



inclusion factory products and services 产品和服务





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The Inclusion Factory

太仓中德善美实业有限公司

At the Inclusion Factory, we strongly believe that physically and intellectually challenged people have the desire to be and are capable of being fully integrated into an industrial working environment and consequently into our society. By applying an unique concept of specialized coaching & mentoring methodologies, smart semi-automated workplaces and an innovative shop floor coaching system we achieve what is commonly perceived to be impossible: challenged people manufacturing at productivity and quality levels being comparable or even better than known from the “normal” industry.

Our model is based on the German “Lebenshilfe” workshop and supported by the Taicang local government and the KFW DEG (Deutsche Investitions- und Entwicklungsgesellschaft mbH) in recognition of our social mission.

The Inclusion Factory has been established by the Taicang Round Table and is registered as a private limited and fully cash-flow managed local company.

太仓中德善美实业有限公司坚信身体和智力存在障碍的人群渴望且完全有能力融入到工业生产环境,并最终融入社会。通过引入针对性的培训和指导方法,打造智能半自动化工作环境,以及设立新型车间指导系统等一系列独特的概念,我们残疾员工的生产制造能力和质量水平与所谓的“正常”工业旗鼓相当,甚至略胜一筹,实现了不可能完成的挑战。

我们的模型根据德国“Lebenshilfe”工作环境而建立,得到太仓当地政府的大力支持,而我们的社会使命也得到 KFW DEG (德国投资与开发有限公司)的高度认可。

中德善美实业由TRT太仓经济开发区欧商投资协会建立,是一家在本地注册完成、产生稳定现金流的有限公司。



Advanced Production Capabilities

先进的生产能力

With the help of our partners, our workshop features state-of-the-art equipment as well as custom-made machinery for efficient production developed in close cooperation with our engineering partners.

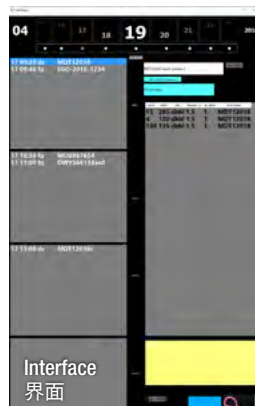
In order to eliminate handling errors during the manufacturing process (e.g. usage of wrong material, incomplete assemblies, ...) our production processes are EDP supported and material logistics are NFC monitored. We are in the process of being ISO 9001 approved and strictly follow the corresponding requirements and processes. Our operation supervising staff is trained and qualified accordingly. Inspection plans and work instructions are created for each products and aligned with our customers' demands.

在合作伙伴的鼎力支持下,我们的车间拥有最先进的设备以及专门定制的机械,可实现高效生产并与工程合作伙伴密切合作。

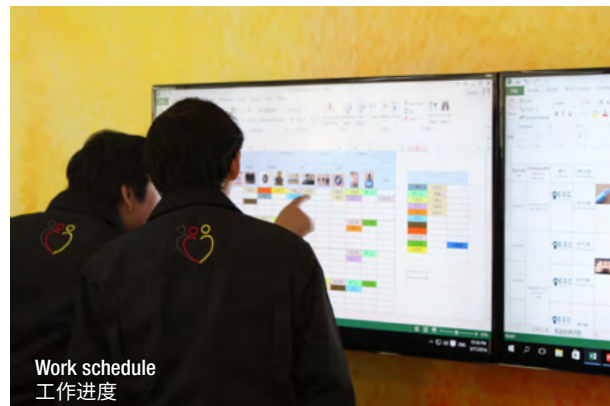
为了避免在生产过程中出错(例如,使用错误材料、装配不完整等),整体生产流程由 EDP 支持,物流通过 NFC 监测。目前,我们正在进行 ISO 9001 质量体系认证申请,并严格遵守体系相应的要求和流程。我们的业务主管经过严格培训,拥有专业资质。我们的质检计划和工作指导根据每批产品特别设计,以满足客户特定需求。



Assembly: customized tool
组装:定制工具



Interface
界面



Work schedule
工作进度



Komax wire printing
Komax 电线喷印机



Ultra-sonic welding
超声波焊接

Advanced Production Capabilities • 先进的生产能力

Wire Harnessing

线束

Industry 3.5 – a concept developed by the Inclusion Factory

工业 3.5——中德善美新概念

While having a very similar agenda as the Industry 4.0 concept:

- increasing efficiency, quality and flexibility
- raising the skill level of workers
- assuring safer and more attractive workplaces
- reducing costs
- allowing quick reaction on demand changes
- providing traceability

The methodology of Industry 3.5 significantly differs from Industry 4.0 in its core element: The core of Industry 4.0 is the CPS ... the Cyber-Physical System monitoring physical processes, creating a virtual copy of the physical world and making decentralized decisions possible.

