



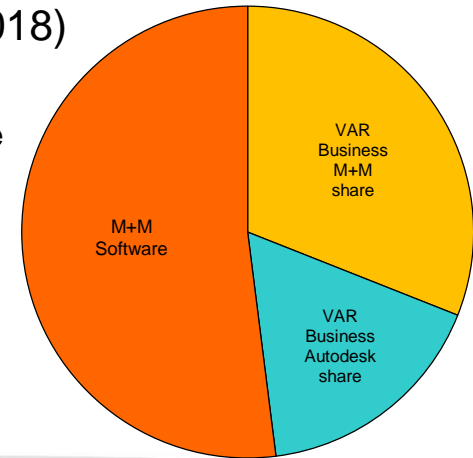
# Mensch und Maschine Software SE

Company Presentation Status November 29, 2019 / Nine months report 2019



# Business model

- Leading vendor of CAD/CAM/CAE/PDM/BIM solutions
  - ◆ CAD/CAM/CAE = Computer Aided Design / Manufacturing / Engineering  
PDM = Product Data Management / BIM = Building Information Management
  - ◆ Founded 1984 – 35 years on market // IPO 1997 – 22 years public
- Gross Margin from two Segments (Contribution 2018)
  - ◆ M+M Software: Proprietary Standard Software
    - 52% of gross margin from self-developed CAD/CAM, BIM, CAE Software
  - ◆ VAR Business: Customized Digitalisation Solutions
    - 31% of gross margin from M+M Solutions / Training / Service
    - Just 17% gross margin contribution from Autodesk business (compared to 2001: >75% / 2008: >50%)
  - Altogether 83% of group gross margin is proprietary



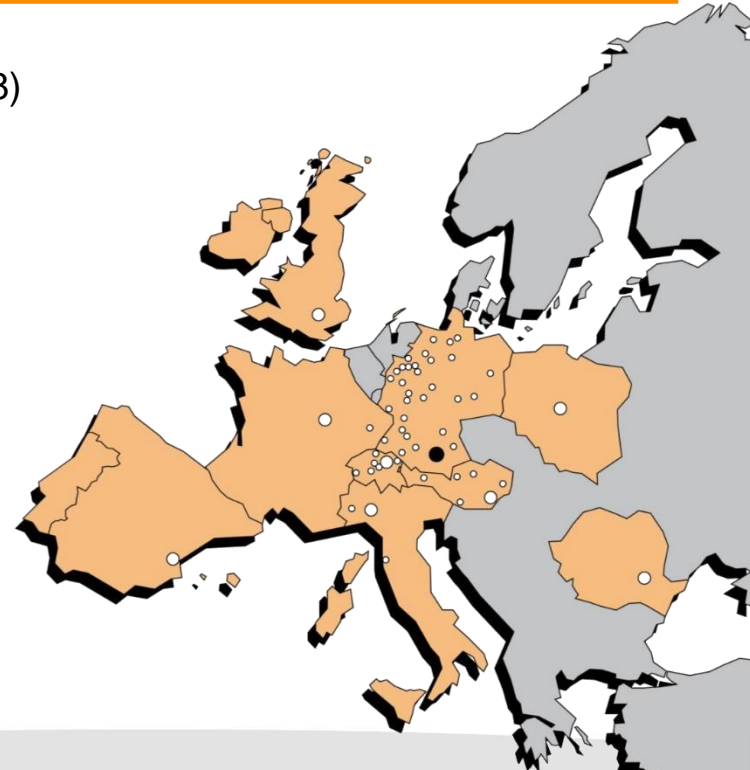
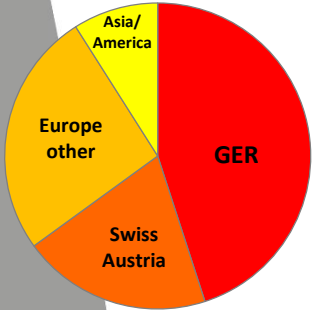
# Business model

## ■ Geographical sales contribution: (2018)

- ◆ Germany: EUR ~83.5 mln / ~45%
- ◆ Austria/Switzerland: EUR ~37.5 mln / ~20%
- ◆ Europe (other): EUR ~48.2 mln / ~26%  
France / Italy / UK / Poland / Romania / Iberia
- ◆ Asia/America: EUR ~16.2 mln / ~9%  
Japan / China / India / APAC / USA / Brazil  
(until 2018 CAM Software only / from 2019 also SOFiSTiK)

## ■ Headcount: (Full time equivalent 9M/2019)

- ◆ 918 (PY: 818 / +12% or +2.2% organic)
  - 456 / 50% M+M Software
  - 462 / 50% VAR Business
- ◆ Gross headcount at Sep 30, 2019: 1,000



