Adjusting to SC disruptions during Covid-19 German companies in Singapore

Pepperl+Fuchs SE T. Bloecher | Director Global SCM

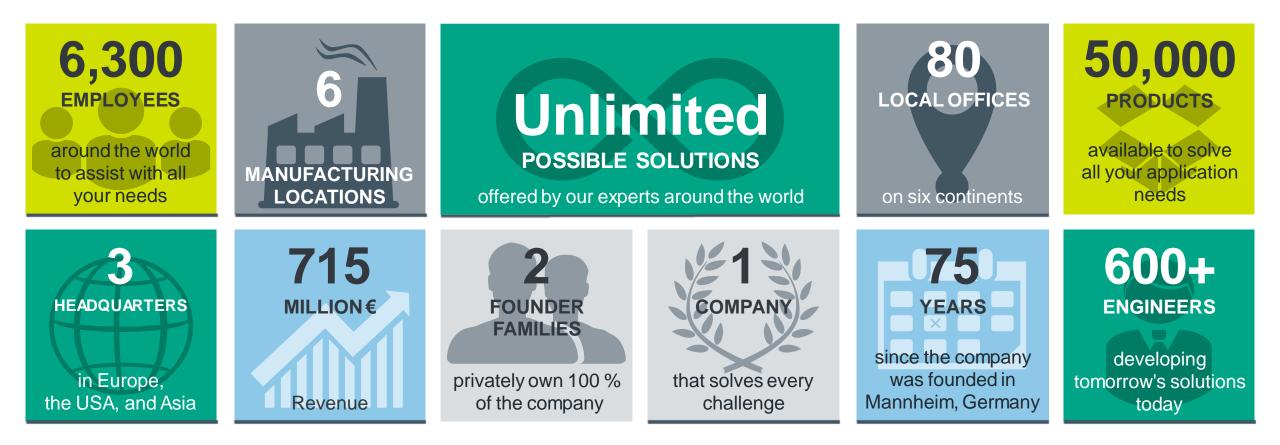




Your automation, our passion.

Pepperl+Fuchs at a Glance

One Company | Unlimited Solutions





The Pepperl+Fuchs Group

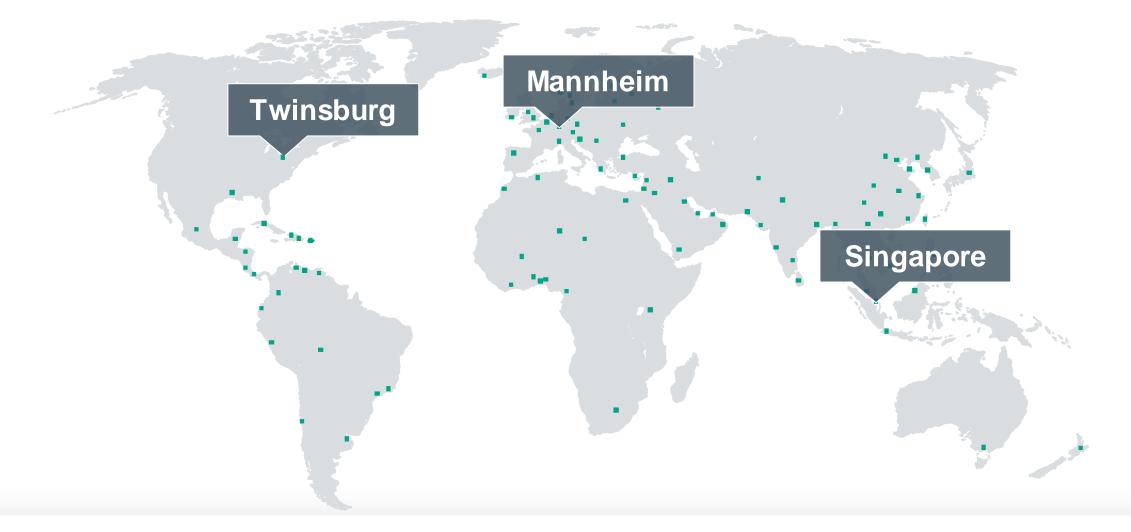
A company with solutions for every demand in automation technology





Over 80 Locations Worldwide

With locations in over 80 major cities on six continents, we're there when you need us.





Your automation, our passion.

Manufacturing Locations

Our production locations in Germany, Singapore, Hungary, Indonesia, Vietnam and the Czech Republic are ISO 9001 certified.