The core of Industry 3.5 are TWDs ... our Talents with Disabilities. After picking their own task from a visual planning system a smart NFC-supported supervision system mentors our TWDs all the way from raw material to the finished product, eliminating handling errors. Top quality and high efficiency is achieved by specialized and intelligent working stations combined with visual aided controls.

Some technical titbits:

- ERP (finance, procurement): Kingdee
- ERP (production and task planning, order processing): A-Plan 12
- NFC tagging of material & workplaces
- Language-free symbolic touch user interfaces
- NUC type Intel small computers for distributed workplace intelligence
- Barcode reader and auto label printing

纲领与德国提出的工业 4.0 概念非常相似

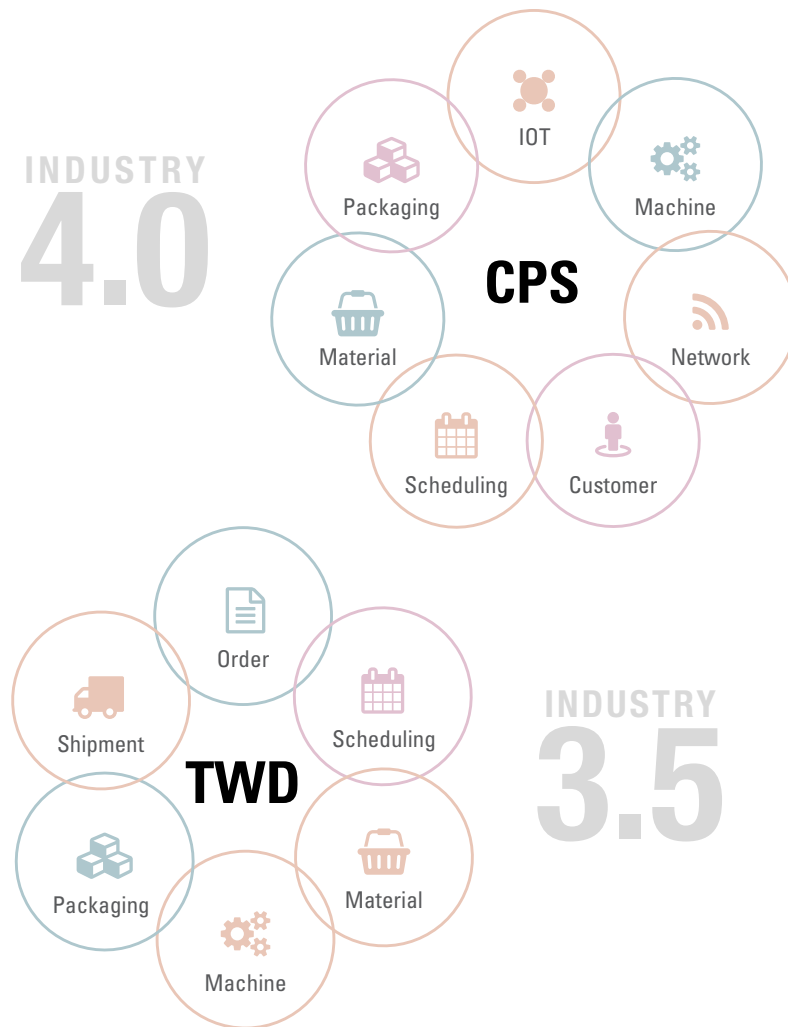
- 提升效率、改善质量、提高灵活性
- 提高员工技能水平
- 增加工作环境的安全性及工作吸引力
- 降低成本
- 快速响应需求变更
- 增加可追溯性

工业3.5与工业4.0方法论的主要区别在于核心元素。工业4.0 的核心是 CPS (信息物理系统), CPS 可监控物理进程, 创造自然世界的虚拟镜像, 使分散决策成为可能。