# Business model

## ■ Broad industry balance:

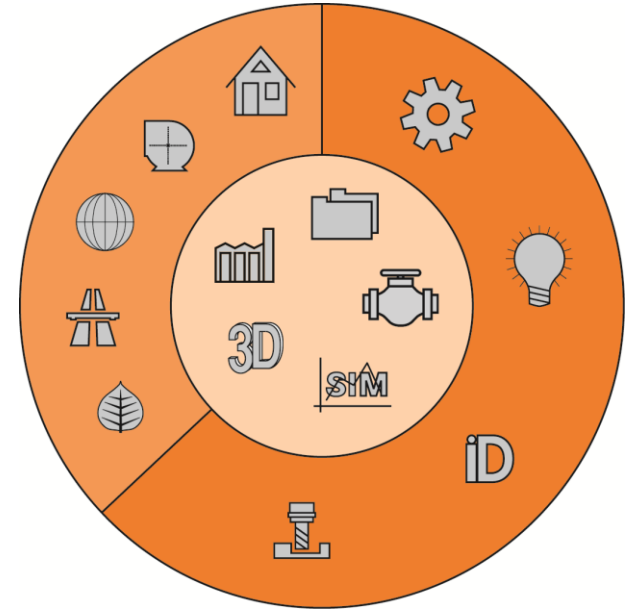
- ~2/3 Industry: e.g. Mechanical/Electrical Engineering, Tool/Mold/Die Making, Automotive/Aerospace/Shipbuilding, Industrial design
- ~1/3 BIM: e.g. Architecture, Building Services, Structural/Civil Engineering, Infrastructure, Gardening/Landscaping
- Interdisciplinary: e.g. Digital Factory, PDM/PLM, Simulation, Plant Design, Visualization/Animation

## ◆ Extensive installed base:

>100,000 active seats @ more than 30,000 customers

## ◆ Wide price/performance range:

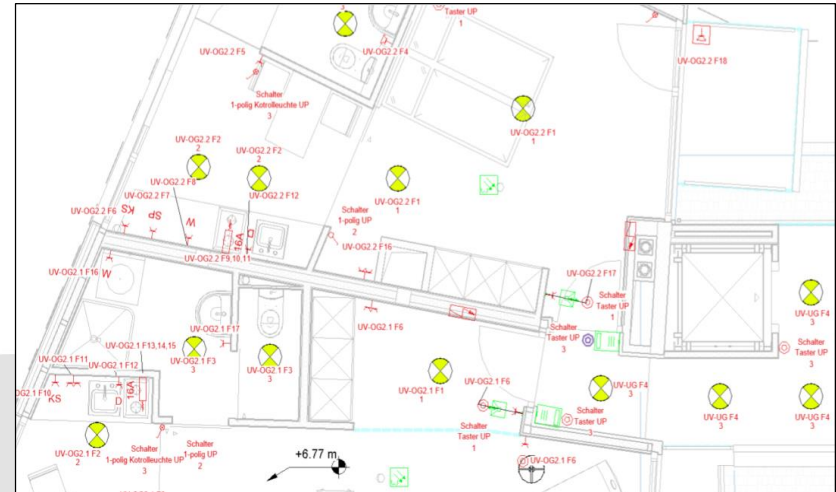
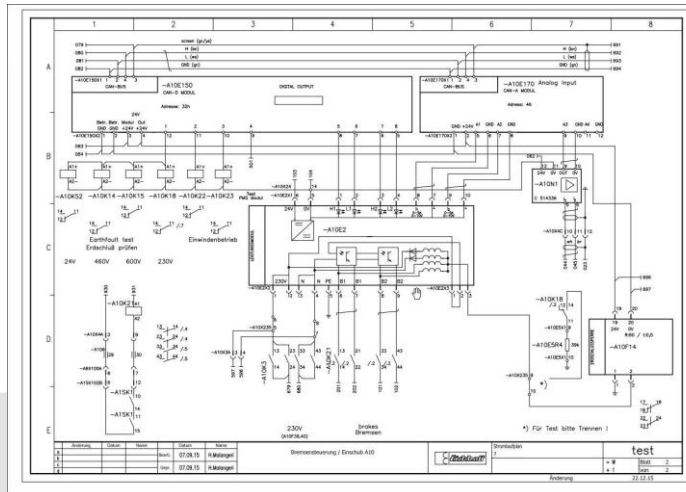
- Software from 1,000 Euro to over 100,000 Euro per seat
- Pure B2B Business, only professionals, no consumers



# CAD/CAM in practice (M+M Software)

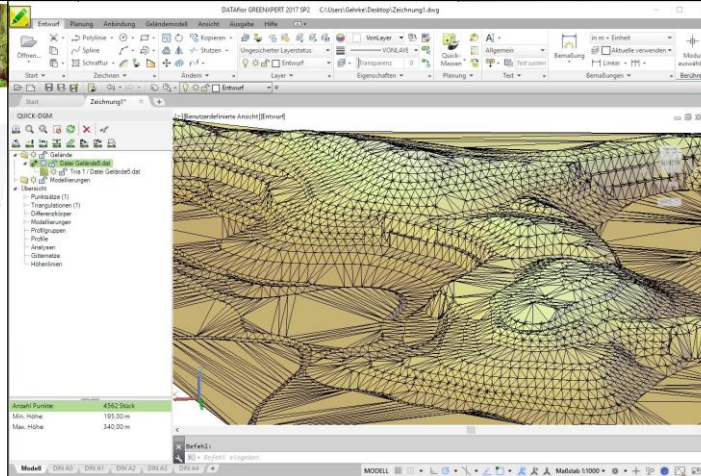
## ■ CAE – Computer Aided Engineering

- Actual product: ecscad – until 2008 M+M Software, end of 2008 sold to Autodesk – since 2014 licensed back and developed / supported by M+M
- Newly developed: eXs – fully data- and largely user interface compatible
  - High performance database, more functionality, simpler usability, free configurability
  - For Industry disciplines electrical and process engineering, hydraulics and pneumatics
  - As well as for all building services disciplines in BIM projects
  - For ecscad maintenance customers free automatic license transition



