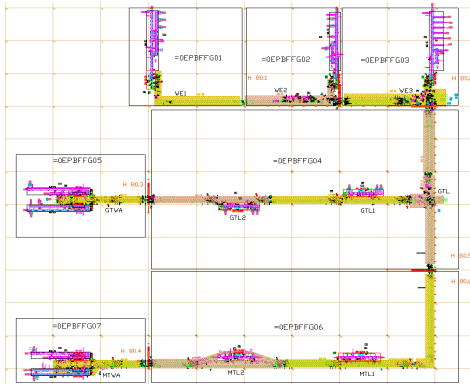


Materials Handlings by electro powered Skid Track (EPB)

The BMW central store Dingolfing supplies the local distribution centres and importers for the global BMW markets and assumes direct provision of about 300 BMW dealers in Southern Germany.

The Dynamics Centre (DyZ) is the central element of the central spare parts delivery (ZTA) of BMW Group there. Materials handling by electro powered skid tracks (EPB) as core of the internal transport system is used as bridging for long distances in the Dynamic Centre and connects the operating spheres goods receipt/pre-packaging, storage area, ordering's consolidation and end packaging. The transported boxes are handed over or assumed by different operating spheres with FFZ at defined positions on the chain conveyors.

The transport level of the EPB is located about 6 m above the ground floor and lifting equipments join the acceptance and delivery stations with the conveying systems.



Expertise and experience in the range of materials handling and material flow controlling convinced the customer and so. Staudinger got the order of realising the project in the range of control engineering.

In cooperation with the mechanical partner Staudinger conceived, constructed, programmed and built a complete materials handling facility to ensure a smooth transportation with two different conveyor systems (chain conveyors and electro powered skid track) for the multiplicity of different skids. Only for this project Staudinger developed and built a customized material flow control system.

Material flow control system:

- Operatingsystem: Microsoft Windows 2003 Server Enterprise as Cluster incl. Active Directory
- Clientsoftware: Proprietary development of Staudinger GmbH with Microsoft C#.NET
- Database: Cluster connection to BMW owned Oracle 9.2.0.4 Cluster over OLE DB
- Webserver: Microsoft Internet Information Services 6.0 with ASP.NET
- MQS-Client: IBM MQSeries 5.3.

Fault report system:

BMW - Legatosystem

Group control:

Simatic S7-400 (7 Units)

On-site Operating and Visualisation:

Visam - HVO (28 Units)
Visam - TFT (14 Units)

Visualisation Control Centre:

Visam

Fieldbus-System:

Interbus LWL-Technology and Profibus DP

Distance:

4.600 m

Wiring:

31 200 m

Interbus members:

838 Units

Profibus members:

96 Units

Sensor technology:

2316 Units

(Inductive, optical, supersonic)

Chain conveyors:

247 Units

Outline/Weight controls:

11 Units

Barcode scanners:

22 Units

Lifting equipments:

11 Units

Switch points

60 Units

(Quattro, rotary, cross):

Telescope converter:

19 Units

EPB-vehicles:

70 Units

Write/read stations IDENT-I:

52 Units