工业 3.5 的核心是 TWD, 即我们的残疾人员工。员工根据可视化的生产计划表开展生产任务时, 智能 NFC 管理系统可以指导员工, 从原料到成品的整个工作流程中消除错误。通过专业的智能工作站与可视化辅助控制的综合应用, 实现高质量和高效率作业。

部分技术要点:

- ERP (财务、采购) : 金蝶软件
- ERP (生产和任务计划、订单处理) : A-Plan 12
- 物料和工作场所的 NFC (近场通讯) 标签
- 非语言、符号化触控式用户界面
- 用于分布式智能化工作场所的英特尔 NUC 迷你计算机
- 条形码阅读器和自动标贴打印



Our Tool Box

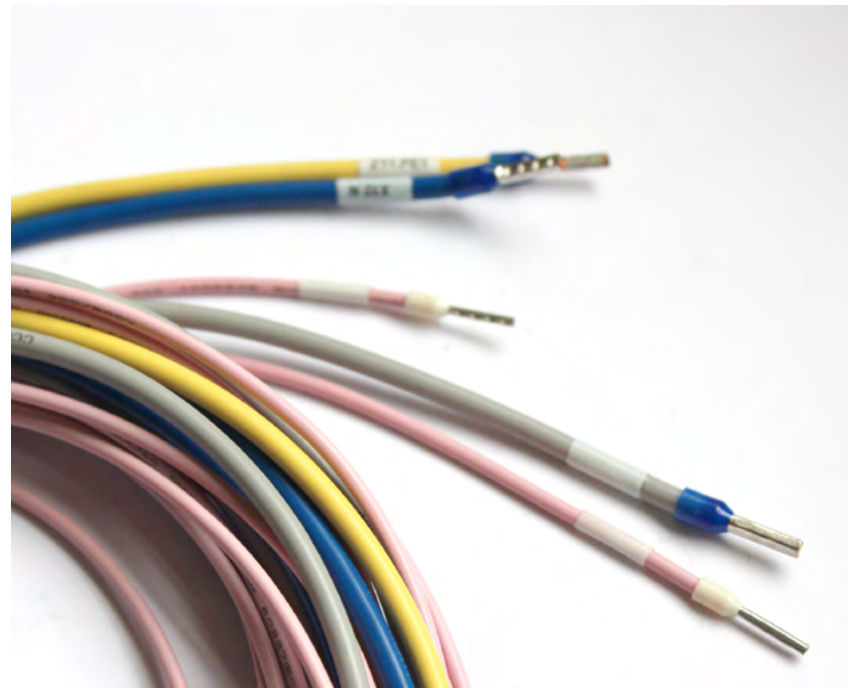
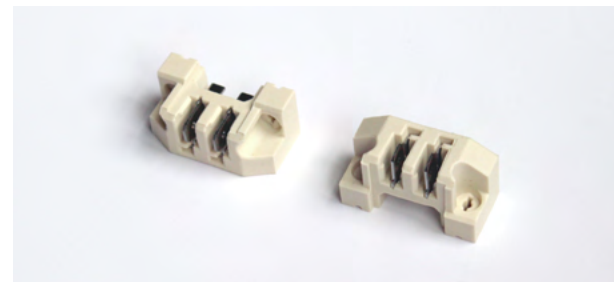
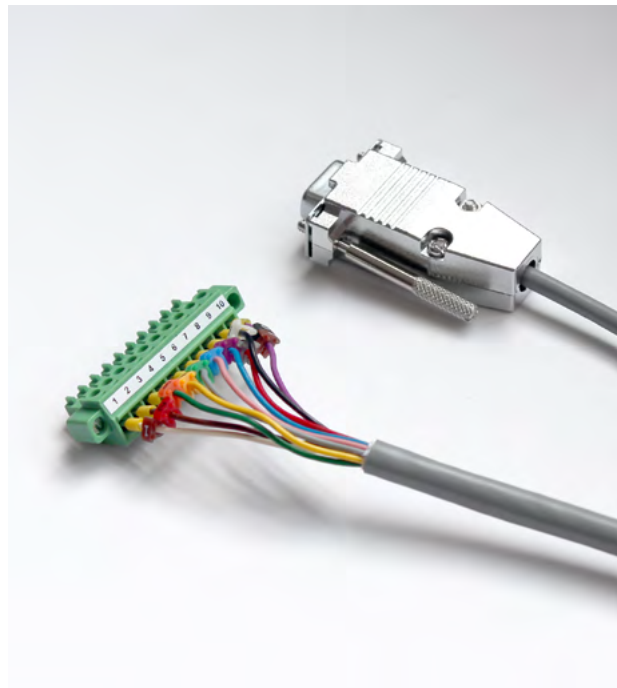
工具箱