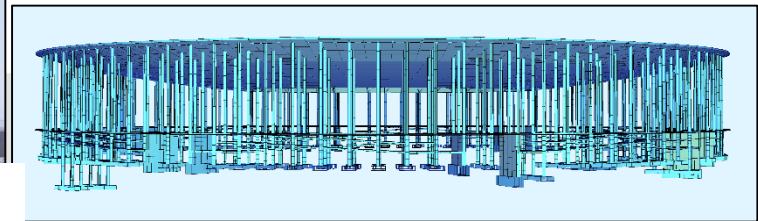
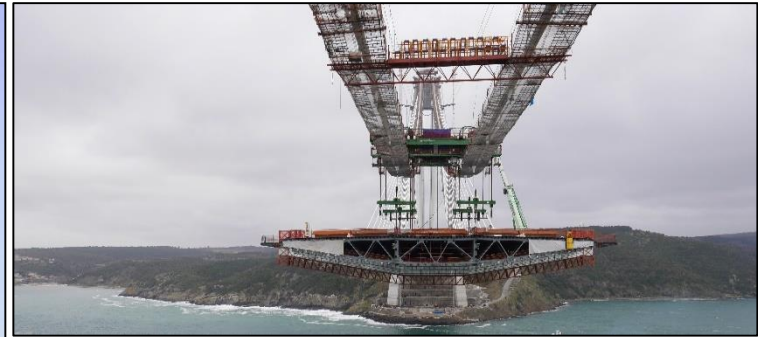
# CAD/CAM in practice (M+M Software)

- Gardening / Landscaping / Earthworks for Architects and Implementors
  - M+M Subsidiary DATAflor, Goettingen
  - Integrated software solutions not only containing graphical planning but also calculation, tender, quoting, construction site controlling and billing
  - Two examples from the extensive functionality:
    - Digital terrain model: Comfortable three dimensional landscape design (middle picture)
    - GRUENSTUDIO 3D: Live experiencing the future garden via VR glasses (right picture)



# CAD/CAM in practice (M+M Software)

- New in 2019: BIM, Structural Analysis and Reinforcement
  - Strategic shareholding in SOFiSTiK AG increased from 13.3% to 51%
  - Share swap, Founders/Management staying on board with 49% shareholding
  - SOFiSTiK (est. 1987) is a technology leader in bridge, tunnel and building construction
    - In more than 30 years, thousands of construction projects have been realised and calculated with SOFiSTiK software, e.g. BMW-Welt Munich, new Bosphorus bridge, Brasilia National Stadium...



[www.sofistik.com/company/references](http://www.sofistik.com/company/references)

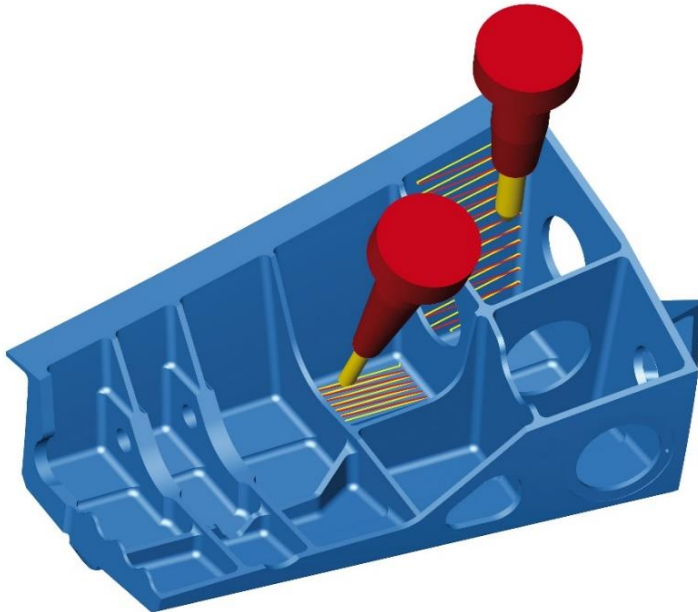
# CAD/CAM in practice (M+M Software)





# CAD/CAM in practice (M+M Software)

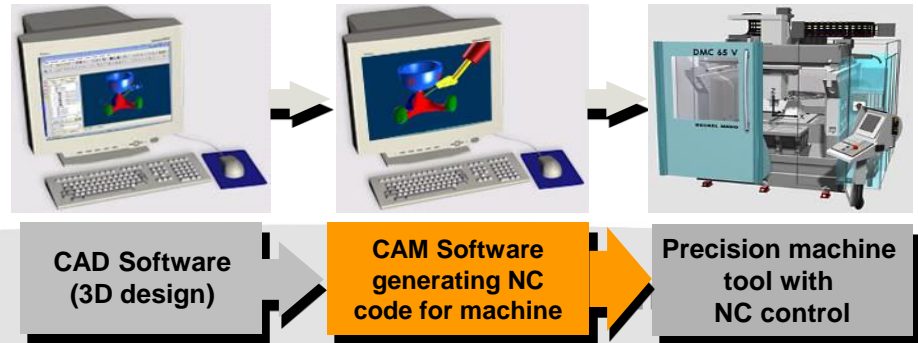
- CAM – Computer Aided Manufacturing
  - Subsidiary Open Mind – Product line hyperMILL
  - High end: Average revenue approx. EUR 30,000 per seat
  - **CAM is contributing ~40% of group gross margin**



Precision machine tools' purchase prices are in the six or seven digit Euro range. hyperMILL reduces milling times by up to 90% through intelligent machining strategies, pushing return on investment for these expensive machine tools to completely new dimensions.



