

2024 经销商会议



GIBBSCAM



up₂parts

SELF-LEARNING CO-PILOT FOR MANUFACTURING

制造业自主学习型人工智能CO-PILOT

UP2PARTS源自何处

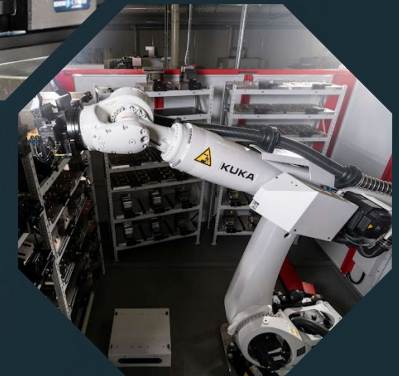
up2parts
AI-driven manufacturing

Corporated spin-off from MAB GmbH

- Founded in 2011 by Marco Bauer (CEO)
- Classic contract manufacturer
- Technologies: Turning, milling, sheet metal
- 110 employees

从德国MAB拆分出来的子公司

2011年Marco Bauer创立
业界信誉好
车削、铣削、钣金
110名员工



关于UP2PARTS

up2parts
AI-driven manufacturing

- Founded in 2020 by Marco Bauer (CEO)
- Software solutions for the manufacturing industry
- Shareholders: Schaeffler, Sandvik, DMG MORI
- 55 employees

2020年创立公司

制造业提供软件解决方案

股东：山特维克、DMG MORI、Schaeffler公司

50名员工

The idea to rethink the traditional manufacturing industry was the beginning of up2parts!

