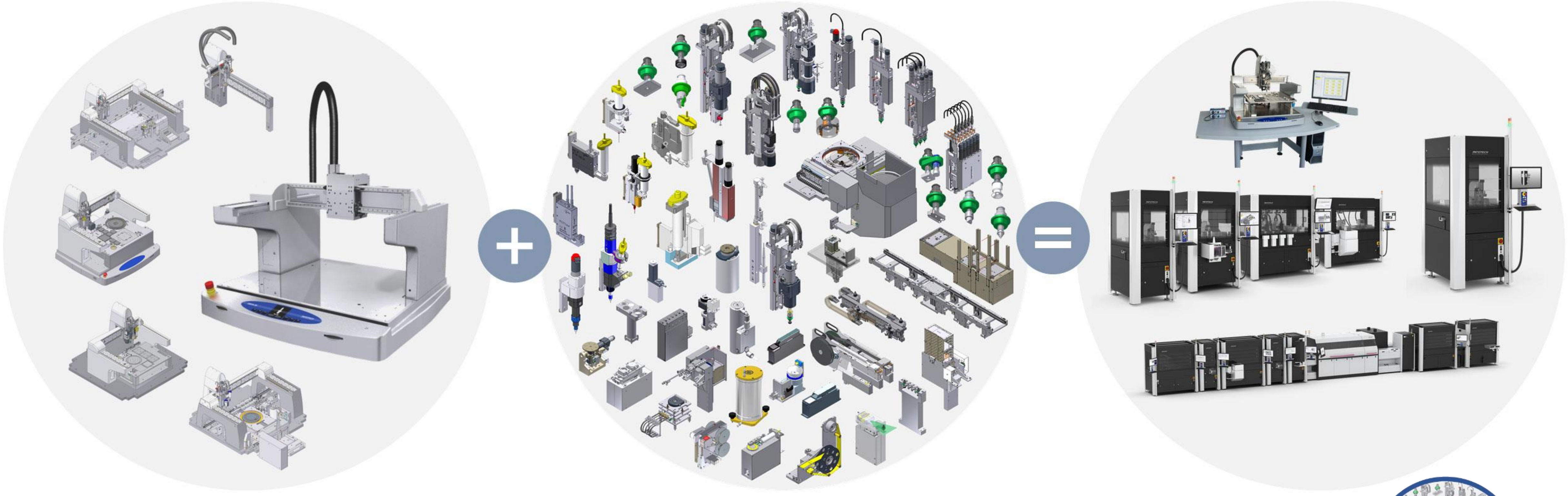
INFOTECH COMPONENT MATRIX



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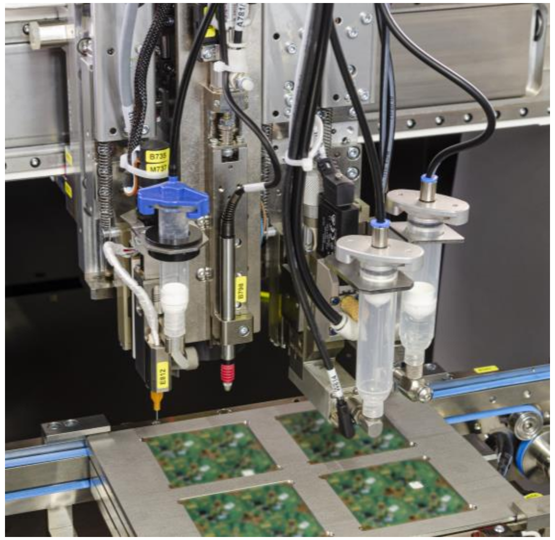
COMPONENT MATRIX

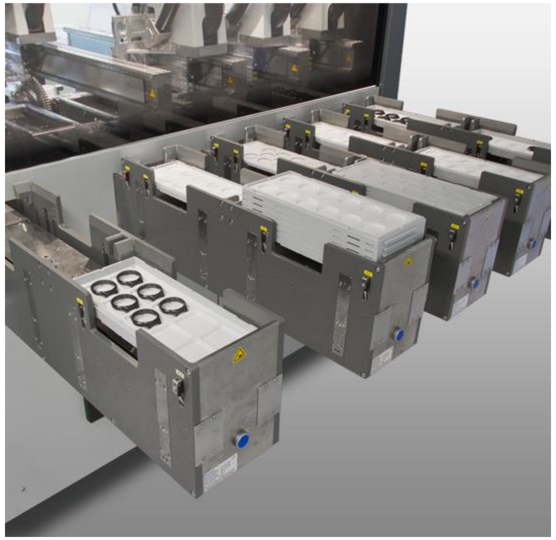
INFOTECH COMPONENT MATRIX

PRODUCTION CELLS PLATFORMS



HEAD PERIPHERALS

TABLE PERIPHERALS



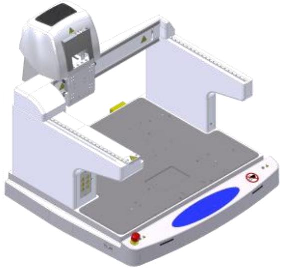
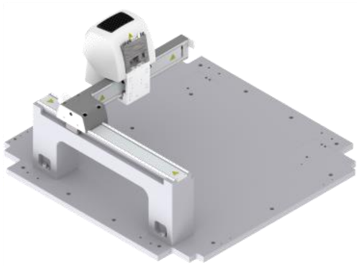
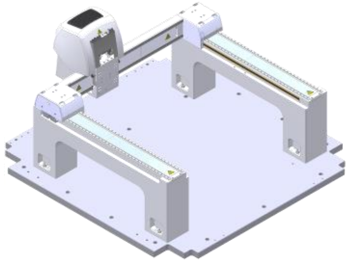
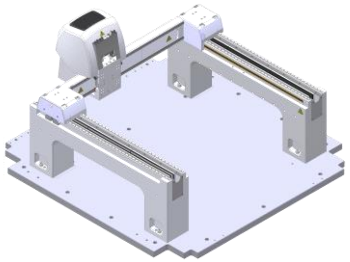
FEEDING PERIPHERALS

PRODUCTION CELLS

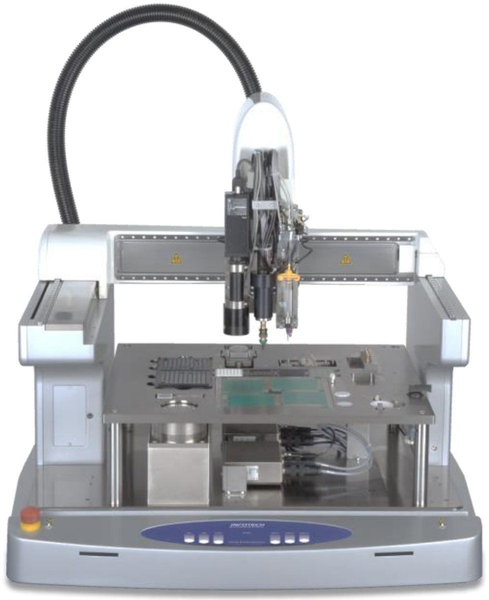
IC-900, IC-1200, IC-1600, IC-1800, IC-2000 and IC-2200

PRODUCTS

PLATFORMS

	IP-100	IP-500	IP-600	IP-620	IP-720
					
Travel range X	93 – 140 mm	400 mm	210 – 340 mm	210 – 540 mm	210 – 540 mm
Travel range Y	440 – 680 mm	400 mm	400 – 730 mm	400 – 730 mm	540 – 730 mm