 **OPEN MIND**  
THE CAM FORCE



# CAD/CAM in practice (M+M Software)

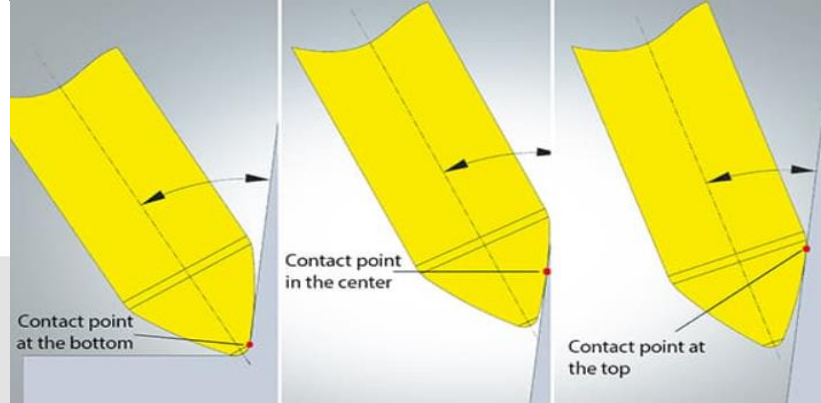
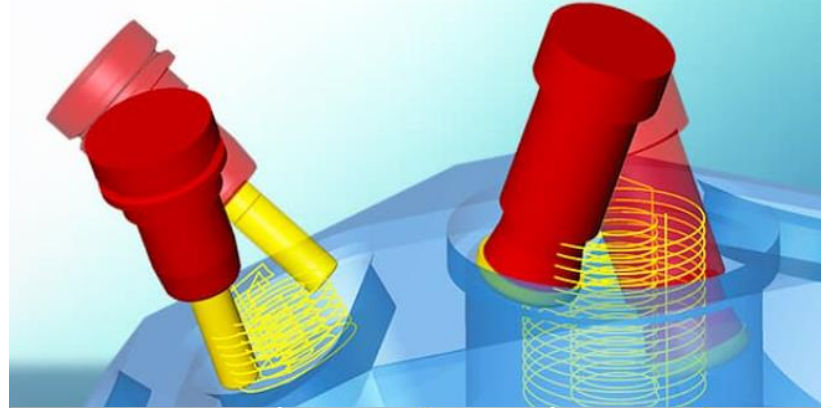
Up to 5x faster material removal by 'helical' roughing.

Flat surface finishing up to 10x faster by using special conical cutters with slightly convex curvature.

Milling time for this lightweight aerospace part:  
2h05min instead of 10h30min => 80% productivity gain.

Total 80% productivity gain: 2h05 instead of 10h30

78% faster roughing + 90% faster flat surface finishing:



