

AAT®
GmbH

Produktionsanlagen-Automationstechnik

Wikingerstraße 11

D-76189 Karlsruhe- Germany

Tel.: +49 721/95 240-0

Fax.: +49 721/95 240-50

e-mail: aat-gmbh-karlsruhe@t-online.de

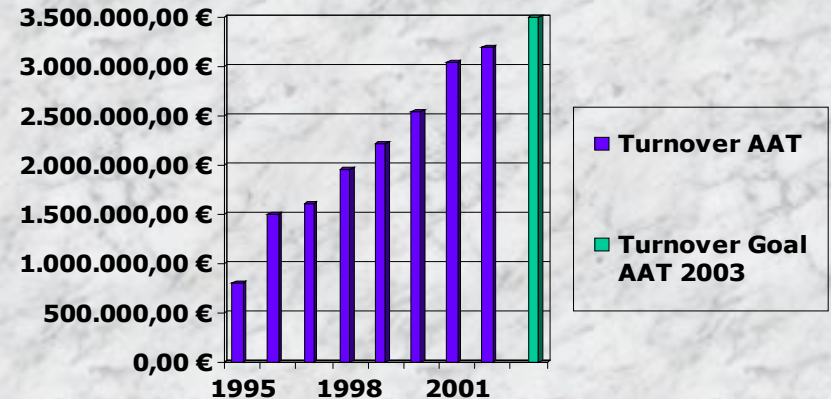
Your Partner for the automation of
production and manufacturing



Who we are



- Establish in 1995
- Shareholder Roman und Beatrice Kaiser, Homme Jansma
- Managing director Roman Kaiser
- Capital investment € 62.500.-
- Address Wikingerstraße 11
D-76189 Karlsruhe; Germany
- Employee 32
- Extern offices
 - Saarbrücken, 1 Employee
 - Bochum, 2 Employees
 - Benelux, Mechelen, 1 Employee
 - AAT do Brasil, Sao Paulo, 2 Employees
- Cooperations
 - WILL Consultoria E. Part. S/C. LTDA, Sao Paulo
 - NISSAN Trading Co. LTD., Tokio (Only: Low-Cost-FTS)
- Certification DIN-ISO 9001
(VDA6.1, QS9000 in preperation)



Our main focus

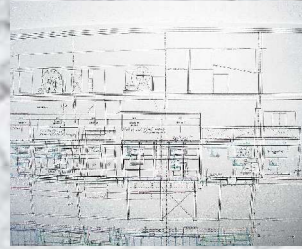
- System planning
- Hardware development
- Software development
- Building and construction of Control Cabinets and the installation on site
- Supervision on site
- Commissioning
- Maintenance and Stand By

Our Experiences

We have experience in execution of

- Overhead conveyor (Overhead Electric Powered Trolley System – Electric Monorail System – EMS)
- SKID - conveyor
- Push – Skid Conveyor – Skillet Conveyor
- Conveyors for pallets
- Power & Free-Conveyor
- Floor conveyors with non contact Energie -and Data-transmission
- High-rise storage with storage and retrieval unit
- Low-Cost-FTS-System
- Gantry and Gantry robots and handling systems
- Special development for handling of material

System planning



- Because of our long-time experience with planning and realisation of transport- and productionsystems we are in a good position to set-up realisation-concepts and specifications, which are especially developed for your needs and qualifications of your Maintenance Crew.
- The following elements can be part of this work
 - ***Planning*** of industrial production-control-systems
 - ***Choice of components*** and rework components in the case.
 - ***Listing of work-specific realisation-concepts*** such as choice of controllers, partlists and construction-advises for control-cabinets and installation.
 - ***Set-up of software standards*** for PLC-systems
 - ***Set-up the standards*** for documentation
 - ***Development*** of standard function blocks for Tec-units
 - ***Set-up visualisation-concepts*** for production- and system-control
 - ***Set-up of system-specifications***

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Hardware Development

- We do the Hardware Development on the following CAD-Systems:
 - *EPLAN*
 - *RUPLAN*
 - *AUTOCAD*
- We have experience with the factory specifications from:
 - *AUDI*
 - *BMW*
 - *DAIMLER CHRYSLER*
 - *FORD*
 - *ROVER*
 - *OPEL (T3000, T3200, T4300, SKE, LVE)*
 - *PORSCHE*
 - *SKODA*
 - *VW*



Software Development

■ Make out of PLC -Software for the Systems you find below:

