



FIRST CLASS ENGINEERING

Quality test – construction supervision and acceptance

Company

About us

- Team with more than 110 employees at the locations **Basel**, **Bautzen**, **Chemnitz**, **Essen** and **Leipzig**
- More than **25 years** of market presence and specialisation in the rail vehicle sector
- Ensuring highest expertise in the redevelopment, modernisation or conversion of rail vehicles



Company

Brief summary

1992

ESTABLISHMENT
IKB Ingenieur- und
Konstruktionsbüro
GmbH

2001

ACCREDITATION
Surveyors &
Welding Company

2008

OPENING
Basel branch

2003

OPENING of
branch
Chemnitz

2013

INTEGRATION
in Friedhelm
Loh Group

1990

1995

ISO 9001
CERTIFICATION

2002

RENAMING
to CIDEON Engineering
GmbH

2008

OPENING of
Leipzig branch

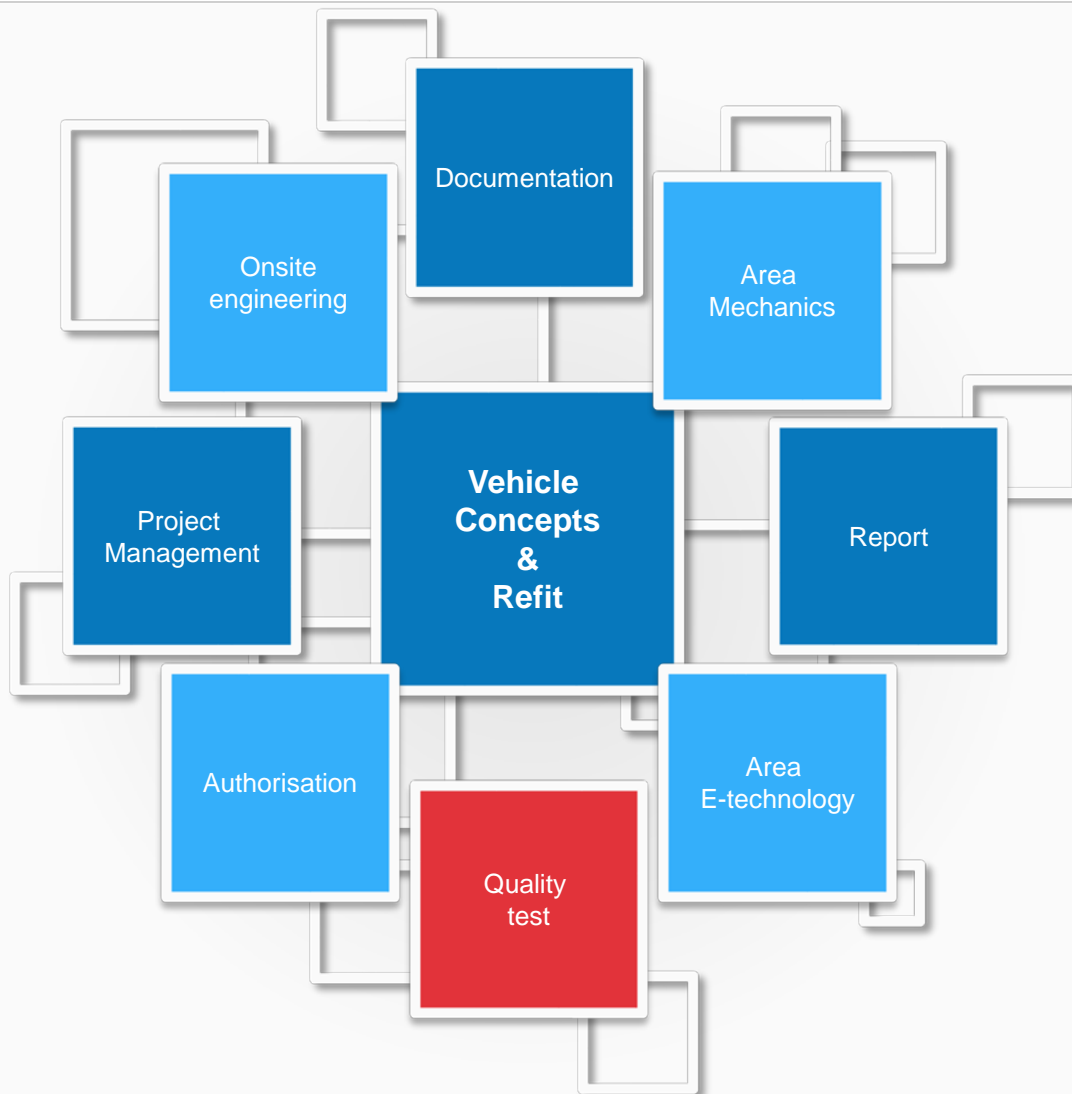
2016

INTEGRATION
in CRCCE

2020

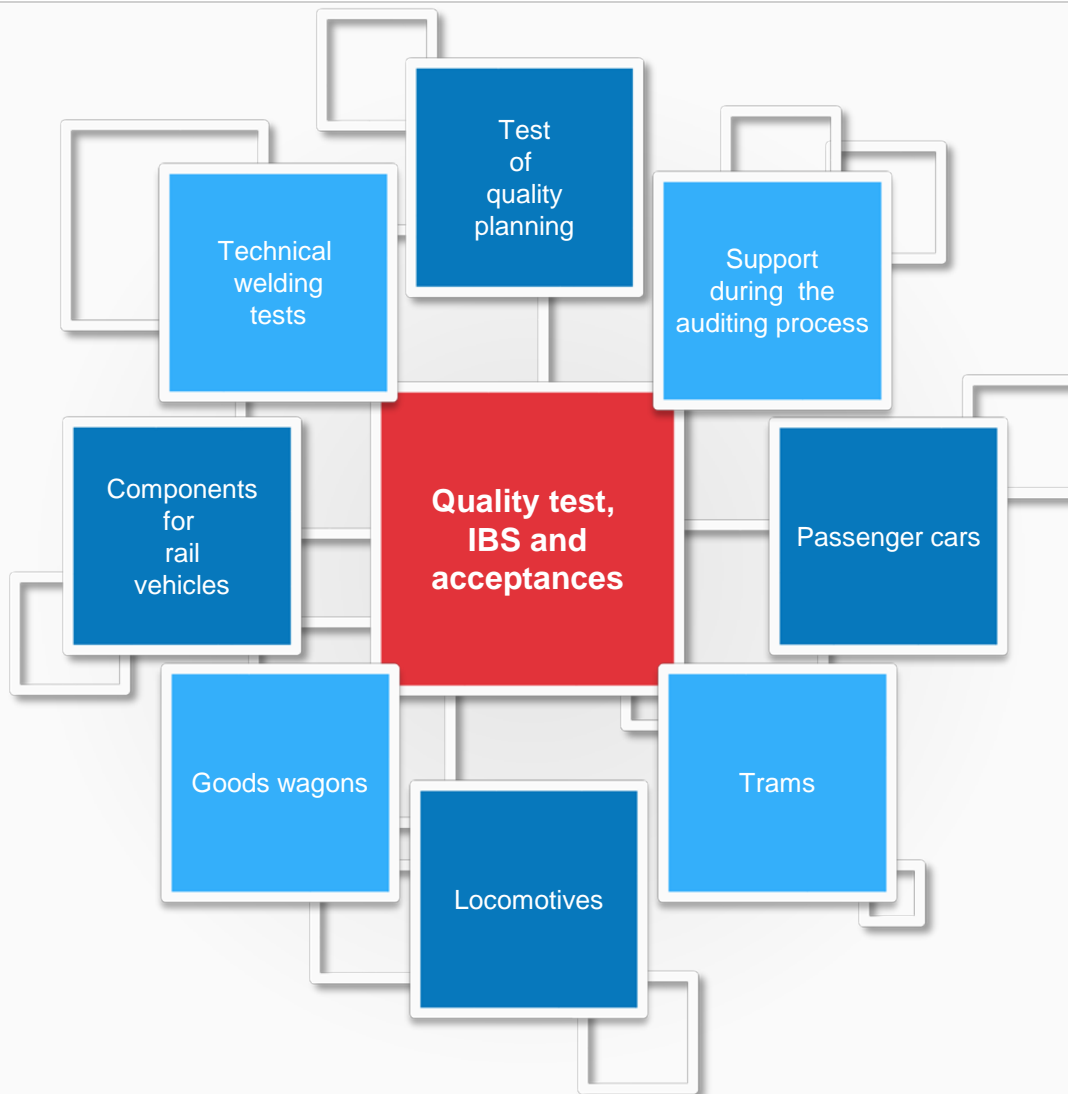
Services

Overview



Scope of services

Excerpt of the most important areas within the scope of the quality test, IBS and acceptances