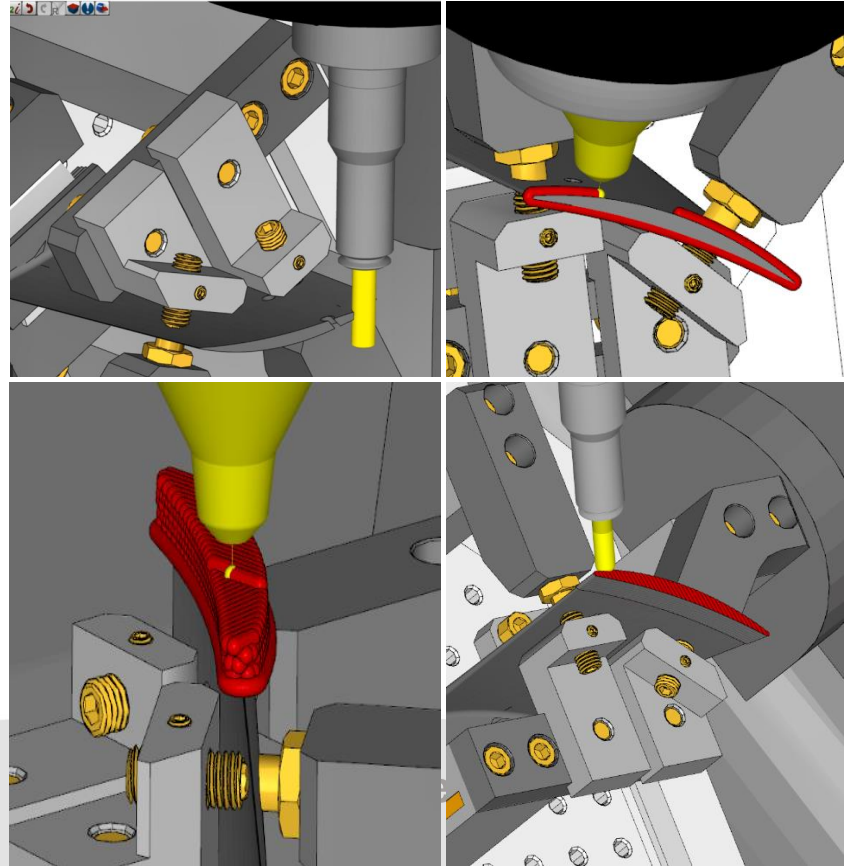
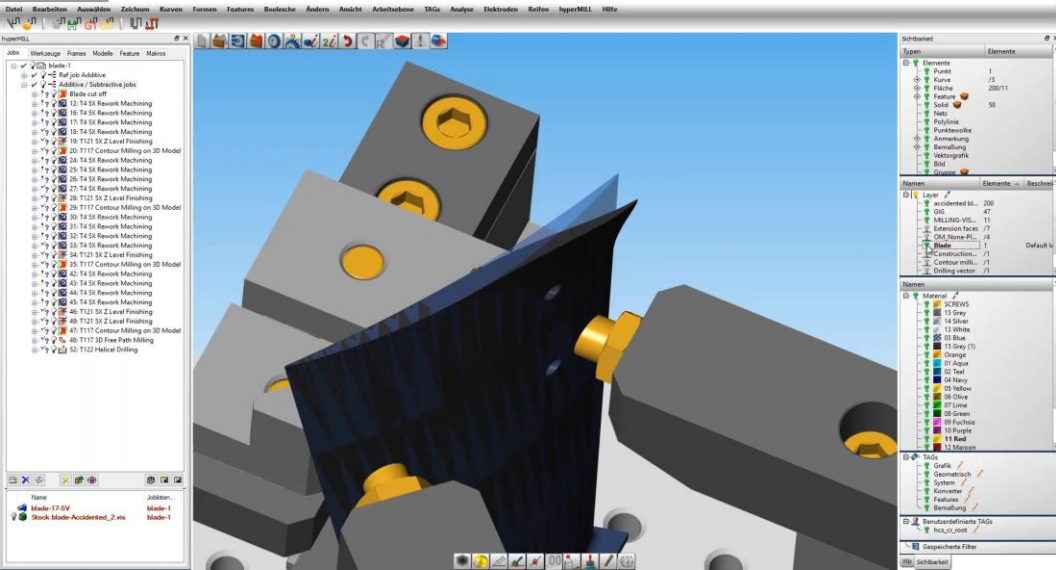
# CAD/CAM in practice (M+M Software)

## CAM (subtractive) meets 3D printing (additive):

New hybrid machine tools with an LMD device (Laser Metal Deposition) combine the advantages of 3D metal printing (building parts from scratch) and 5-axis milling (finishing defined surfaces with high accuracy) without re-clamping.

hyperMILL now supports this process holistically.

Example: Hybrid repair of a turbine blade without re-clamping.

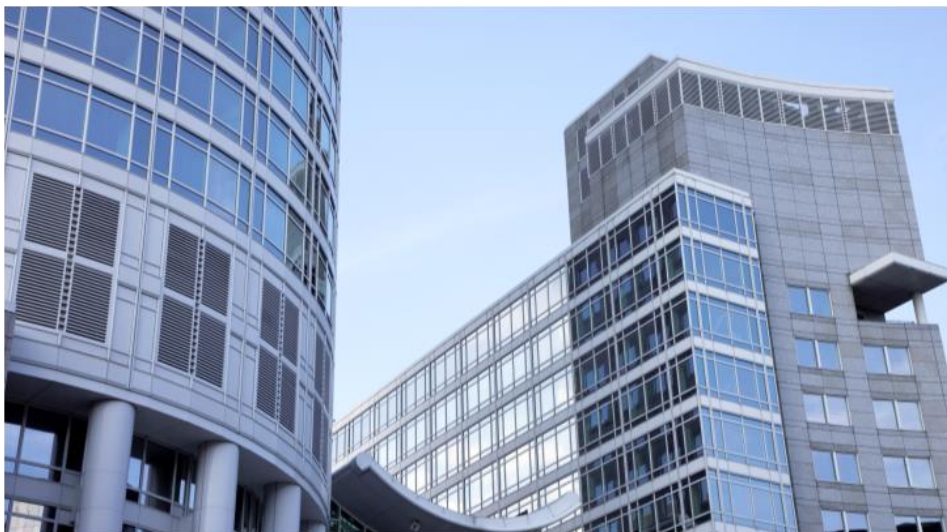


# Some CAM Key Customers



# CAD/CAM in practice (VAR Business)

- Example BIM – Building Information Modelling / Management: Digital Building Manual for Facility Management



bim  booster bin  ready

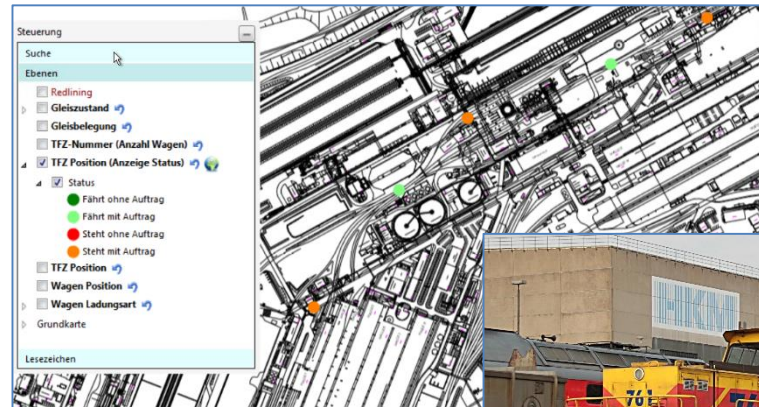


# CAD/CAM in practice (VAR Business)

- Example: Infrastructure/BIM – Steel plant becoming ‘Digital Factory’  
Large project since 2010 including over a dozen modules totally representing several man-years. Here: GPS aided locomotive tracking on the factory premises