重新审视制造业这一想法，是up2parts的起点！



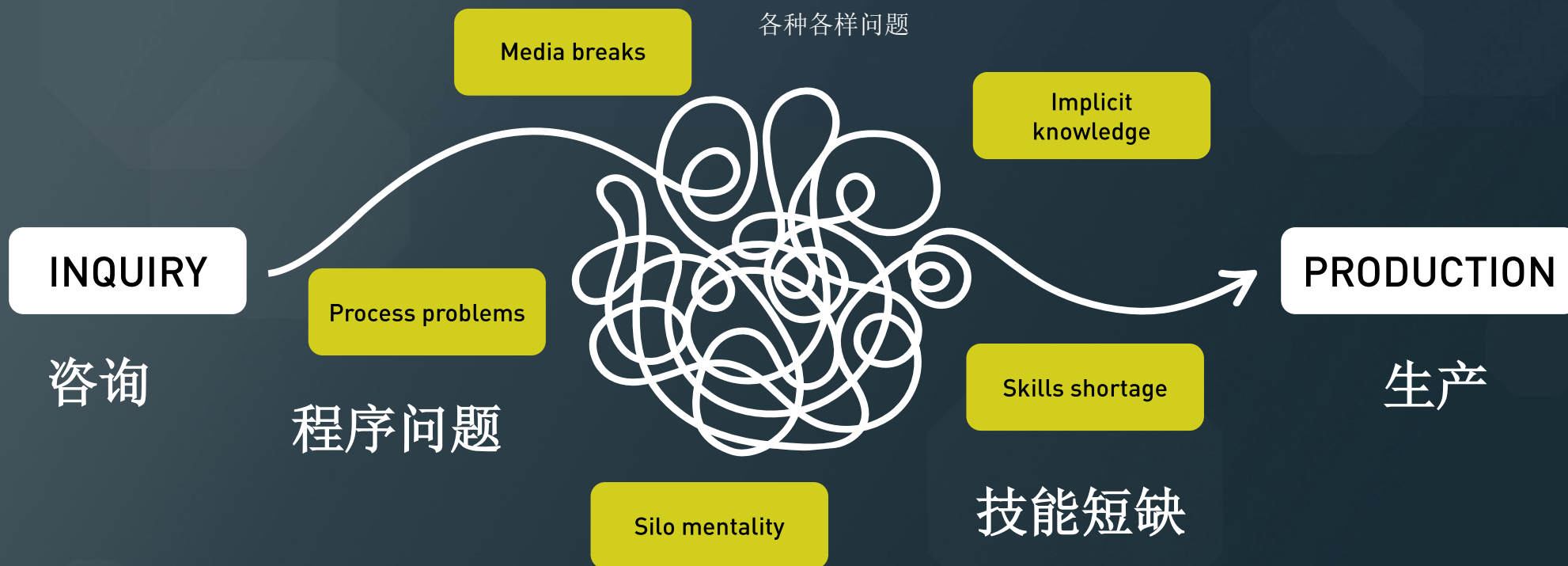
黄金问题

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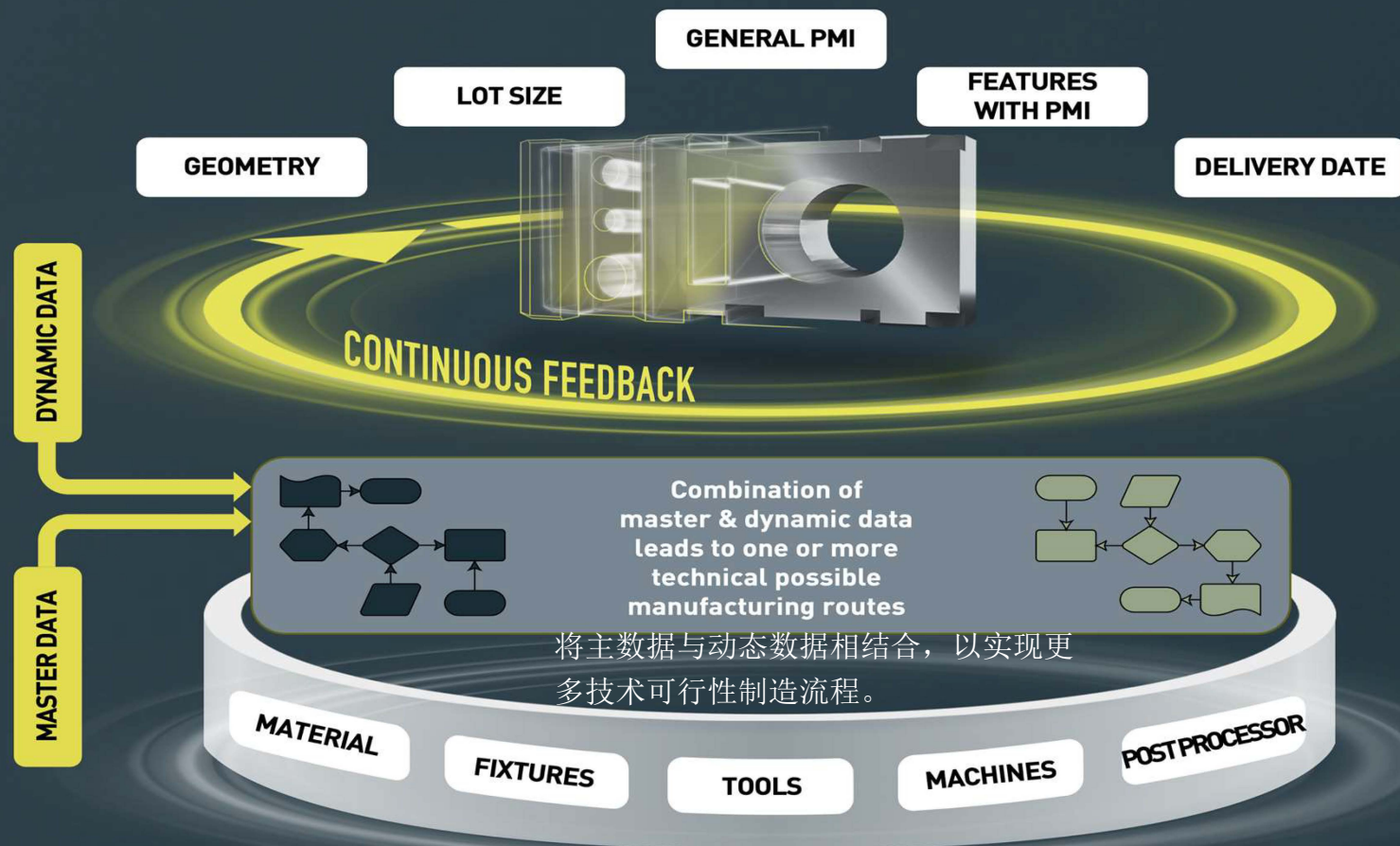
我们客户的机器利用率有多高？