Quality test

Quality test & Acceptance

- In the scope of construction supervision, we accompany **production start-ups** and **series productions** in terms of quality of the production.
- On behalf of customers, our personnel ensure the **quality parameters** of the products are met, while monitoring performance, dimensional tolerance and adherence to schedules.
- In close cooperation with the customer, the **acceptance of rail vehicles** and **components** takes place at the manufacturer's site.
- Quality test takes place according to **Quality management** and **ISO 9001:2015**

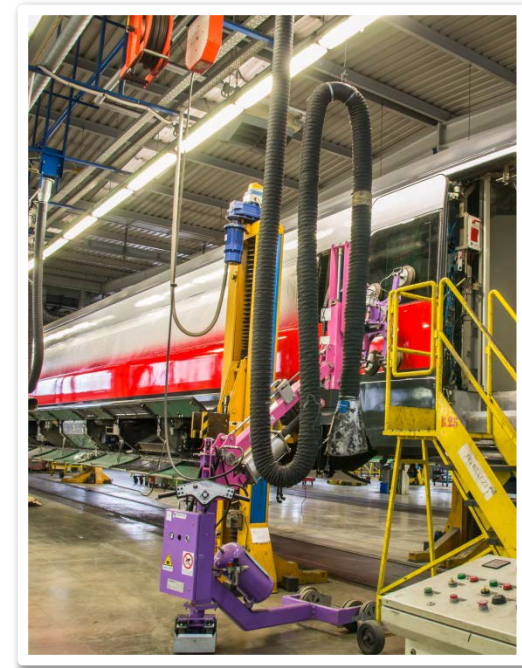
Quality test

- Similarly, **detailed quality measures** can be systematically defined, such as:
 - Supplier audit
 - First sample test / FAI
 - Routine tests
 - Spot checks
 - Test certificates
 - Test and measurement protocols
 - Type tests, etc.



Expansion of activities

- Depending on the customer's expectations, the activities can also be extended to include process audits at the subcontractor's site.
- Process audits can be carried out for:
 - Engineering
 - Project management
 - Production planning
 - Logistics
 - Production



Acceptance

- **The acceptance of vehicle systems, complete vehicles and trains can also be part of the quality test**
 - Audit of the quality planning of the manufacturer
 - Audit
 - Acceptance of vehicle systems and commissioning
 - Quality test / Acceptance
 - Supervision of series production
 - Functional test of vehicles or components
 - Welding test of components and assemblies as well as verification of conformity
 - Conformity of parts, components and assemblies
 - Monitoring the proper execution of the corrosion protection in accordance with the contract
 - Control of quality management systems at the manufacturer's and supplier's site

Quality test

Engineering Services

Technical calculation

Quality test

Authorisation

Experts

Several qualified employees, who are permanently deployed



Quality test

Excerpt from references

On behalf of	Place / Country	Manufacturer	Products
Carwaggon	Swidnica / PL	Greenbrier	Hccrrs 5.833M (closed 2x2-axle car transport wagon), 5,860, 5,870
DB AG	Poprad and Trebisov / SK	Tatravagonka	Sgns (60'), 90', Samms 489, Y25
SWM	Vienna and Graz / AT	Siemens	Avenio T1
DB AG	Salzgitter / DE	Alstom	Coradia Continental DB BR 1440 and BR 430, Coradia LINT/ DB BR 620/622
DB AG	Aachen / DE	BT	BR 430
Havelländische Eisenbahn AG	Louny / CZ	Legios Louny	Faccns (open bulk goods wagon)

Current projects

On behalf of	Place / Country	Manufacturer	Products
DB AG	Poprad and Trebisov / SK	Tatravagonka	Goods wagons and bogies
ARS	Olawa / PL and Niesky /DE	GBRX / WBN	Conversion open ATW