**Customer:** HKM Hüttenwerke Krupp Mannesmann, Duisburg-Huckingen, Germany

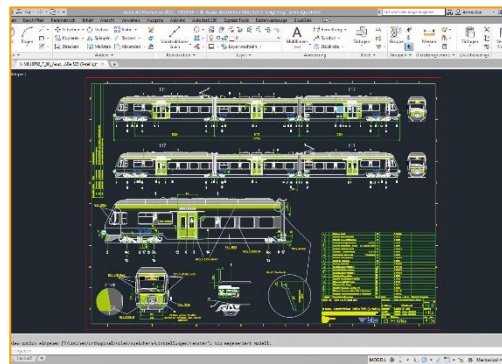


mapedit

# CAD/CAM in practice (VAR Business)

- Example: Data Management for a train operator  
Integrated system for design, data management and Office

**Customer:** BLS Bern-Loetschberg-Simplon Bahn AG,  
Bern, Switzerland



ecs  cad



man  machine  
CAD as CAD can

mensch  maschine  
CAD as CAD can

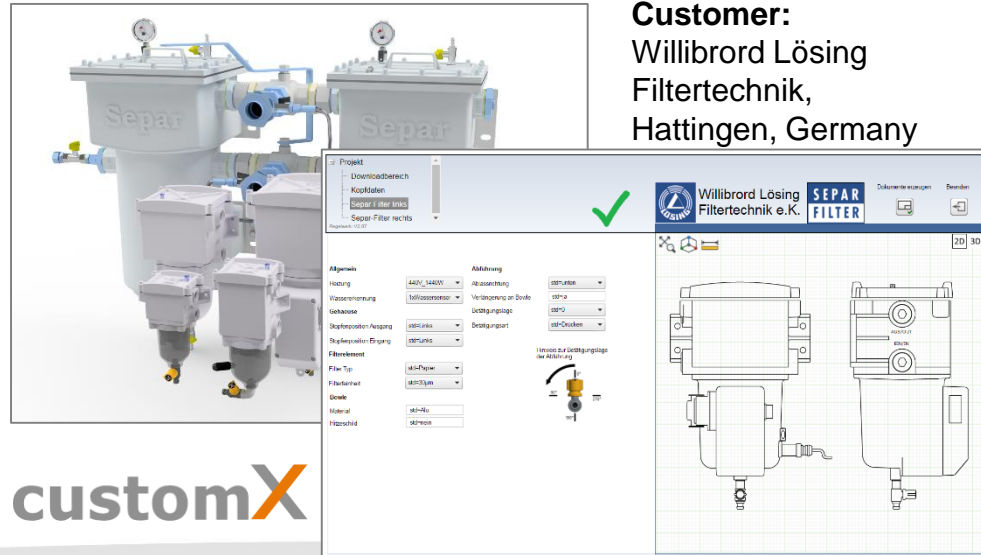
# CAD/CAM in practice (VAR Business)

- Fully automated variant design with customX - for >90% productivity gain  
Project examples: Electric distribution boxes and Diesel filters

**Customer:** Bals Elektrotechnik, Kirchhundem, Germany



**Customer:**  
Willibrord Lösung  
Filtertechnik,  
Hattingen, Germany



customX





# CAD/CAM in practice (VAR Business)

- Example: Industry 4.0 meets BIM  
BIM compatible catalog data for large kitchen planning

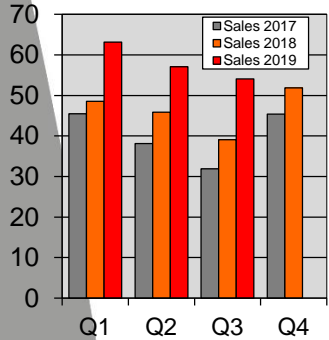
Customer: Rational AG, Landsberg, Germany



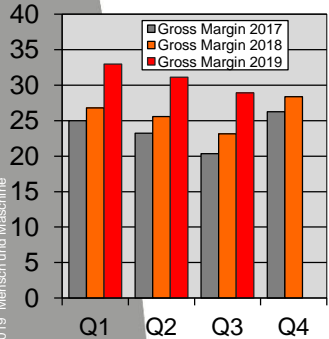
# Some VAR Business Key Customers



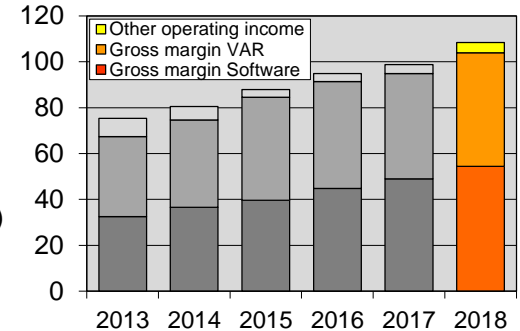
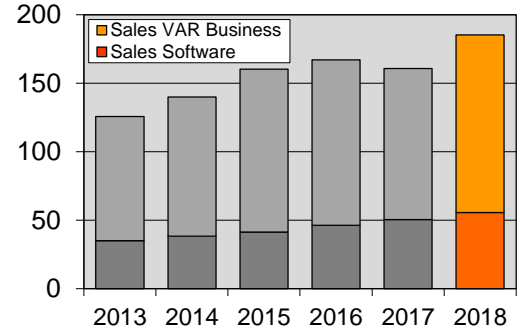
# Sales & gross margin