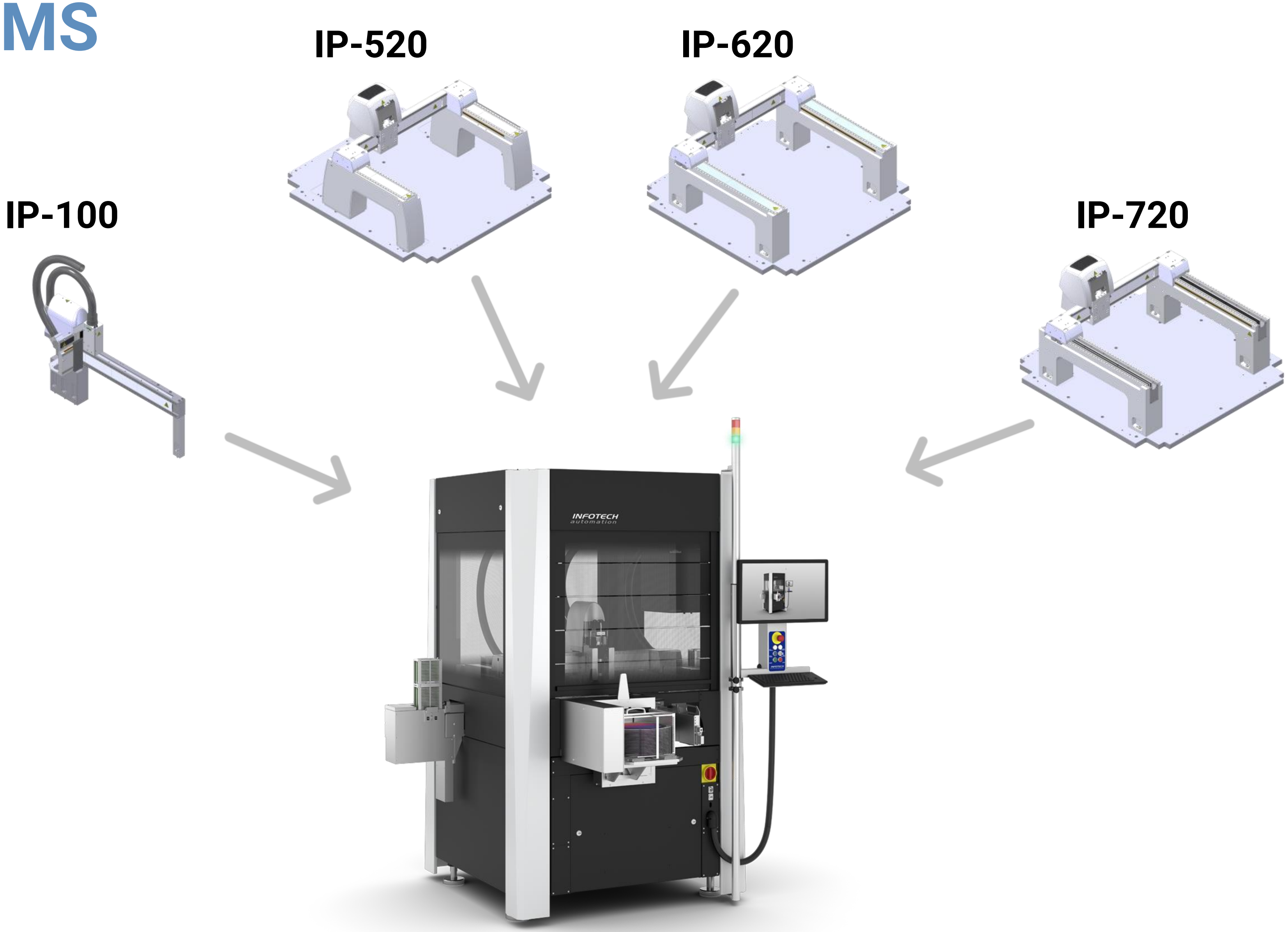
PLATFORMS



Scalable from Desktop to Production Line

PRODUCTS

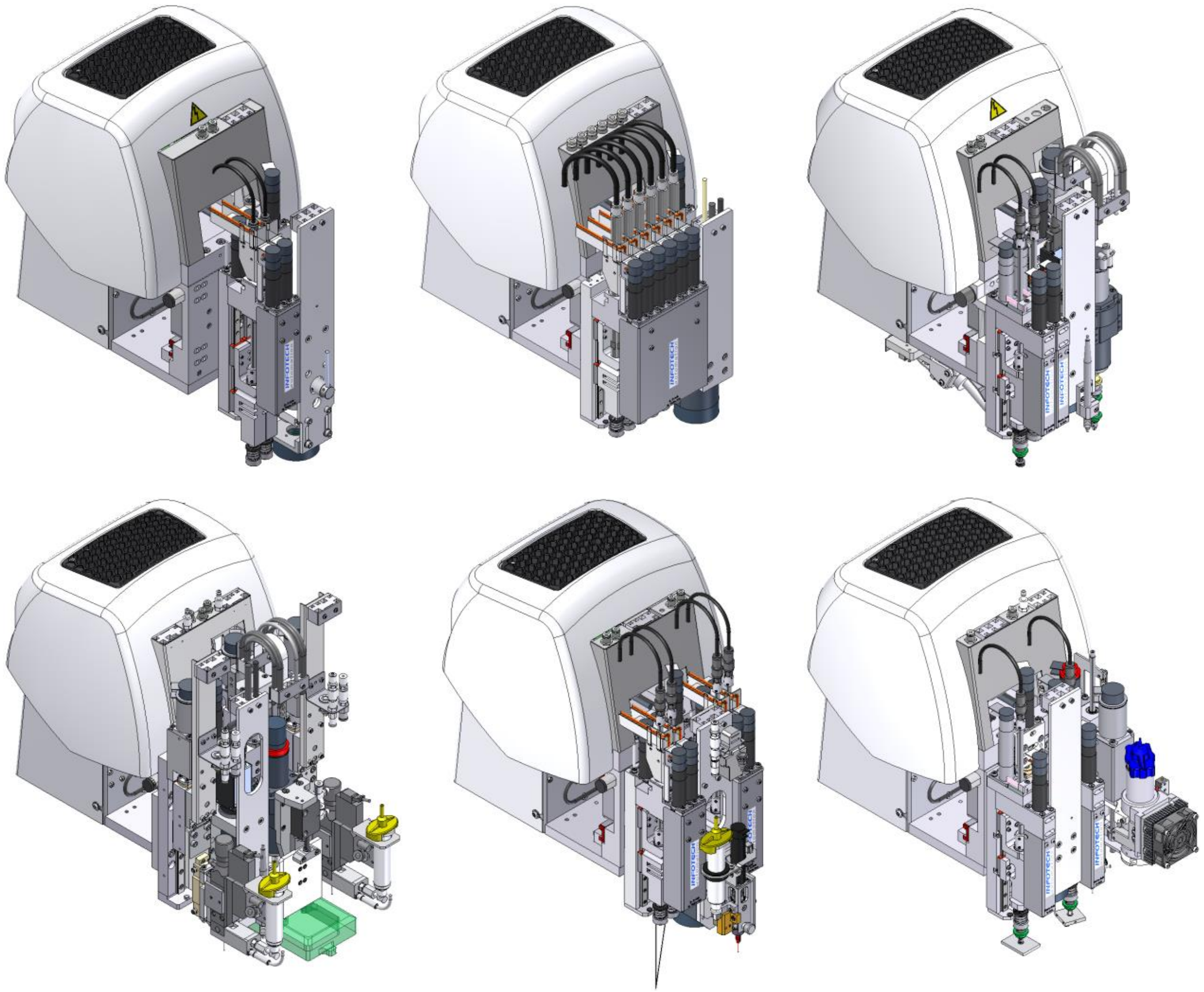
PLATFORMS

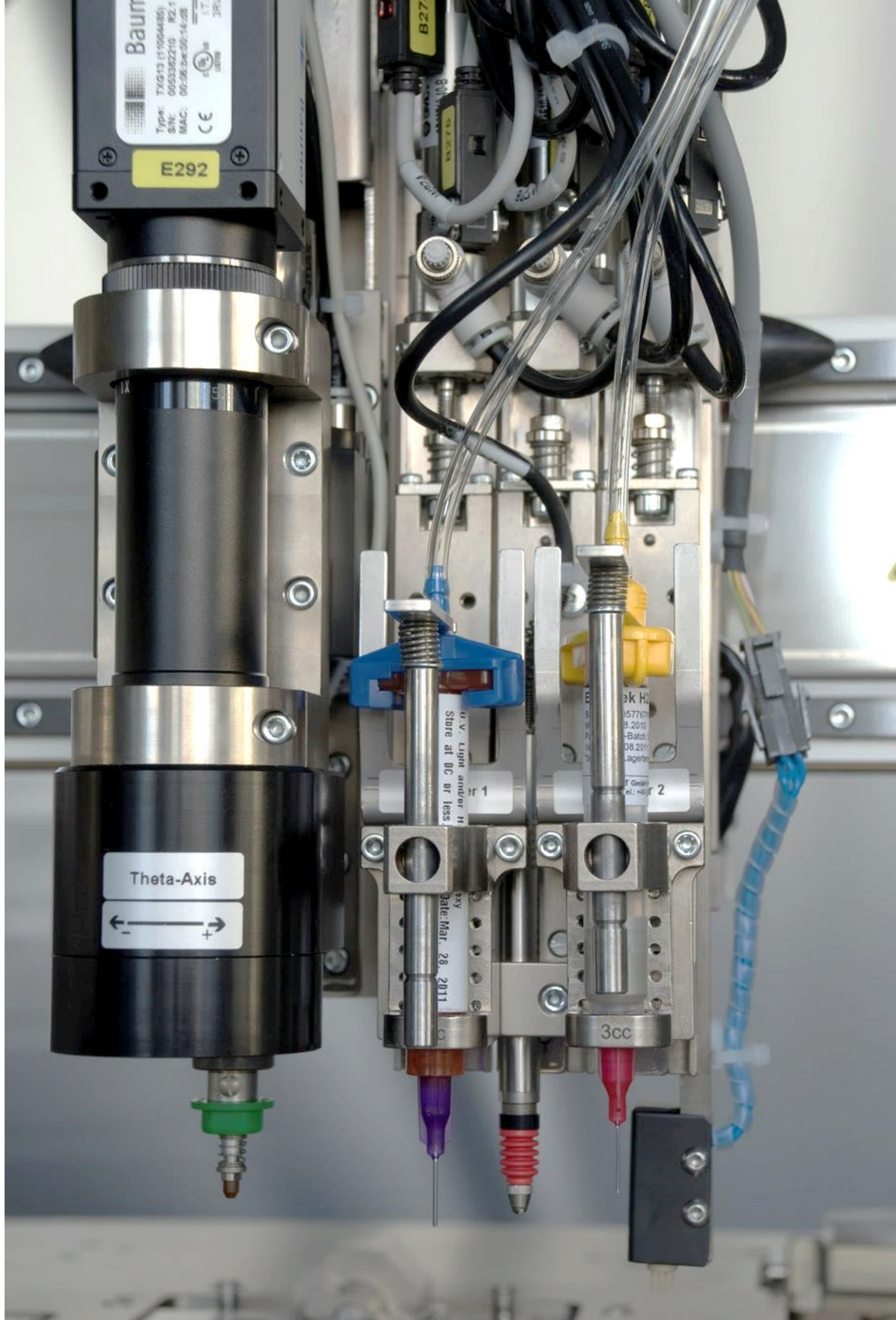