我们一起帮助他们增加它

制造工艺现状



制造过程自动化

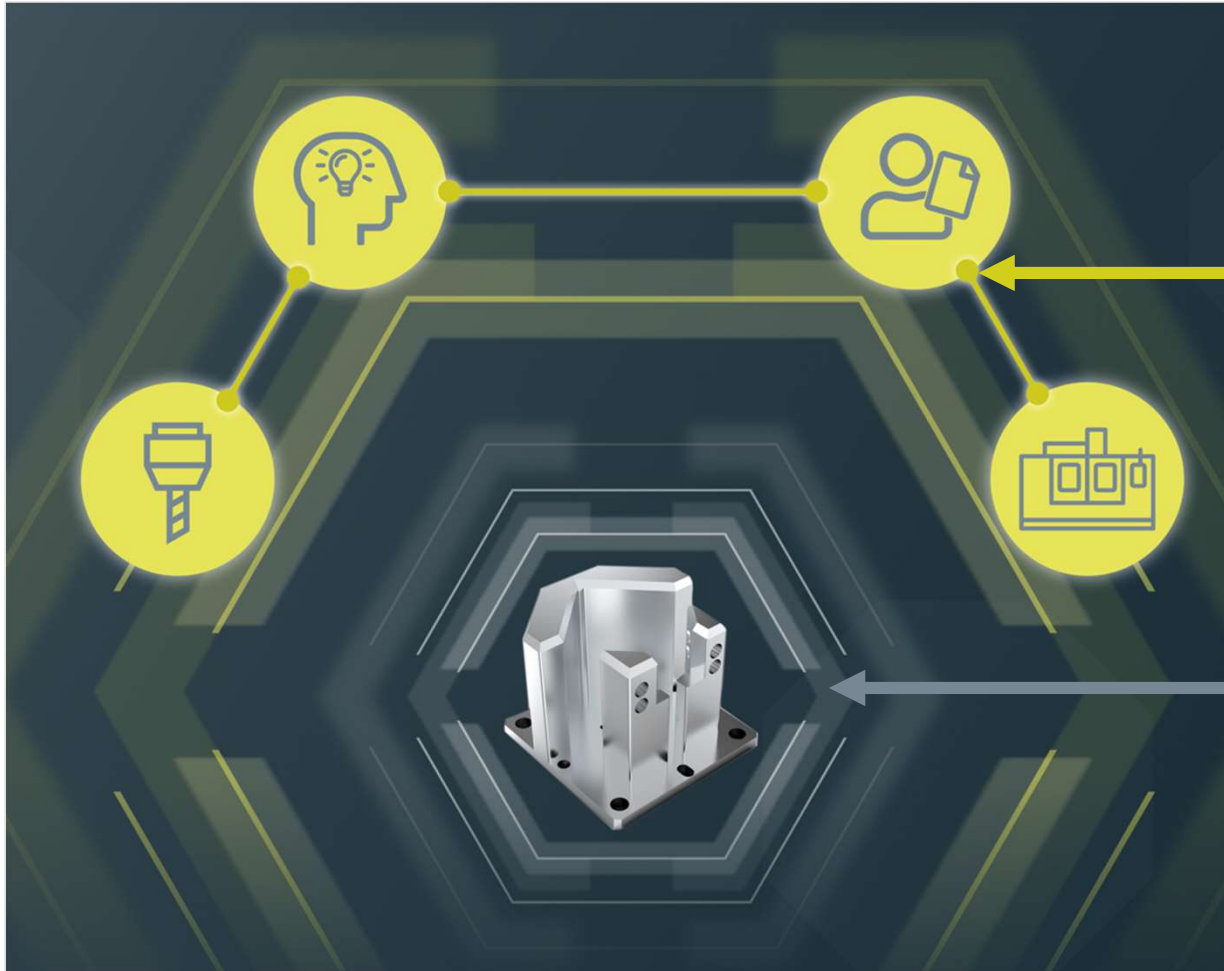


自主学习型UP2PARTS

AI

描述组件的操作方式
在整个过程中获得知识
保留您的程序和技术程序中的知识
公司个性化

up2parts
AI-driven manufacturing



Shell of the AI

- Describes the HOW of the component
- Gains knowledge throughout the process
- Preserves your process and technical process know how
- Company individual intelligence

Core of the AI

- Describes the WHAT of the component
- The initial intelligence is constantly improved by up2parts
- Based on special developed feature recognition