- Sales 2018: EUR 185.40 mln / +15%
  - ◆ M+M Software: EUR 55.73 mln / +10.4%
  - ◆ VAR Business: EUR 129.67 mln / +17.5%
  - ◆ Normal seasonality (Q1/Q4 strong, Q2/Q3 catching up)
- Record gross margin 2018: EUR 103.91 mln / +9.6%
  - ◆ M+M Software: EUR 54.36 mln / +11%
  - ◆ VAR Business: EUR 49.55 mln / +8.0%
  - ◆ Gross margin seasonality smoother than for sales



- Sales 9M/2019: EUR 174.27 mln / +30% (organic +23%)
  - ◆ M+M Software: EUR 54.73 mln / +37%
  - ◆ VAR Business: EUR 119.54 mln / +28%
- Record gross margin 9M/19: EUR 93.03 mln / +23% (org. +12%)
  - ◆ M+M Software: EUR 51.18 mln / +31%
  - ◆ VAR Business: EUR 41.85 mln / +15%

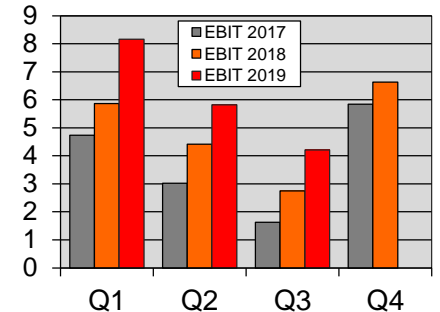
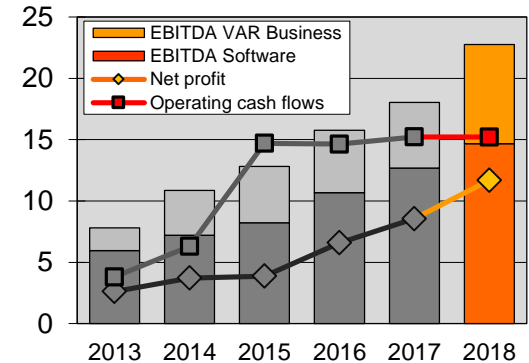


# Earnings / cash flows / dividend

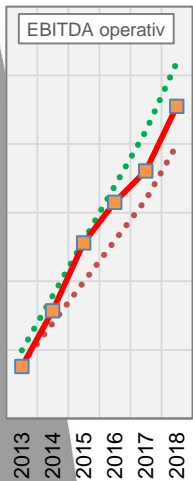
- Record EBITDA 2018: EUR 22.75 mln (PY: 18.04 / +26%)
  - ◆ EBITDA yield: 12.3% (PY: 11.2%)
  - ◆ M+M Software: EUR 14.68 mln (PY: 12.69 / +16%) / yield 26.3% (PY: 25.2%)
  - ◆ VAR Business: EUR 8.07 mln (PY: 5.35 / +51%) / yield 6.2% (PY: 4.8%)
- ◆ Record EBIT 2018: EUR 19.66 mln (PY: 15.21 / +29%)
- ◆ Record net profit 2018: EUR 11.69 mln (PY: 8.55 / +37%)
  - ◆ EPS 71.5 Cents (PY: 52.5)
- ◆ Operating cash flows 2018: EUR 15.23 mln (PY: 15.22)
- ◆ Dividend for 2018: 65 Cents (PY: 50 / +30%) in cash or shares

## EBIT seasonality, as EBITDA 19/18 is not fully comparable due to IFRS16

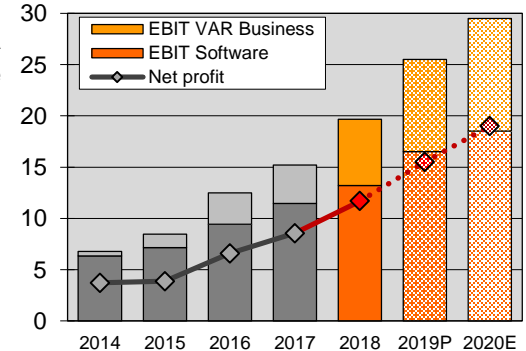
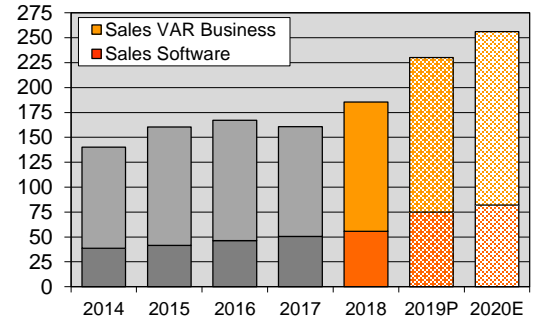
- ◆ Record EBIT 9M/2019: EUR 18.19 mln / +40% (organic +23%)
  - ◆ M+M Software: EUR 12.18 mln / +35%
  - ◆ VAR Business: EUR 6.00 mln / +49%
- ◆ Record net profit 9M/2019: EUR 10.91 mln / +38% (organic +29%)
  - ◆ EPS 65 Cents (PY: 48)
- ◆ Record operating cash flows 9M/2019: EUR 20.04 mln / +82% (organic and adjusted by IFRS16 +32%)