Competence Centers

Focused competences in five locations

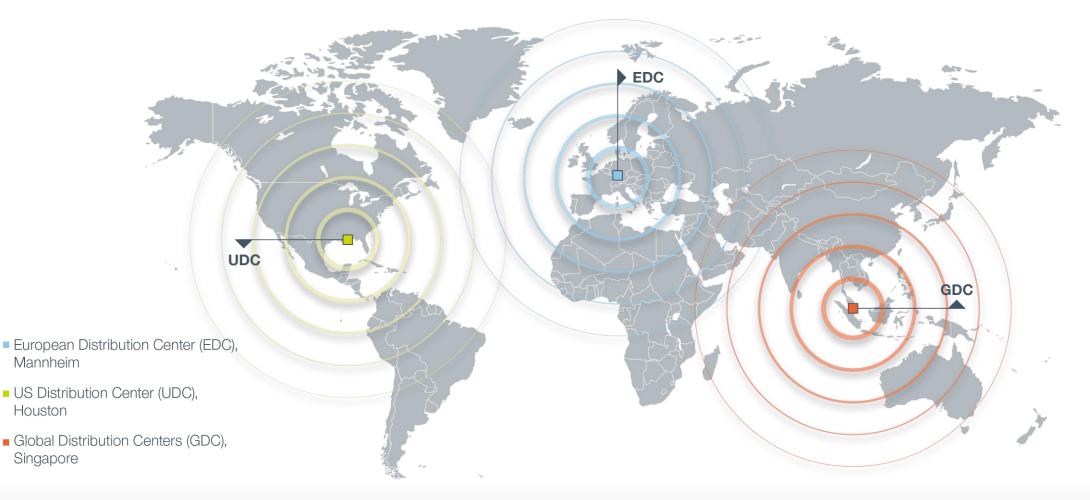


- Headquarters of Pepperl+Fuchs Group
- Research and development HQ
- More than 1,000 employees
- Photoelectric sensor competence center
- More than 200 employees
- Purge and pressurization systems competence center
- More than 200 employees
- Mobile computing and communication competence center
- More than 200 employees
- Rotary encoder competence center
- More than 60 employees



Pepperl+Fuchs Logistics

Ordered and delivered without delay. Around the clock, we deliver to every country in Europe within two days from our state-of-the-art distribution center in Mannheim.



Operations Singapore (fact sheet)

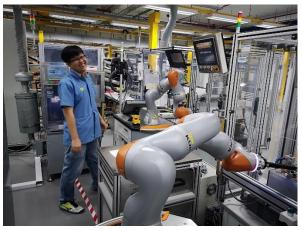


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T. Bloecher | Global SCM | Adjusting to SC disruptions - EDB SG

Operations Singapore

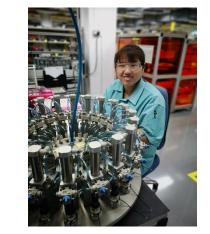
Factory Automation and Process Automation incl. SMT – Surface Mount Technology



Kuka Robot in Action



Sensor Assembly



Transducer Assembly



Product Testing



Manual Assembly to Complete Testing



SMT Production



SMT feeder



Global Distribution Center Singapore

Automated storage and retrieval system (ASRS)







Supply Chain Functions

Local Production Supply Regional Production Logistics Node Regional Customer Direct Delivery Global DC replenishment

Facts & figures

Footprint: 6,200 m² Tray storage locations: 60,000 Picks per day: 12,000 Parcels/pallets per day: 250



The local and regional challenges emerged of Covid-19

Covid-19 as mega-disruption is putting global supply chains to the test, revealing cracks and flaws in organization, processes and technology. Cracks, which have existed long before the crisis already...



- Focus on China-based/ impacted suppliers in Mar-20, later widened to global scope
- Target: Fuel local, regional & int'l. material consumption
- Create daily E2E transparency of impacts downstream to finished goods & customers
- [Focus SG/SEA]: Supply across SEA sites (> 8 wks); Critical: MY border shutdown & SG circuit breaker measures

Keep Production

- Protect operations: Install hygiene measures & adhere to local rules
- Care for critical processes with wider influence beyond local facility (short-term measures, mid-term BCP, etc.)
- [Focus SG/SEA] SMT Production SG, SubA supply across SEA production; Critical: MY border shutdown



Manage warehouse op's & int'l. cargo transports

- "Never loose GDC" (global FG replenishment, regional logistics node & Asia direct delivery, local production material supply)
- Re-route & keep up in 'bidding war' for shortened cargo space
- Keep transparency for reliable planning in steady-changing environment
- [Focus SG/SEA] 'weak spot' GDC in SG



Contribution of P+F Singapore team

Overcoming Covid-19 challenges only possible with engaged & locally established expert teams and management – starting with short-term reaction to long-term re-thinking of our supply chain setup.

Re-act (hours)

- Setup and staff local / regional task force with experts & Mgmt.
- Exemption status for P+F
 Operations prior circuit breaker
 → secure business continuity
- Secure RM supply from local SG suppliers over weekend prior circuit breaker

Re-plan (days)

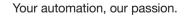
- Setup & execute Covid-19 hygiene measures (incl. shift models, social distancing, etc.)
- Alert / activate 2nd source suppliers + alternative transport routes / carriers
- BCP update incl. worst-case scenarios ("GDC down")
 → risk mitigation measures
- Flexibility & creativity of workforce to realize Home Office regulations

 SC Network: 'Weak spot' GDC + AIR → SEA freight
 → increase planning flexibility

Re-think (weeks)

- Invest in E2E SC transparency & real-time planning capabilities
 → upgrade team skills
- Adapt (regional) stocking policies to "new normal" & increase OPS capa back-ups / independency

 \leftarrow Close collaboration with EDB \rightarrow





Ongoing

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