COMPONENT MATRIX

PRODUCTS

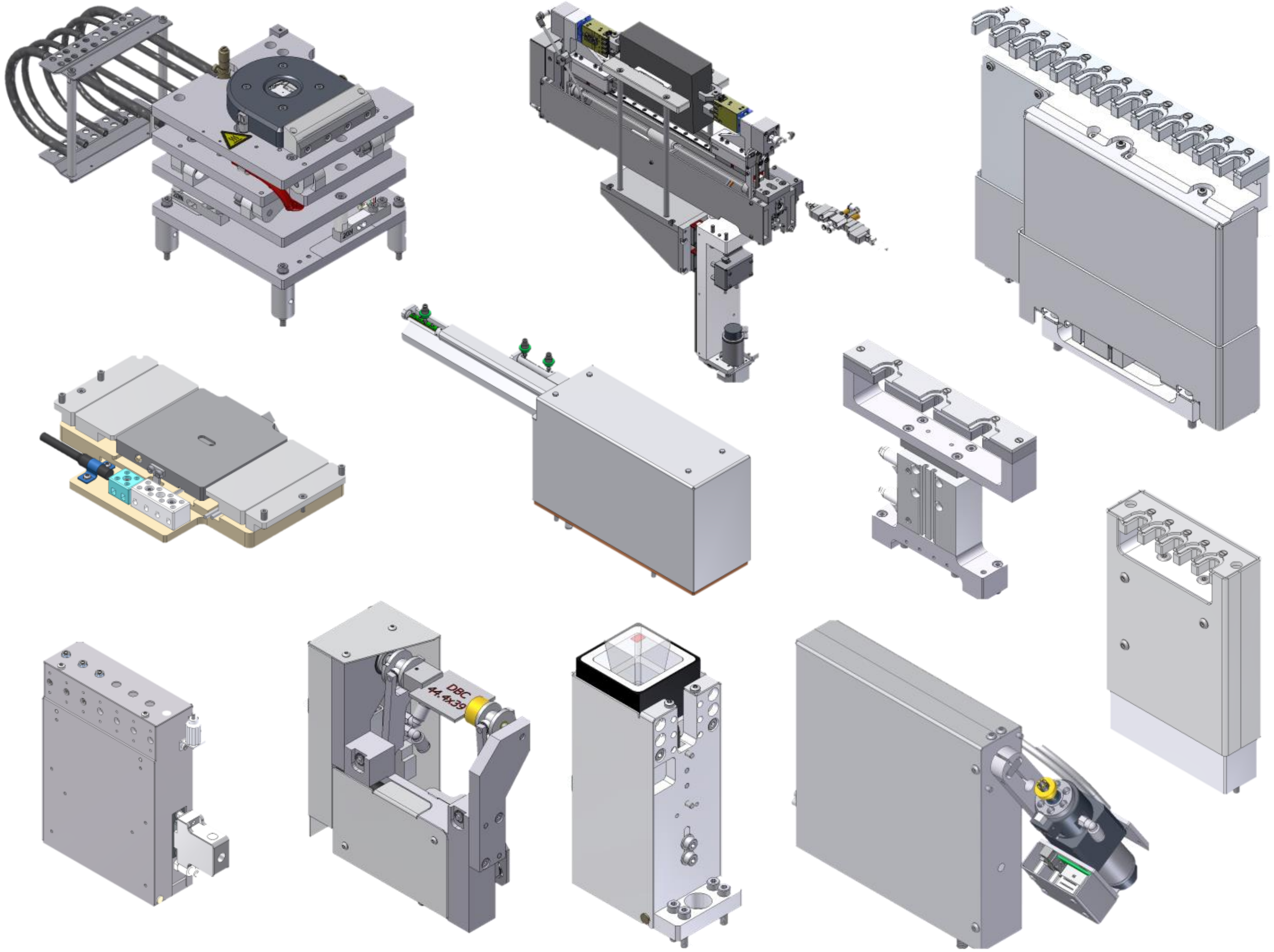
HEAD PERIPHERALS

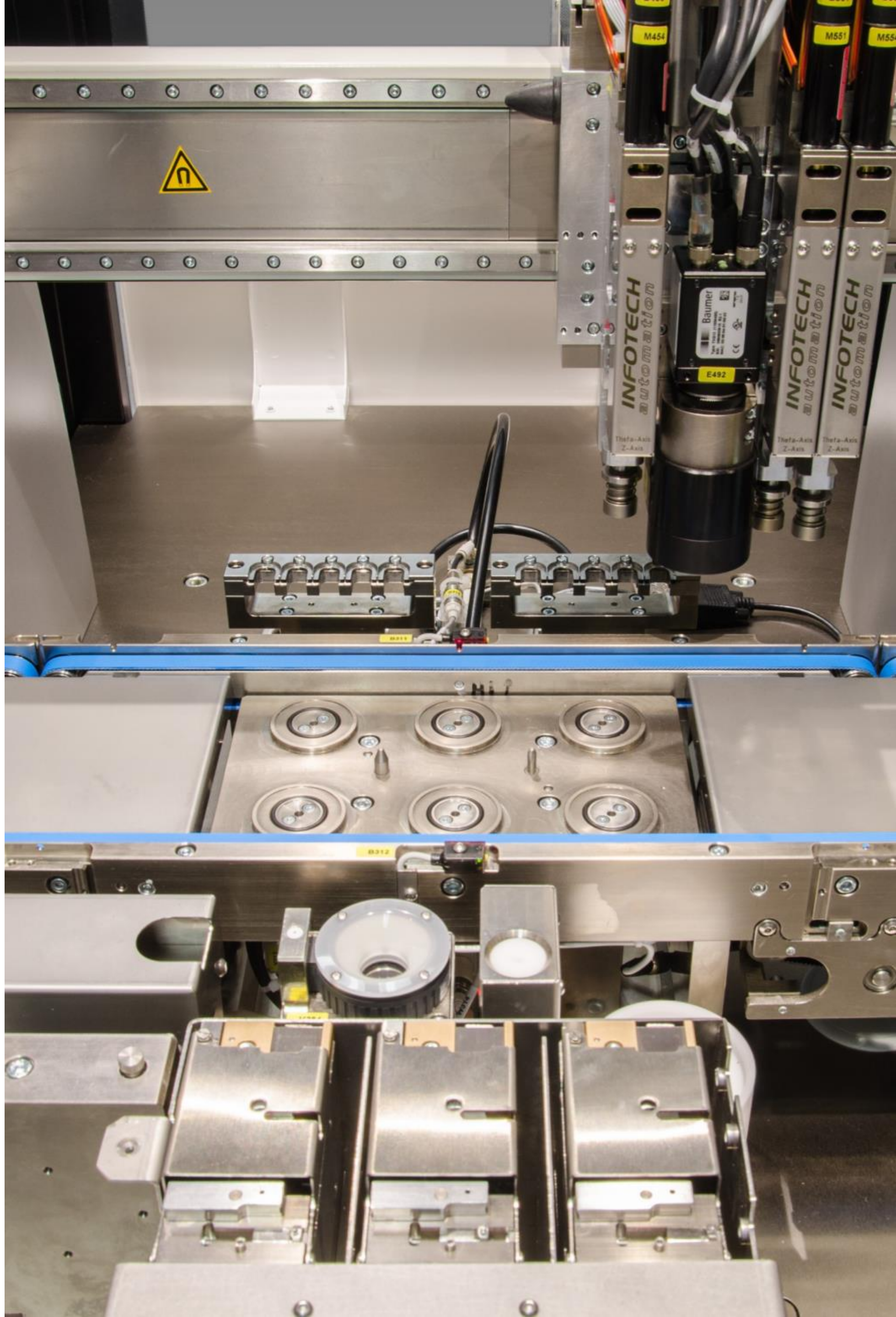




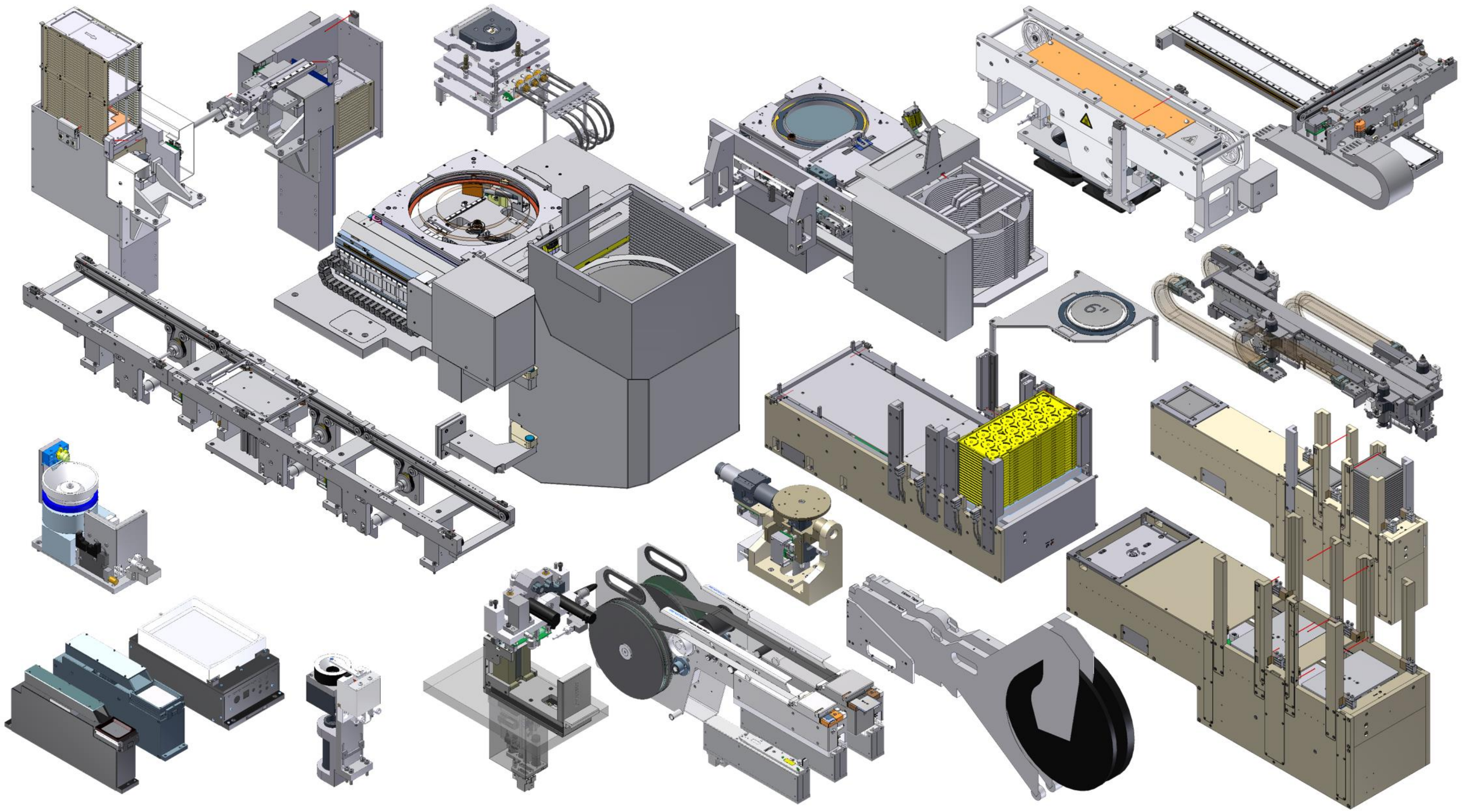
PRODUCTS

TABLE PERIPHERALS