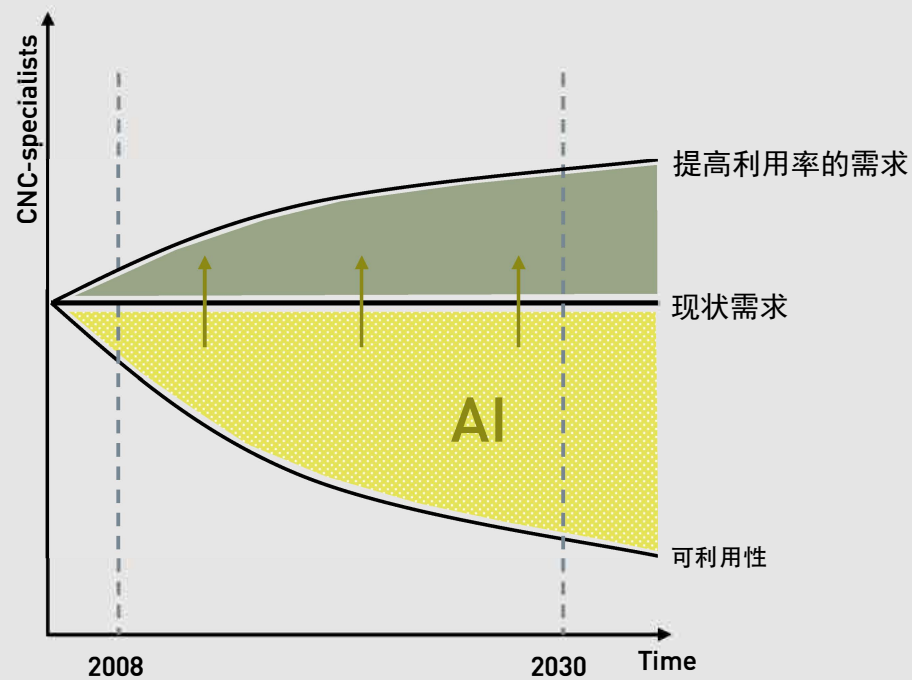
AI的核心

描述组件的功能

通过up2parts最初的智力会不断改进

基于专门开发的特征识别

为什么我们制造业需人工智能

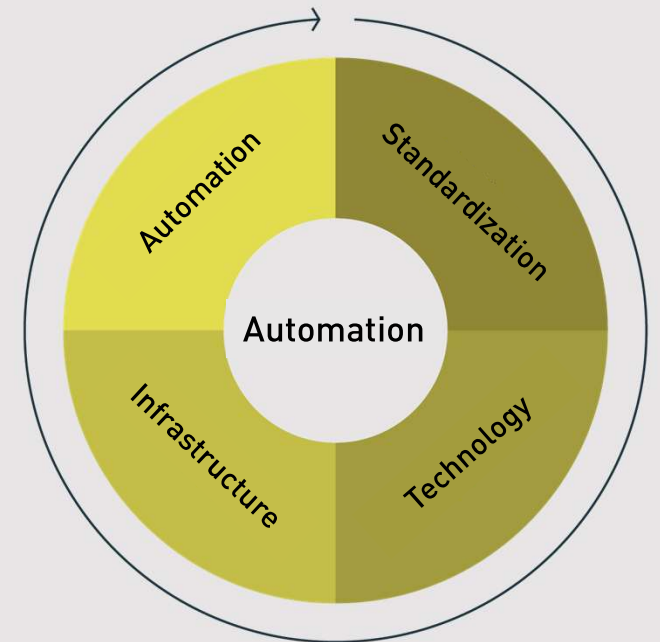


仅在美国和德国，到2030年我们将短缺300万名数控专家
这还是仅仅保持现状

自动化规则与AI

Automating complex systems does not work with a crowbar.