From wire printing equipment to screwdrivers: we use state-of-the-art tools for best results

从电线喷印设备到螺丝刀, 我们使用最先进的工具, 展现最佳成果



Production Examples 产品示例



Client 客户: Automatic Systems
Industry 行业: Automation 自动化



What we are doing 我们负责的工作

Assembly of communication cable
组装通信电缆

Final Product 最终产品

Automation for secure entrance control
安全出入口自动控制设备



Custom-made tools allow our staff to work in a safer, more efficient way.
定制工具让员工工作更安全、更高效。

Client 客户: E.G.O
Industry 行业: Components 零部件



What we are doing 我们负责的工作

Assembly of double terminal ceramic
connectors
组装双端子陶瓷连接器

Final Product 最终产品

Connectors for ceramic stoves
陶瓷炉连接器

Client 客户: E.G.O
Industry 行业: Components 零部件



What we are doing 我们负责的工作

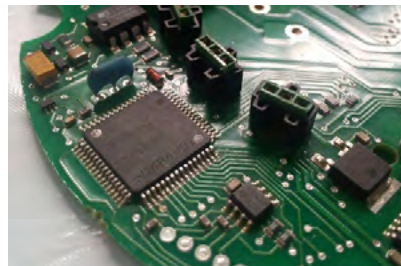
Receptacles

三针插座

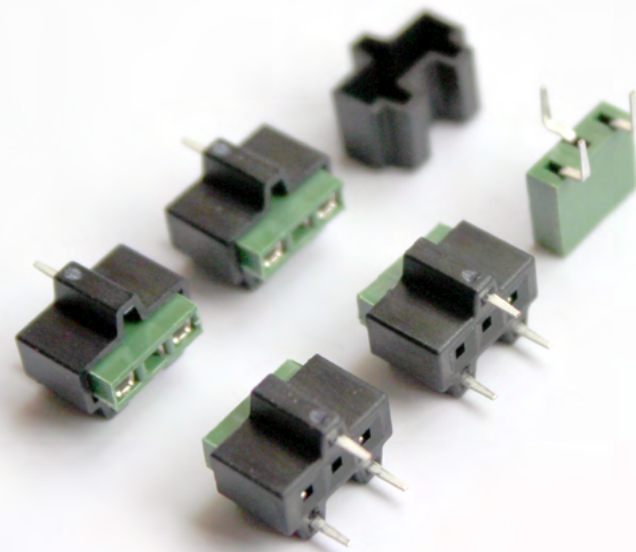
Final Product 最终产品

Printed circuit boards (PCB) for domestic
appliance technology

家用电器印刷电路板 (PCB)



32,000
pcs/mo



“We outsourced four different assembly projects to the Inclusion Factory and are planning to outsource two more. Their work quality is excellent and in over a year they haven't missed a lead time once”

我们外发了4个组装类产品到中德善美, 并且计划再增加外发2种产品, 他们生产的产品质量很好, 在过去的一年中也没有出现过一次交货延迟。

Philips Guan, Production Manager,
E.G.O. Components (China) Co., Ltd.
管海清, 生产经理

Client 客户: Fischer
Industry 行业: Automotive Systems 汽车制造



What we are doing 我们负责的工作

Spring & rollo spool
卷簧与滚轴

Final Product 最终产品

A spring for cupholders in GM and VW cars
通用和大众汽车杯座卷簧



“ It makes me very happy that with your care and guidance my daughter made such a big change. Thank you so much for giving her this employment opportunity, I thank you from the bottom of my heart!

在你们的关爱和指导下,我女儿能有如此大的变化,这让我们非常高兴。感谢你们给了她这样的就业机会,我从心底里感谢你们!