FEEDING PERIPHERALS



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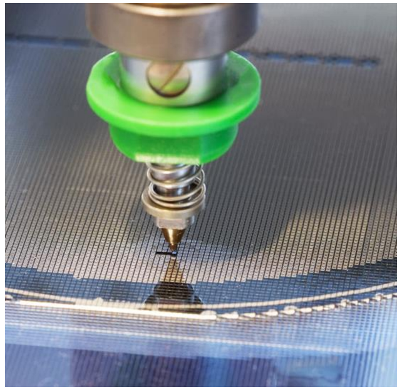
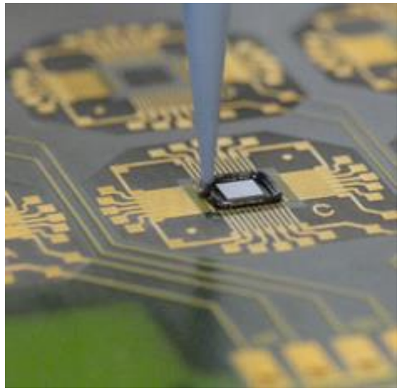
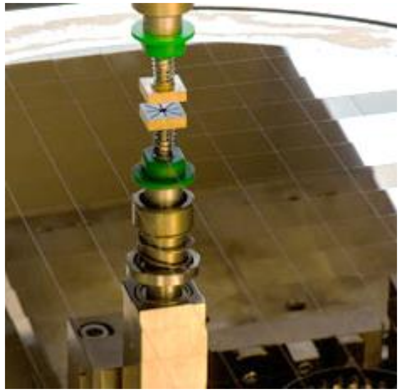
APPLICATIONS