- **Standardization: 标准化**
Tools, clamping devices, processes, etc. 刀具、夹紧装置、工艺等
- **Technology: 工艺**
Clear range of components, e.g. 3-axis milling of prismatic components
组件范围清晰，例如棱柱形组件的三轴铣削
- **Infrastructure: 基础设施**
Hardware, such as IT systems, robots, etc.
硬件，如IT系统、机器人等
- **Automation: 自动化**
Introduction/activation of rules, algorithms, etc.
规则、算法等的引入/激活



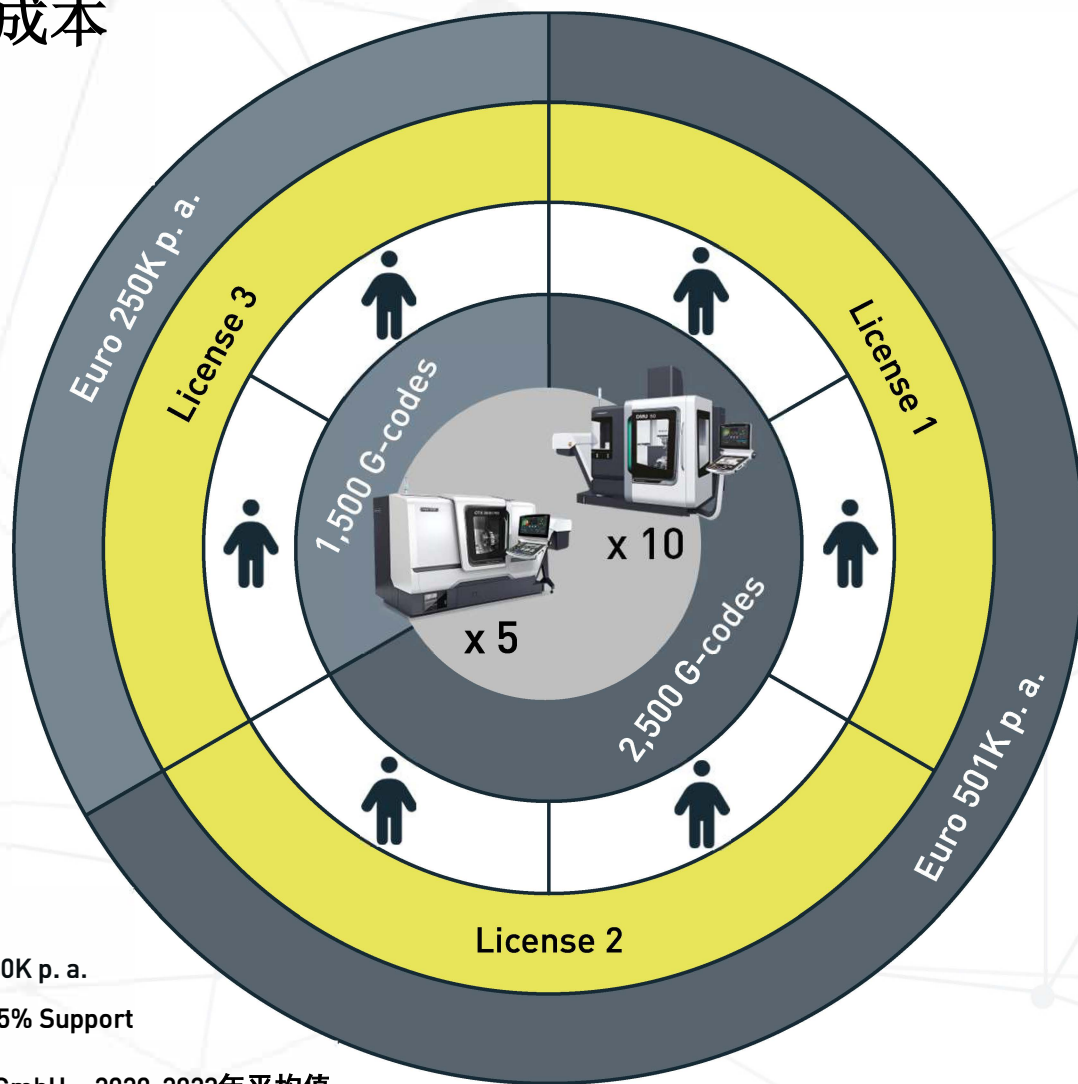
Automation and AI is a step-by-step process and most likely everything is better than it is now.

自动化和人工智能是一个循序渐进的过程，很可能一切都比现在好。

UP2PARTS的目标



CAM-成本



👤 = Euro 120K p. a.

