

# 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 a 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. The Inclusion Factory is an ISO 9001: 2015 Certified 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。我们已获得ISO 9001:2015质量体系 认证。

Taicang Roundtable















































## Wire Harnessing

## **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 ISO 9001: 2015 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,我们已获得ISO 9001:2015质量体系认证, 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。















Advanced Production Capabilities • 先进的生产能力

## Industry 3.5 – a concept developed by the Inclusion Factory 工业 3.5——中德善美新概念

As a supplier for the automotive industry we must meet with our customer's high quality and lead time demands. Therefore we developed an innovative and customized shop floor system; Industry 3.5! (TM) Our Industry 3.5 presents specialized and intelligent working stations combined with visual aided control panels which allow less-skilled operators to take part in complicated production processes.

Our Industry 3.5 has similar goals as the Industry 4.0, meaning, increasing efficiency, quality and flexibility, reducing operation costs and providing traceability. But at the same time, both concepts differ in it's core element: while industry 4.0 focuses on the Cyber-Physical System, the core of Industry 3.5 is to improve the production abilities of our talented and highly motivated Operators.

After picking their own task from a visual planning system, a smart NFC supported supervision system mentors them all the way from raw material to the finished product while eliminating handling errors.

#### 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

作为一个汽车产业的供应商,我们必须达到客户的高要求和提前期需求。因此我们开发了一个创新定制的车间整合系统;我们的工业3.5体现了特定的与可视化辅助控制板相结合的智能工作站,这能保证技能不足的操作者也能实现复杂的生产流程

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
- FRP (牛产和仟务计划、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







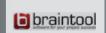












Kingdee金蝶

## Production Examples 产品示例

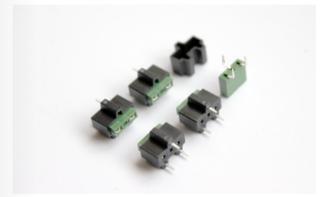
















PRODUCTION EXAMPLES 产品示例

Client 客户: Industry 行业:

Automatic Systems Automation 自动化



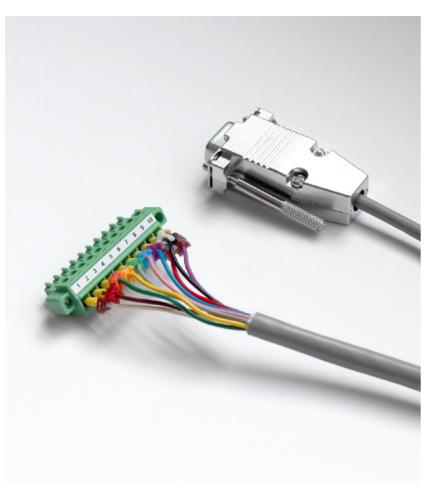
What we are doing 我们负责的工作

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、 审高效。

Client 客户: E.G.O

Industry 行业: Home Appliances 家用电器



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 Home Appliances 家用电器



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)





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

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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



45,000 pcs/mo

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

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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: SCHAEFFLER Industry 行业: Automotive 汽车

#### **SCHAEFFLER**

What we are doing 我们负责的工作

Assembly of clips 组装卡夹

Final Product 最终产品

Clutch Release System 离合器分离机构



PRODUCTION EXAMPLES 产品示例

Client 客户:

komax

Industry 行业: Wire processing machines

线材加工机器

### komax wire

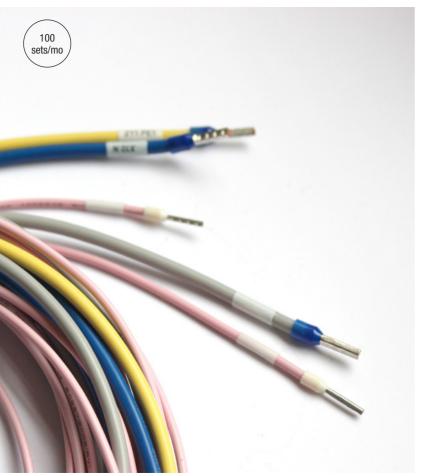
What we are doing 我们负责的工作

Wire harnesses 线束

Final Product 最终产品

Wire stripping machine 剥线机







Client 客户:

DATWYLER

Industry 行业: Industrial component supplier

工业组件供应商



What we are doing 我们负责的工作

SUN Switches for various use in industry applications 在工业领域广泛使用的行程开关

Final Product 最终产品

Elevators, Escalators and "Intelligent Building" cabling 电梯,自动扶梯和"智能建筑"布线



Client 客户:

业: Automotive 汽车



What we are doing 我们负责的工作

Hose clamp for Automotive industry 汽车工业弹簧卡箍

Final Product 最终产品

Car Engines 汽车引擎



pcs/mo

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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。

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















## 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





Project Partner	Taicang Roundtable	mdT	KFW DEG	(RT)		<b>Lebenshilfe</b> Offenburg-Oberkirch e.V.	GERMAN CHAMBER of Connector in Chine - Shonghoi 中面查图完全 - 上海	Rotary Club of Shanghai
	Taicang Roundtable	mdT	KFW DEG	Taicang Economy Development Area	Taicang Disabled People Federation	Lebenshilfe	German Chamber of Commerce Shanghai	Rotary Club of Shanghai
Platinum Partner	Figh-tech since 1901.	HUBER-SUHNER Dealers in Connecting Selection	komax wire	IMS:GEAR	MEMMINGER-IRO	Oase <sup>s</sup>	<u> zoline</u> r	
	E.G.O	HUBER+SUHNER	Komax wire	IMS Gear	Memminger-IRO	Oase Living Water	Zollner	
Gold Partner	fan, chan 6 dr. neumann outeen avvoor co. Uti	fischer 🗪	GERMAN CENTRE	<b>JUNGHEINRICH</b> Machines. Ideas. Solutions.	quick-mix @国品质 专业之选	schunk	Bertelsmann <b>Stiftung</b>	Windoyen
	FCN Business Advisory	Fischer Automotive Systems	German Centre Taicang	Jungheinrich	Quick-Mix	Schunk	Bertelsmann Stiftung	Windoyen
	ADEN SERVICES ■	KERN-LIEBERS	WAELZHOLZ	Mubea	♦ kurtz ersa	MiniTec	STAUFEN.	TaylorWessing
	ADEN Services	Kern-liebers	WAELZHOLZ	Mubea	Kurtz Ersa	MiniTec	Staufen.	TaylorWessing
	Rödl & Partner	SCHAEFFLER						
	Rödl & Partner	Schaeffler						

please visit www.inclusion-factory.com

JungleFish Shanghai



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