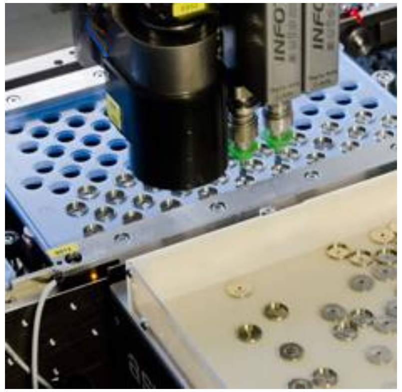
ASSEMBLING



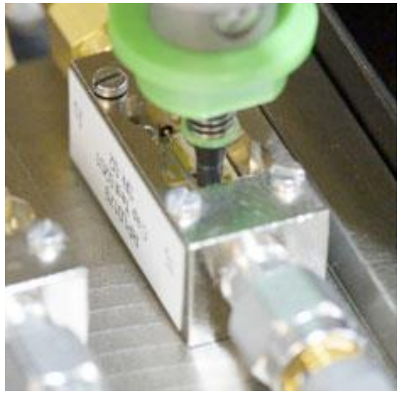
DISPENSING



POWER MODULE



SORTING

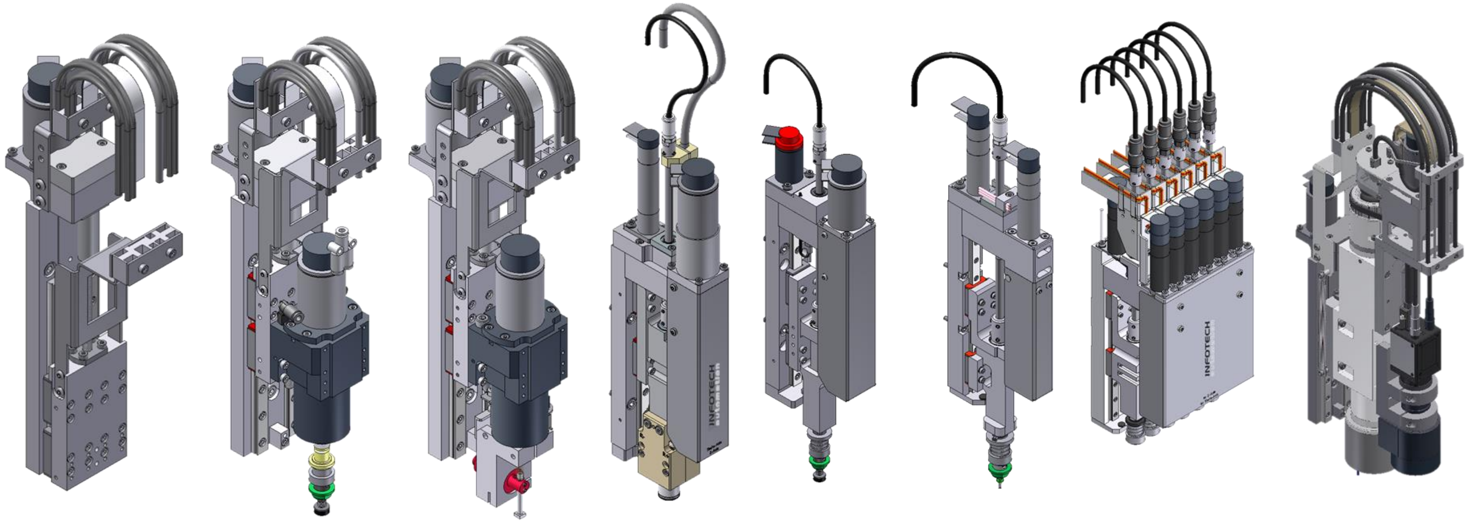


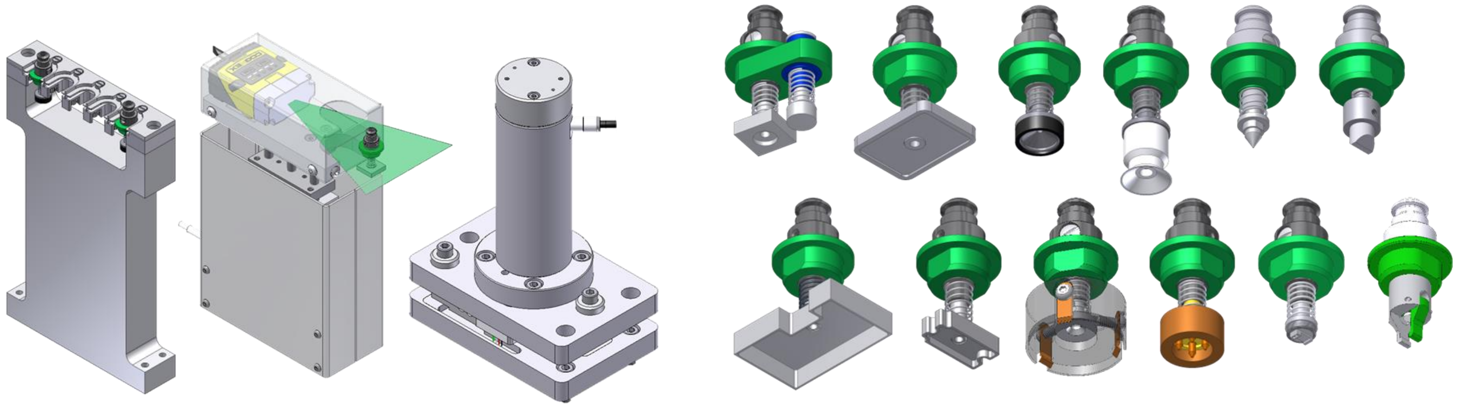
TESTING

PACKAGING

APPLICATION EXAMPLES

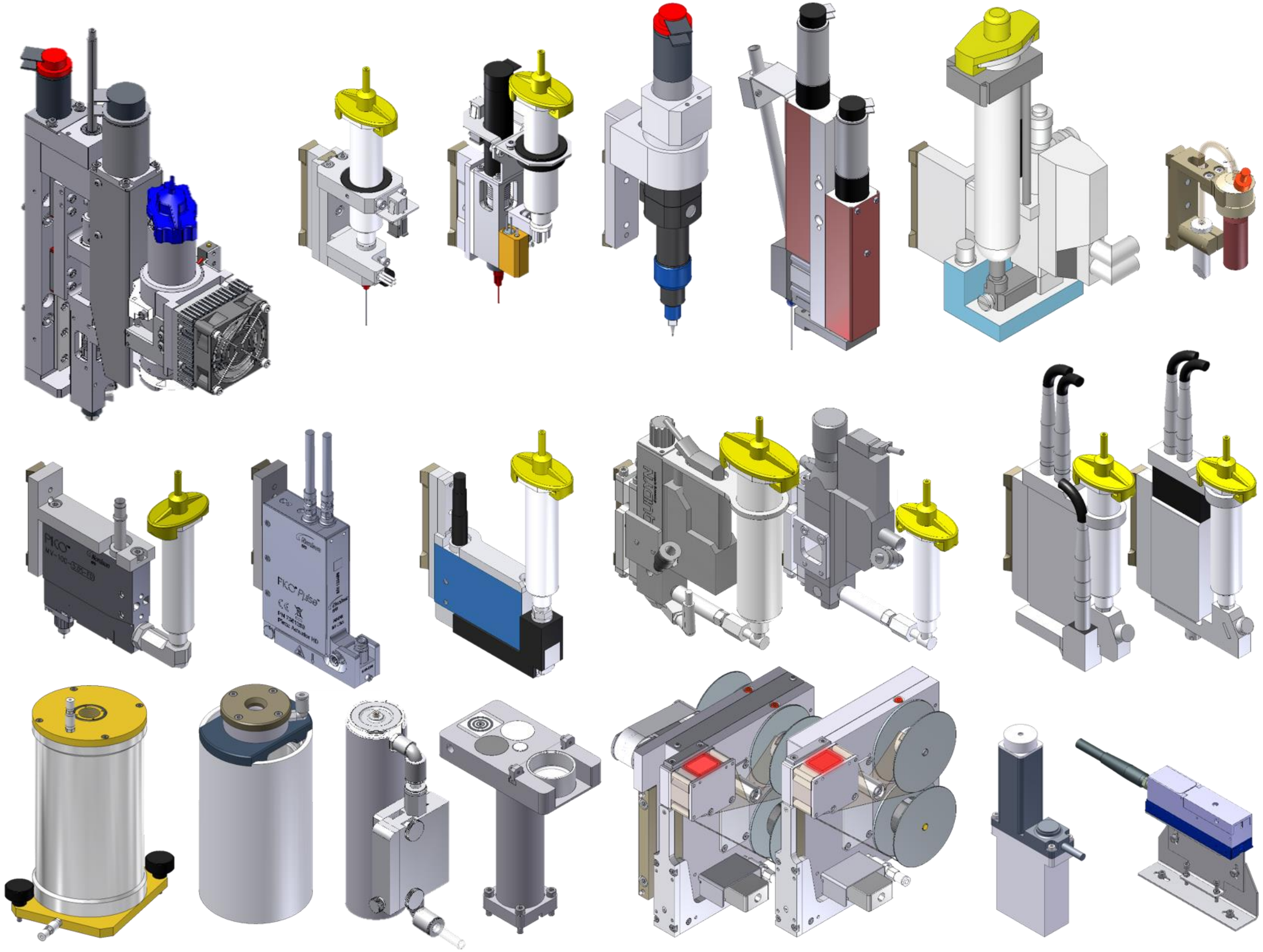
ASSEMBLING





APPLICATION EXAMPLES

DISPENSING



IP-500 DESKTOP

Relative assembly of opto electric transceivers

Relativbestückung von optoelektronischen Transceivern

IP-500 DESKTOP

Dispense-and assembly processes for pressure sensors

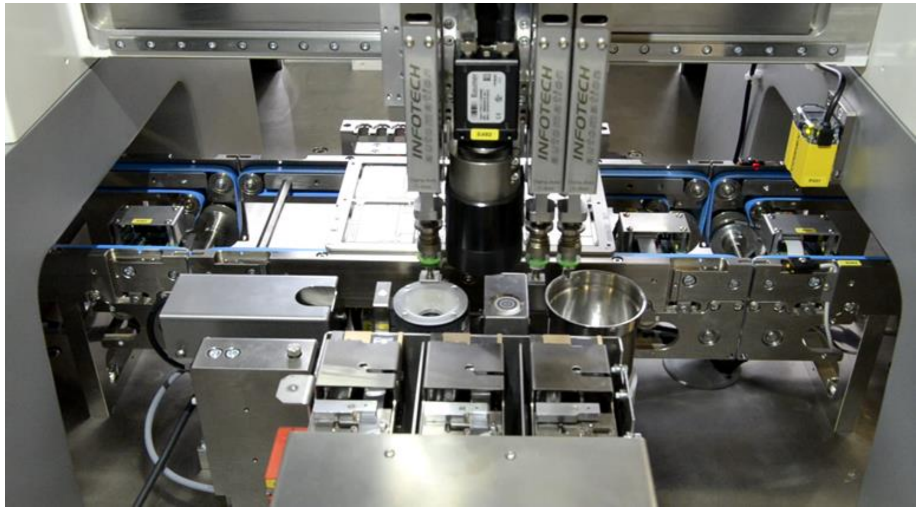
Dosier- und Bestückungsprozesse für Drucksensoren

IP-500 DESKTOP

Pre-assembly of optical parts for solid-state laser

Vorbestückung von optischen Teilen für Festkörperlasern

IC-900 PREFORM BONDER



IC-900 Preform bonder with 3 preform feeders PF2-14 - Cut, pick, inspect and place solder preform from tape onto DBC-substrates for power modules