License = 70K + 15% Support

资料来源: MAB GmbH, 2020-2023年平均

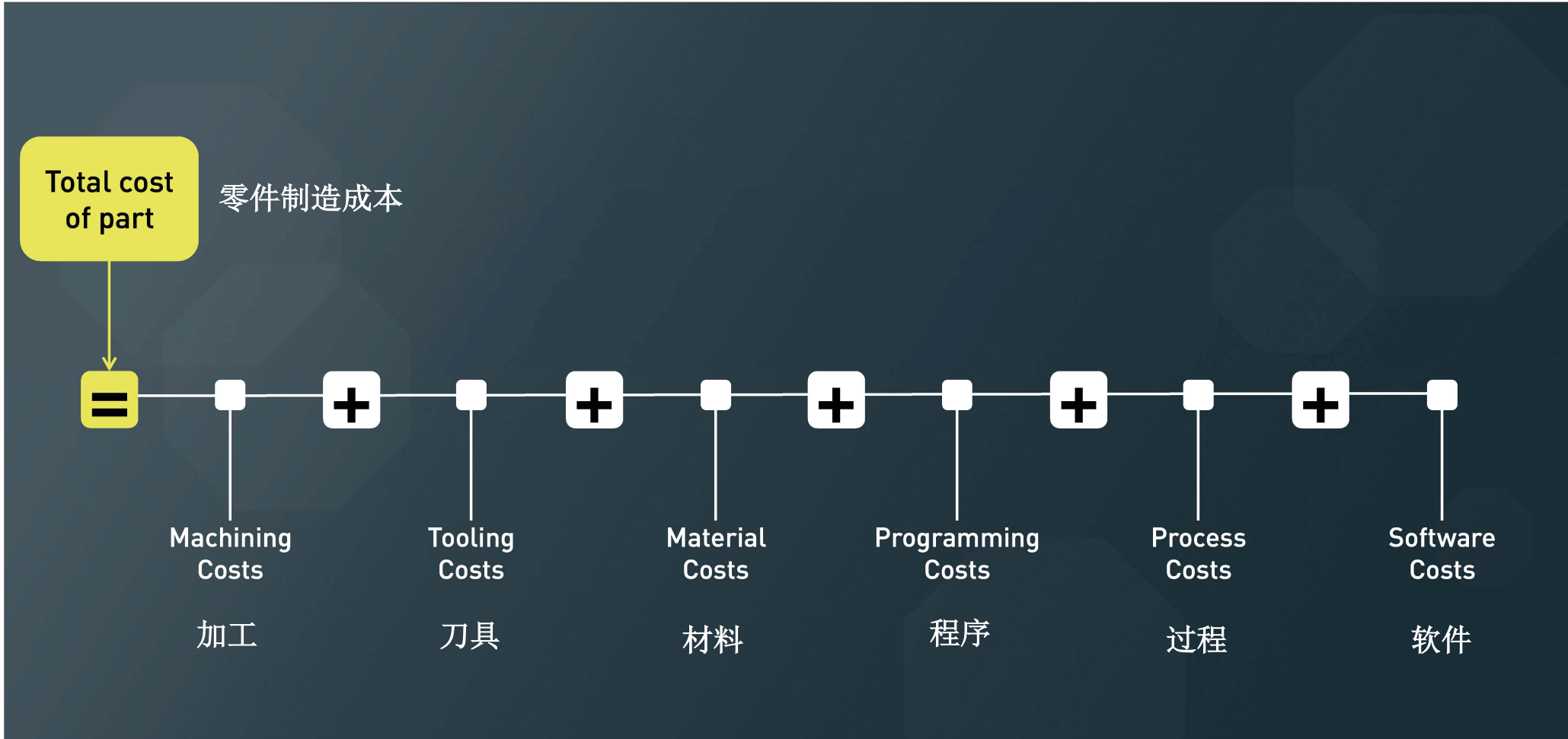
总费用: 每年
751 000 欧元



速度提高70%

每年节省52.5万欧元

制造成本方程式

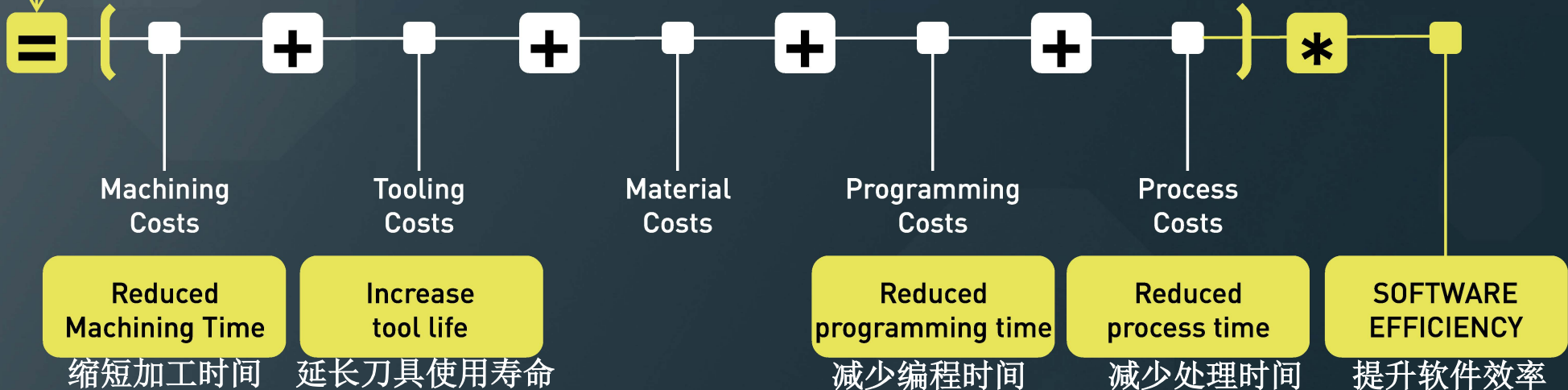


制造成本方程式

THE POWER OF SOFTWARE IS THAT IT CAN REDUCE THE COSTS OF THE OTHER ELEMENTS IN THE EQUATION!

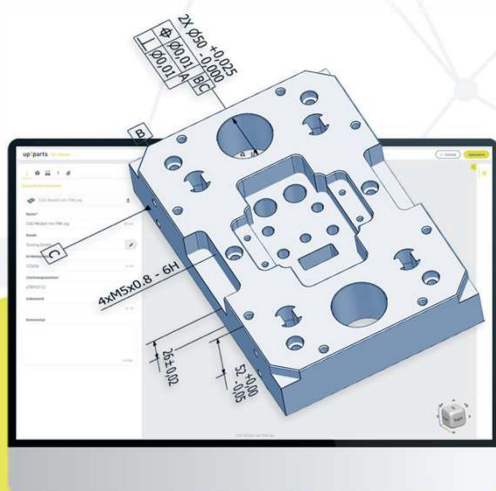
软件强大之处在于它能够降低该等式中其它各项的成本！

Total cost of part



产品

up2parts
AI-driven manufacturing



UP2PARTS COCKPIT ¹⁾

中央数据库，包括带
PMI、DFM检查和相似性
搜索的3D查看器



UP2PARTS计算

速度提高80%：基于几何形
状和技术的自动化工作计
划建议



UP2PARTS AUTOCAM

速度提高70%：CAM程序
的自动建议

¹⁾ up2parts cockpit 是up2partes计算和up2parts-autoCAM使用的基础。

UP2PARTS AUTOCAM:程序运行速度提升70%

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AI-driven manufacturing

Create a proposal for the CAM program up to 70% faster, transfer it to the existing CAM software and complete the entire CAM program in a fraction of the time and effort.
为CAM程序创建提升的速度提高了70%，将其转移到现有的CAM软件中，并在很短的时间内完成整个CAM程序

- **Create CAM programs within minutes:** Instead of time-consuming macro and rule-based CAM programming
在几分钟内创建CAM程序：而不是耗时基于规则的CAM编程

- **Automated proposal:** From clamping, operations, tools and machining steps
自动化建议：从夹紧、操作、工具和加工步骤

- **Integrated tool management:** For efficient import
集成刀具管理：实现高效导入

- **Uniform programming standards:** Continuous knowledge training for recurring routine tasks to reduce the workload of skilled workers
统一编程标准：对重复性日常任务进行持续的知识培训，以减少熟练工人的工作量

CREATE CAM PROGRAMS EFFICIENTLY WITH UP2PARTS AUTOCAM.