- **Siemens**
 - S5-95U, -100U, -115U, -135U, -150U, -155U
 - S7-200, -300, -400
 - Local System ET200M/B/S/X
 - Profi Bus DP and FMS, H1-Bus, MAP-Connection
- **AEG-Schneider** A250/500, Quantum, Premium
- **ABB** Advant 110
- **Allen Bradley** PLC 5 - 40/80, SLC500, Control Logix, RIO-Bus, DATA-Highway-Bus, Device-Net, Control-Net, Touch Panel,
- **Bosch** CL500/550, ZS500/510, Profibus DP and FMS, R500MAP
- **Modicon** 584/984, Modbus+
- **IPC** 300, 620
- **Berghof**
- **CAN-Bus**
- **Phoenix Interbus-S (Optical fibre cabel and Wire)**
- **ASI Bus**
- **Safety Bus**



Software Development

- We can do the the Visualisation in following systems
 - *Siemens WIN CC; OP27/37; Protool*
 - *Intouch*
 - *QuickPics*
 - *Madap-MMI*
 - *SWAC*

- *We have experience with systems from LJU, DETO, intelligent frequency converter, Distance measuring systems, data light, electronic saftey equipment*

- *We have experience with the contact less Energie and Data Transmission with*
- *the systems from LJU and Vahle*

- *We have experience with with servo frequency converter and frequency converters*
- *from SEW, Danfoss, Schneider, Lenze, Siemens, Allen Bradley*



Control cabinets and Installation

- Our employees in the assembly department have also a long time experience in construction, assembly and installation of Control cabinets. Special regulations for this part, from our clients (for example BMW, Daimler-Chrysler, AUDI, VW, Porsche, GM and Ford) are no problem
- Before the Control cabinets are ready for delivery a test and inspection under potential/ voltage, is a part of our Quality System.



Supervision on site, training, commissioning and maintenance

- Because of the long time experience we can do the complete transaction and coordination of complex and time critical jobs. Even more than one job at the same time.
- Our Commissioning Team can set your plant or machine just in time to the output you want. Also they are able to do the training for your employees, so they can work with it and do the maintenance.
- If you want, we can do the regular maintenance for you. Our Maintenance Teams are ready to do the complete Maintenance Logic for you.
- We can do the the project in different languages because of our international Team with native speakers :
 - *German* *Spain*
 - *English* *Chinese*
 - *French* *Polish*
 - *Flämisch*
 - *Turkey*
 - *Russian*



A list of clients which trust in
the competence of the AAT GmbH



- **Adam Opel AG**
- **AFT**
- **BAFA Badische Naturfaseraufbereitung GmbH**
- **Bürkle GmbH**
- **cfcSTOTZ GmbH Fördersysteme Automation Logistik**
- **DaimlerChrysler AG**
- **Eisenmann Fördertechnik KG**
- **Grenzebach Fördertechnik GmbH**
- **Hörmann Rawema GmbH**
- **Jervis B. Webb GmbH**
- **MBN Sachsen GmbH**
- **psb GmbH Förderanlagen**
- **ROFA Rosenheimer Förderanlagen GmbH**
- **Schmitt GmbH**
- **Siemens DEMATIC**
- **Swisslog AG**
- **Volkswagen AG**

What we have done

■ AUDI Ingolstadt

– Complete Electric for a Storage of Battery incl. the store keeper PLC;

■ Daimler Chrysler Plant- Würth

- Complete Electric for a engine conveyor and skillet conveyor;
- Complete Electric for a Electric Monorail System EMS for the transport of Cockpits 30 drive units;
- Renew the electric of several Chain Conveyor for the transport of cardan shafts;
- Software and commissioning for a skillet conveyor for seats;
- Complete Electric for a skid conveyor in the paint shop;
- Electrical Documentation in RUPLAN-Format;
- Build up of an new Visualisation Standard in WIN CC for the paint shop;

■ Daimler Chrysler Plant- Sindelfingen

– Renew the complete electric for an Electric Monorail System EMS for theTransport of shock absorber;

■ FORD, San Jose Dos Campos, Brazil

– Delivery of a Low-Cost-AGV-System

■ KARMANN, Rheine- Germany

– Complete Electric for an Floor Conveyor with non contact energy and data transmission

■ LANDROVER Birmingham- UK

– Complete Electric for an Floor Conveyor with non contact energy transmission and radio data transmission