IC-900 Lötfolien Bonder mit 3 Lötfolienzuführungen PF2-14 Schneiden, aufnehmen, Qualitätskontrolle und absetzen der Lötfolie auf eine DCB-Substrat für die Leistungselektronik

IC-900 DISPENSER

Using the IC-900 Dispenser, dispense applications can be processed precise, efficient and repeatable. With the Infotech designed universal dispense valve interface, several different dispense pumps can be exchanged quickly.

IC-1200 – DIE BONDER 12" WAFER

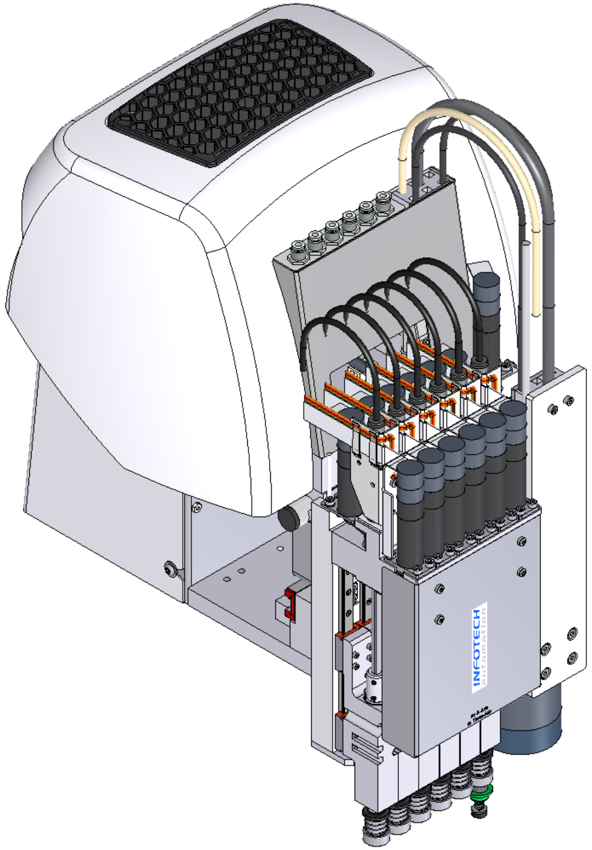
Preform and die bonder for power module production with 12" Wafer die eject feeder

Lötfolien und Die Bonder für die Produktion von Modulen für die Leistungselektronik mit 12" Wafer Zuführung und Ausstecheinheit

IC-2200 – DUAL DIE SINTER BONDER 12" WAFER

Dual Sinter Bonder with dual 12" Wafer die eject feeder and die tacking process peripherals