使用UP2PARTS autocad高效创建CAM程序



UP2PARTS云视频

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AI-driven manufacturing

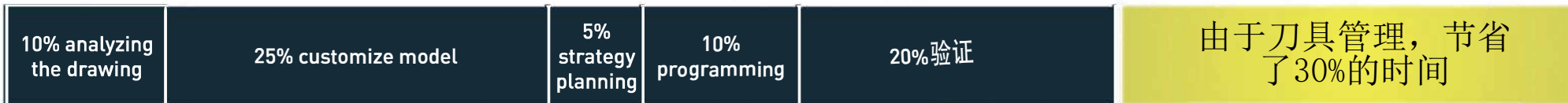


CAM程序：基本要求

传统



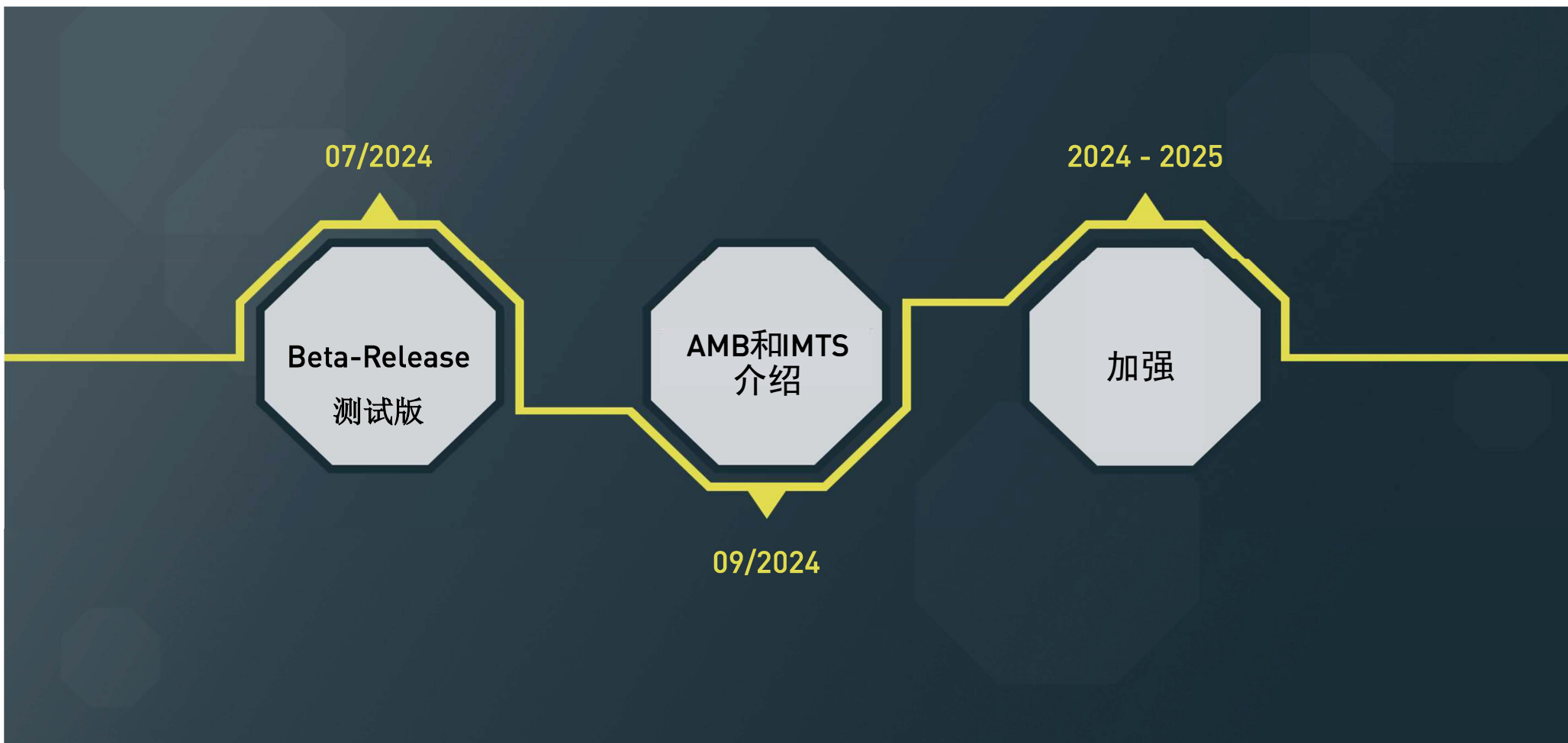
无PMI的autoCAM



带PMI的autoCAM



时间线



“编程速度提高70%”
你认为值多少钱？
我们讨论一下