Parent of our staff
员工的父母

”

“ Memminger’s cooperation with the Taicang Inclusion Factory started with the workshop assembling around 15% from our monthly required amount. One year later we stopped doing the assembly at our plant. They are assembling 100% of the amount and saving us many work hours of skilled personnel

刚开始和中德善美合作时我们外发了公司月需求装配量的15%给他们。12个月后我们公司内部已经完全停止了相关产品的组装,他们负责这类产品100%的生产,为我们公司节省了很多技术工人工时。”

Min Chen, Vice General Manager,
Memminger-Iro (Taicang) Textile Machinery Co., Ltd.
陈敏, 副总经理



Client 客户: MEMMINGER-IRO
Industry 行业: Industrial Textile Machines
工业纺织机械



What we are doing 我们负责的工作

Clutch assembly
离合器组件

Final Product 最终产品

Industrial Textile Machines
工业纺织机械



Client 客户: komax
Industry 行业: Wire processing machines
线材加工机器

komax WIRE

What we are doing 我们负责的工作

Wire harnesses

线束

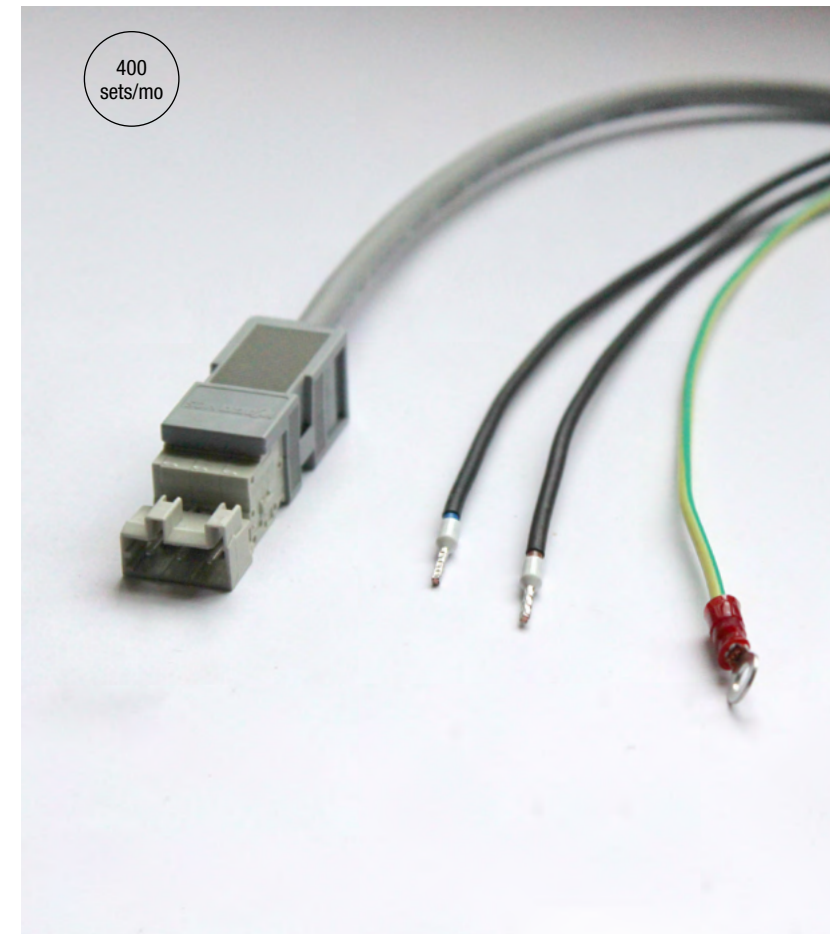
Final Product 最终产品

Wire printing machine

电线喷印机



20
sets/mo



400
sets/mo

Client 客户: DATWYLER
Industry 行业: Industrial component supplier
工业组件供应商

DATWYLER

What we are doing 我们负责的工作

Communication wire sets

通讯线材

Final Product 最终产品

Escalator and elevators

自动扶梯和直梯



“ The Inclusion Factory is producing for MDT wire harnesses for many different wire cabins. They are working with top quality hand tools and machinery and the end result exceeded our expectations.