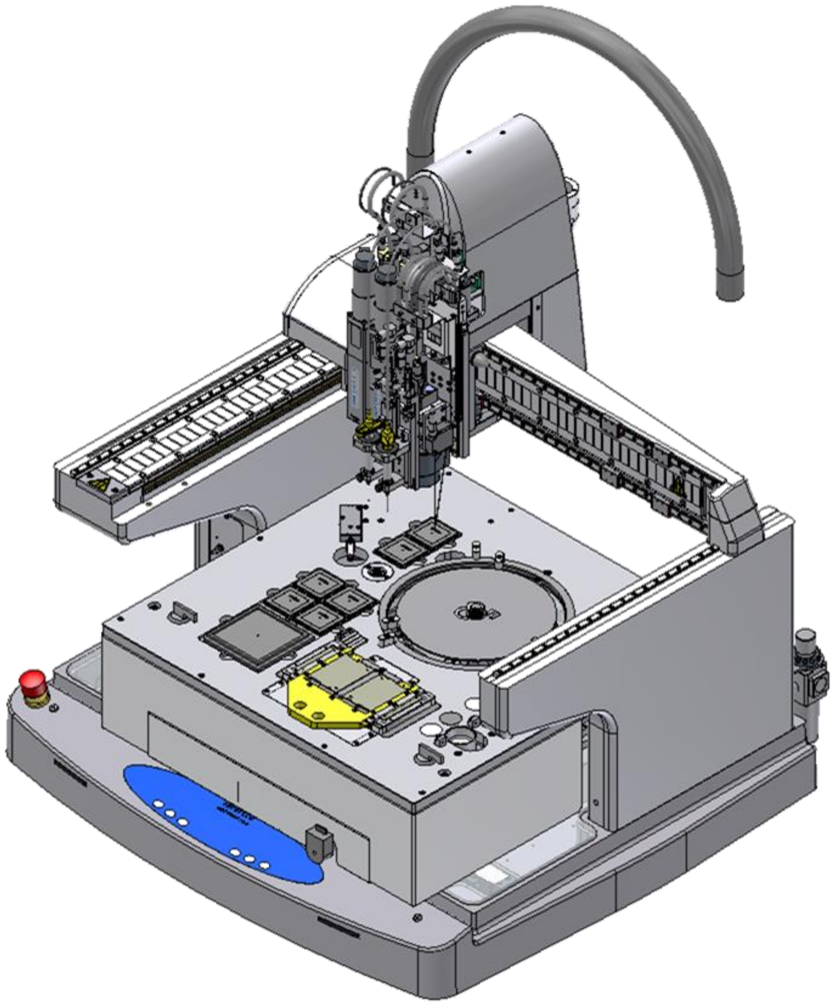
IC-2000 - POWER MODULE BONDER 12" WAFER

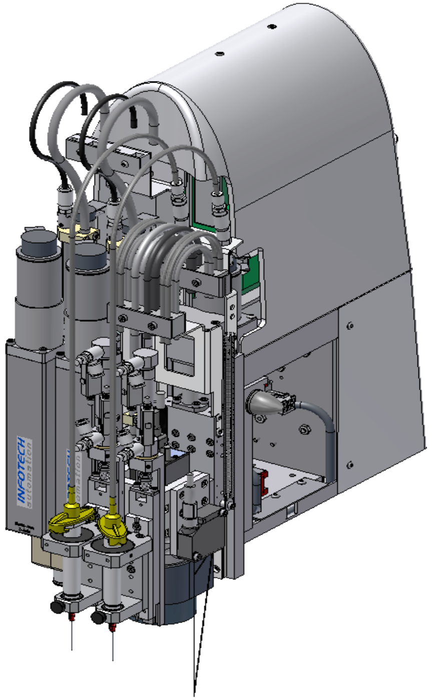


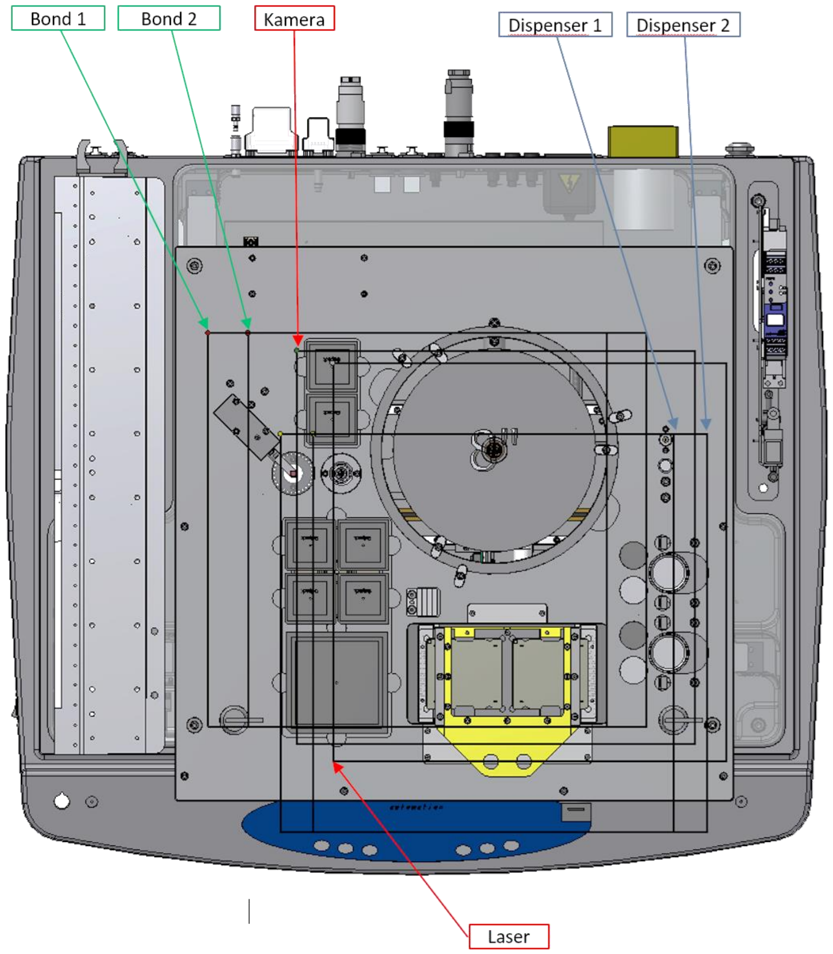
High-speed die bonder for power module production with 12" Wafer die eject feeder and six independent assembly heads

Lötfolien und Die Bonder für die Produktion von Modulen für die Leistungselektronik mit 12" Wafer Die-Eject Zuführung und sechs unabhängigen Bestückungsköpfen

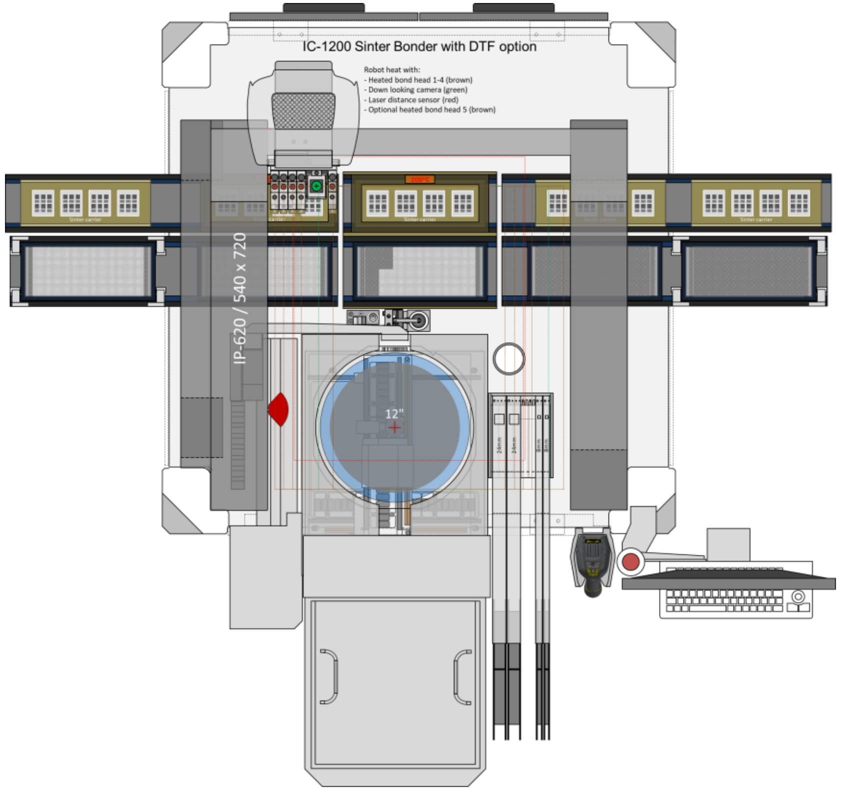
DIE ATTACH FOR SINTER PRODUCTS- LAB EQUIPEMENT