What we have done

■ OPEL Eisenach- Germany

- Supervision in the Project „T 4300“

■ OPEL Antwerpen- Belgium

- Renew the Electric in the assembly shop, 6 Skillet Systems;
- Complete Electric for seat conveyor – Electric Monorail System EMS with 120 units;
- Complete Electric for car body storage; Skid Conveyor;

■ OPEL Bochum- Gemany

- System planning, Hard- and Software development and Commissioning from two Underbody Lines; Overhead System;
- Complete Electric for two European Standard Beam conveyor;
- Complete Electric for two Robot Cells incl. the Conveyor system;
- Renew Electric Conveyor No. 204

■ OPEL Vienna - Austria

- Complete Electric for an Engine Transport; Skillet Conveyor;

■ SKODA, Plant Kvasiny – Czechia

- Complete Electric for an Floor Conveyor with non contact energy and data transmission

■ PORSCHE Zuffenhausen- Germany

- Complete Electric for Heavy Load Electric Monorail System EMS and a Skillet Conveyor;

What we have done

- **VW Salzgitter- Germany**
 - Control System for Electric Monorail System for the Engine Transport;
- **VW Mexico**
 - Delivery of a Low-Cost-AGV-System; 6 Units;
- **VW Wolfsburg**
 - Delivery of a Low-Cost-AGV-System; 9 Units
- **KODAK, Brazil**
 - Delivery of one moveable Transportwaggon with a drive unit
- **SKET-THYCOON, Thailand**
 - Complete Electric for a Power & Free Conveyor;
- **BOSCH SIEMENS, Giengen- Germany**
 - Complete Electric Monorail System;
- **PIRELLI, Sao-Paulo, Brazil**
 - Delivery of a Low-Cost-AGV-System; 13 Units;
- **SCHOTT-Glas Mainz- Germany**
 - Complete Electric for two Chain Conveyor Systems;

What we have done

- **CSR, Australia**
 - Complete Electric for a Skillet Systems for concrete slaps
- **AESTUVER, Calbe, Germany**
 - Complete Electric for an automatical concrete slab assembly incl. the Produktion - Control system
- **FORSCHUNGSZENTRUM, Karlsruhe**
 - Complete Electric for rework line
- **FORD Plant Cologne Germany**
 - Complete Electric for an Wheel conveyer with roller bed
- **FORD Plant Cologne Germany - Supplier Park und Y- Halle,**
 - Programming and Commissioning of one Electric Monorail System with 142 Segment Controllers,
 - Total Length ca. 15 km
 - Programming and Commissioning for the Heavy Load Electric Monorail – Drive units
- **FORD Plant Valencia, Spain**
 - Complete Electric for a Cockpit and a Front End Manipulator
- **FORD Plant Saarlouis**
 - Complete Elektric for a Skillet Conveyer
- **FORD Plant Saarlouis**
 - Complete Electric for a Cockpit Manipulator

Some actual Projects

- TNUVA, Israel
 - Software and Commissioning of an Electric Monorail System in a dairy
- Hyundai, Korea
 - Complete Electric for a Heavy Loaded Electric Monorail System and a Assembly Line with non contact Data and Energie Transmission
- OPEL Rüsselsheim- Germany
 - Complete Electric for a Electric Monorail System Body Shop
- VW Poznan, Poland
 - Complete Electric for a Pre Assembly an Assembly Line for Cockpits
- VW, Belgium
 - Extended Electric for a Pre Assembly an Assembly Line for Cockpits
- Coca Cola, Australia
 - Complete Electric Monorail System in a warehouse Magasin with interfaces to other conveyor systems
- Hyundai, Korea
 - Complete Electric for a Heavy Loaded Electric Monorail System and a Assembly Line with non contact Data and Energie Transmission

Some actual Projects

- **VW, Belgium**
 - Complete Electric for a Pre-Assembly Line incl. the screw motion and the handling systems
- **VW, Belgium**
 - Renew the Electric Monorail System for a new model incl. teaching of 12 robots and the delivery and commissioning of a new visualisation WIN CC with 1 Server and 3 Clients VW, Brüssel
 - Complete Electric for a Electric Monorail Systems for the Assembly of cockpits
- **BMW Shenyang, PR China**
 - Complete Electric Equipment for the conveyor technic with high bay warehouse, conveyor for bodyshop / paintshop and paintshop / assembly, trimline, and final assembly. 4 slat conveyors, all over 10 plants, 3 Win CC stations
- **AUDI Changchun, PR China**
 - Complete Electric Equipment for
 - floor conveyor technic for chassis assembly
 - mono rail motor conveyor
 - mono rail cockpit pre-assembly