中德善美为我们MDT生产很多种用在不同机柜中的线束产品他们使用第一流的手动工具及机器设备,生产出的产品完全超出了我们的期望。

Dietmar Schenk, General Manager & Chairman,
Mobil Data (Taicang) Co., Ltd.
迪特马.申克 总经理&董事长

”

Client 客户: EJOT
Industry 行业: Fastening Systems 紧固系统

EJOT®

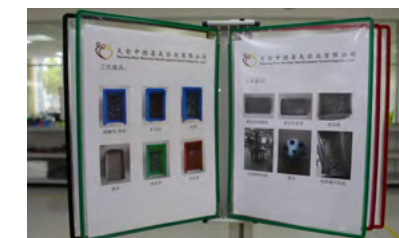
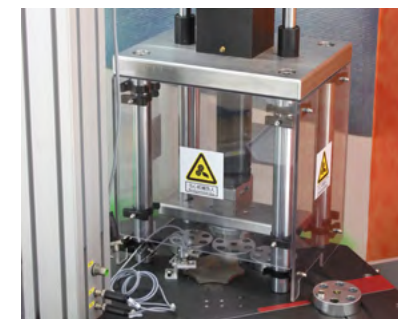
What we are doing 我们负责的工作

Assembly of anchor bolts using servo press

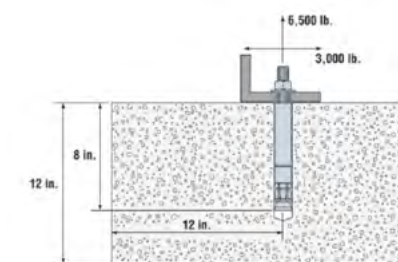
使用伺服压力机组装锚栓

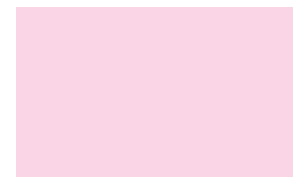
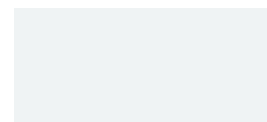
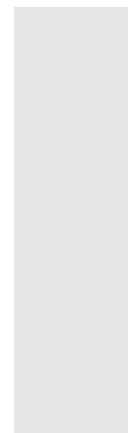
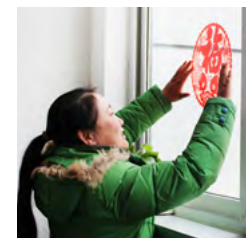
Final Product 最终产品

Building expansion anchor bolt
膨胀型建筑锚栓



Custom-made assembly machine and instruction sheet at the work place.
车间的定制化装配机及说明书。





Our Partners

合作伙伴

Our numerous partners are the backbone of the Inclusion Factory. We have been thrilled by the outstanding support given by our cooperation partners providing start-up fundings, our production partners entrusting us with orders, as well as our service & consulting partners not getting tired in accompanying our journey to become a social enterprise with a true impact on our society. In return, we do our best to promote our partners as a socially responsible company:

- Partner company logo on our wall of fame
- Partner company logo on our brochure
- Introducing new partner in our newsletter
- CSR award signed by us and the local government

中德善美拥有众多合作伙伴，它们是中德善美重要的支持力量。提供启动资金的合作伙伴，委托订单的生产合作伙伴，以及一路陪伴我们的服务和咨询合作伙伴，它们的鼎力支持使我们成为真正具有社会影响力的社会企业，对此我们心怀感激。作为回报，我们竭尽所能促进合作伙伴成为更具有社会责任感的公司：

- 公司荣誉墙上张贴合作伙伴的公司标志
- 公司手册上刊印合作伙伴的公司标志
- 公司新闻上介绍新的合作伙伴
- 颁发由我司和当地政府签署的企业社会责任奖



From the left: Mr. Thilo Koepp, Chairman Board of Directors, Inclusion Factory • Mr. Helmut Schoeneberger, General Manager, E.G.O • Mr. Marc Florian von Busse, Finance & Controlling Manager, E.G.O • Mr. Tai Qing Yang, Vice President, Taicang Disabled People Federation



Project Partner						
Taicang Economy Development Area	Taicang Disabled People Federation	KFW DEG	Taicang Roundtable	German Chamber of Commerce Shanghai	Lebenshilfe	Rotary Club of Shanghai
Platinum Partner						
E.G.O	HUBER+SUHNER	Komax wire	mdT	Memminger-IRO	Oase Living Water	Zollner
Gold Partner						
FCN Business Advisory	Fischer Automotive Systems	German Centre Taicang	Jungheinrich	Quick-Mix	Schunk	IMS Gear
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For the full list of all our supporters, including our Pearl supporters, please visit www.inclusion-factory.com

Partner for design and visual communciation
JungleFish Shanghai

Printing support: Picjoy

JungleFish
PICJOY



inclusion factory
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