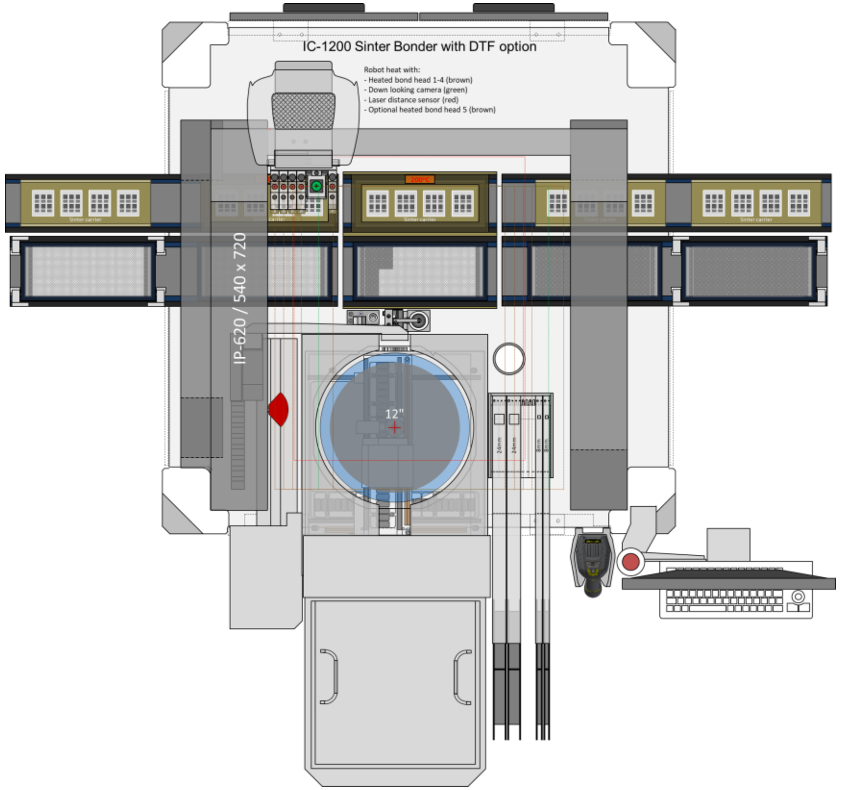
DIE ATTACH FOR SINTER PRODUCTS



- Heated bond heads up to 3 x 34 mm width heads, or up to 5 x 20 mm heads
- Heated bond head up to 300^{O}C, with manual exchangeable heater bond head tools with bond force capabilities up to 300N
- Optional assembly head with interposer to transfer Die from cold to heated bond head
- Substrate holder plate with manual tilt adjustment, heated surface up to 300^{O}C with integrated force sensor table
- Substrate pre-heat station, heated surface up to 300^{O}C
- Die-, Preform-, Spacer-, DTS-, NTC-, SMD Bonder with sinter tacking option
- Wafer-, Preform-, Tape-, Waffle pack-, loose parts- Feeder
- Dispenser, Flipper, Dip-station and many other options from the Infotech component matrix
- Tacking process into sinter paste, DTF-Process or wafer laminated processes

The highly flexible Die attach power module bonder is used for various production demands from laboratory up to series production.

DIE ATTACH FOR SINTER PRODUCTS



DTF with Tacking process

Supports DTF process (Die Transfer Film - Alpha Assembly Solutions) from 4x4" size, Jedec size or wafer frame size

- Loading and pre-heating substrates
- Die recognition on wafer / waffle pack / Tape (ink dot, alignment) using upper vision, or using wafer map
- Pickup Die with heated bond head
- Transfer film to Die with force feedback
- Die alignment and quality inspection of sinter foil on Die using lower vision
- Verify substrate temperature
- Tack on heated substrate with heated bond head and force sensing
- Unloading of substrates

The highly flexible Die attach power module bonder is used for various production demands from laboratory up to series production.

IC-1800 CHAIN ASSEMBLY

Chainsaw Bosch

Sorting of 4 parts building the chain, assembly, 3D-inspection and grouting of chain

Bosch Kettensäge

Sortieren von 4 Teilen zur Montage der Kette, bestücken, visuelle 3D- Kontrolle, und verpressen der Teile zur Kette

IC-1200

Pharma assembly line:

3X IC-1200 / 2x IP-520 / 4x IP-100

Precision membrane assembly of a valve for asthma spray

Pharmamontagelinie:

3X IC-1200 / 2x IP-520 / 4x IP-100

Präzision-Membranbestückung in einem Ventil für einen Asthmaspray

FC-1600 WATCH PRODUCTION LINE

Watch assembly (Swatch):

- 2X FC-1600 / 5X IP-100 / 1X IP-520
- Assembling and soldering of pcb onto leadframe Welding of quartz onto leadframe
- Cut, test and sort into output tray

Uhrenmontage (Swatch):

- 2X FC-1600 / 5X IP-100 / 1X IP-520
- Bestücken und löten eines Elektronikbauteils
- Bestücken und schweissen eines Quarzes
- Schneiden, testen und ablegen in Ausgangstray

WATCH ASSEMBLY LINE

28 IC-1000 / 28 IP-520 / 10 IP-100 SWATCH SISTEM51
First fully automatic production line with complete assembly and functional test of mechanical watch SISTEM51 of Swatch

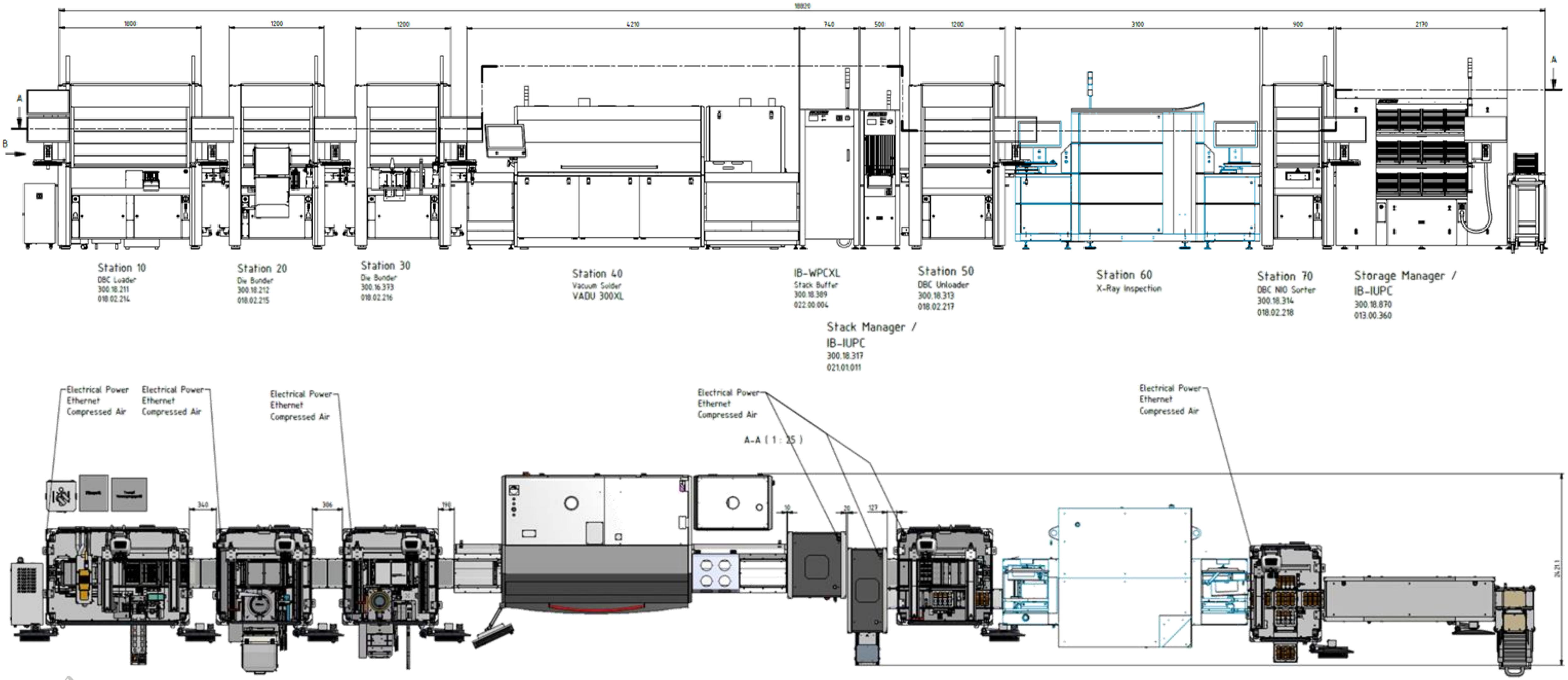
Erste vollautomatisch Produktionslinie zur vollständigen Montage des mechanischen Uhrwerks SISTEM51 von Swatch

DBC PRODUCTION LINE

Fully automatic DBC production line using flux free soldering including laser marking, automatic material loading and unloading using AGV systems

Vollautomatische DBC (Substrat) Produktionsanlage zum flussmittelfreien Löten, mit Lasermarkierung und voll automatischem Material zu- und wegführen mittels AGV (Autonomous guided vehicles)

TYPICAL POWER MODULE PRODUCTION LINE



APPLICATION EXAMPLES

POWER DIODE PRODUCTION LINE

- Carrier lift to upper conveyor
- Heat sink mounter
- Preform attacher
- Die bonder
- Preform attacher
- Head wire mounter

- Vacuum oven

- Stacker
- Power diode unloader
- Carrier lift to lower conveyor
- Gel dispenser
- Electrical tester
- Unloader

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Exceeding your expectations