# Review & Outlook



- **Gross Margin 2013-2018: EUR +36.4 mln / +54%**
  - ✓ +9.0% organic Gross Margin growth p.a. (target was 10%)  
Spread from 3.7% (2017) to 13% (2015)
- **EBITDA purely operating 2013-2018: EUR +18.9 mln**
  - ✓ EUR +3.8 mln p.a. (target range until 2017 EUR +3-4 mln / 2018 +4-5 mln)
- **Gain 52%: 1 EUR Gross Margin >> 52 Cents EBITDA**
  - ✓ Profit optimized growth through active cost control management
- **2019 ff: Sales / EBIT targets replacing Gross Margin / EBITDA**
  - ◆ IFRS 16 moving leasing expenses to depreciation => EBITDA 19/18 not comparable
- **2019P: Organic growth plus SOFiSTiK acquisition**
  - Sales +20-30% to EUR 222-240 mln / Guidance increased
  - ◆ EBIT +22-33% to EUR 24-26 mln
  - ◆ EPS +25-34% to 89-95 Cents / Dividend +18-28% to 77-83 Cents
- **2020E ff: Sales +10-12% / EBIT EUR +3.5-5.0 mln p.a.**
  - ◆ EPS +18-24 Cents / Dividend +15-20 Cents p.a.



# The M+M share

## Listings:

- ◆ scale, Frankfurt (scale30)
- ◆ m:access, Munich

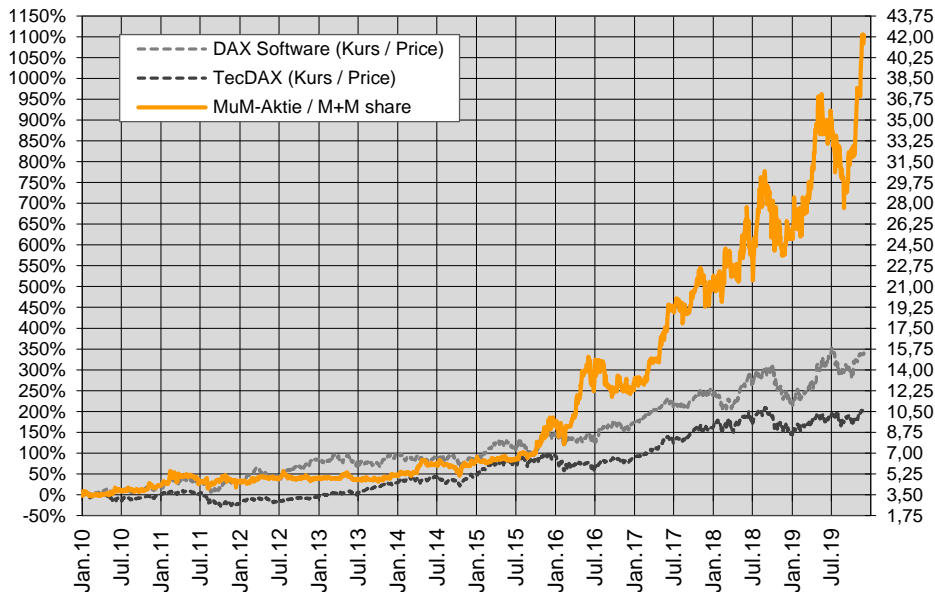
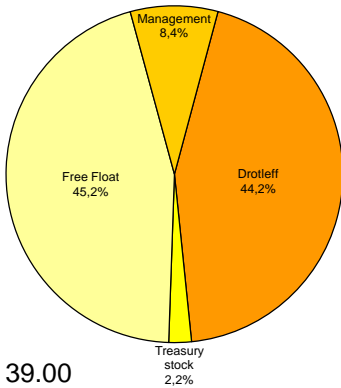
## Designated Sponsors:

- ◆ LBBW, Stuttgart
- ◆ Oddo Seydler, Frankfurt

## Analyst Coverage:

- ◆ LBBW: „Buy“ – fair value EUR 39.00
- ◆ SMC Research\*: „Buy“ – fair value EUR 38.50
- ◆ EDISON\*: **scale** research report – no price tag

\*available in English language



**Total dividends paid since 2010: EUR 2.65**

**M+M is both a public and private company**

# Why invest in M+M ?

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- M+M is a leading vendor of technical software solutions
  - ◆ Founded 1984 – 35 years of established market position
  - ◆ More than 30,000 customers worldwide
  - ◆ Private and 22 years public company
- Sustainably profitable growth / well scalable business model
  - ◆ Organic growth (CAGR): long-term average approx. 10% p.a.
  - ◆ EBIT yield 2018 was 10.6% - mid-term potential >14%
  - ◆ 18-24 Cents p.a. EPS growth target secured by strict cost management
- Good dividend return due to high pay-out ratio
  - ◆ Low CAPEX, as the lion's share of software development is not capitalized
  - ◆ Founder/CEO Adi Drotleff swapping the majority of his dividend rights to shares every year





# Thank you for your attention!

For more Information: [www.mum.de](http://www.mum.de) / Investor Relations