Current reference

Quality test of goods wagons & bogies for DB AG

Requirements

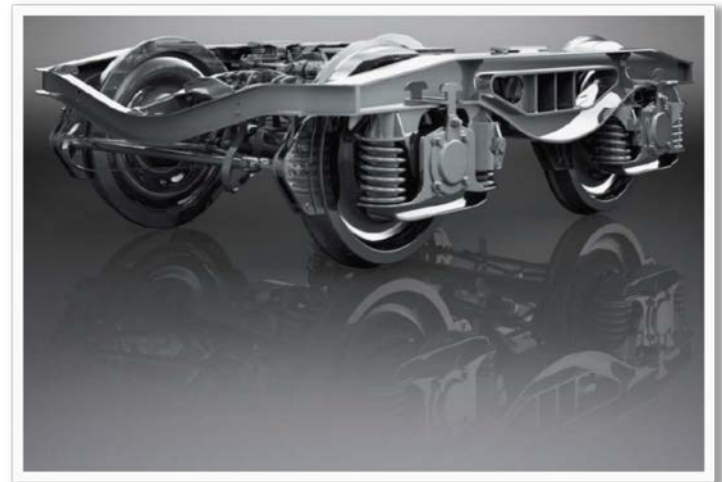
- Construction supervision during manufacturing process of goods wagons and bogies for DB AG in Poprad

Customer benefits

- With our service, the customer is assured that the quality of the manufacturing process of his product is tested and ascertained before commissioning
- Overt deviations (approved concession requests) are known to the customer

Implementation

- Monitoring of series production
- Functional test of vehicles / components
- Technical welding test of components and assemblies
- Test of conformity of parts, components and assemblies
- Supervision of the proper execution of the corrosion protection in accordance with the contract



Current reference

Quality test, conversion of car transport wagon for ARS Altmann

Requirements

- Construction supervision during manufacturing process, conversion of 2x2-axle open car transport wagon for ARS in Olawa / PL and Niesky / DE

Customer benefits

- With our service, the customer is assured that the quality of the manufacturing process of his product is tested and ascertained before commissioning
- Overt deviations (approved concession requests) are known to the customer

Implementation

- Monitoring of series production
- Functional test of vehicles / components
- Technical welding test of components and assemblies
- Test of conformity of parts, components and assemblies
- Monitoring the proper execution of the corrosion protection in accordance with the contract



Reference 2015/2016

Construction supervision during manufacturing process of front wall for DB AG

Requirements

- Construction supervision during manufacturing process of front walls for 4-axle Shimmns at Caracal (RO) for DB AG

Customer benefits

- With our service, the customer is assured that the quality of the manufacturing process of his product is tested and ascertained before commissioning
- Overt deviations (approved concession requests) are known to the customer

Implementation

- Supervision of series production
- Functional test of vehicles / components
- Technical welding test of components and assemblies
- Test of conformity of parts, components and assemblies
- Supervision of the proper execution of the corrosion protection in accordance with the contract



Reference up to 2015

Quality test of car transport wagons Hccrrs for CARWAGGON

Requirements

- Construction supervision during manufacturing process of closed 2x2-axle car transport wagons Hccrrs for CARWAGGON in Swidnica (PL)

Customer benefits

- With our service, the customer is assured that the quality of the manufacturing process of his product is tested and ascertained before commissioning
- Overt deviations (approved concession requests) are known to the customer

Implementation

- Supervision of series production
- Functional test of vehicles / components
- Technical welding test of components and assemblies
- Test of conformity of parts, components and assemblies
- Monitoring the proper execution of the corrosion protection in accordance with the contract



Reference 2014

Quality test DB BR 1440 (incl. shell construction) and BR 620/622 for DB AG

Requirements

- Construction supervision during manufacturing process of Coradia Continental DB BR 1440 and shell structures BR 430 as well as Coradia LINT DB BR 620/622 for DB AG in Salzgitter

Customer benefits

- With our service, the customer is assured that the quality of the manufacturing process of his product is tested and ascertained before commissioning
- Overt deviations (approved concession requests) are known to the customer

Implementation

- Supervision of series production
- Functional test of vehicles / components
- Technical welding test of components and assemblies
- Test of conformity of parts, components and assemblies
- Supervision of the proper execution of the corrosion protection in accordance with the contract



Reference 2014

Construction supervision DB BR 430 for DB AG

Requirements

- Construction supervision during manufacturing process of DB BR 430 (incl. shell construction) for DB AG in Aachen

Customer benefits

- With our service, the customer is assured that the quality of the manufacturing process of his product is tested and ascertained before commissioning
- Overt deviations (approved concession requests) are known to the customer

Implementation

- Supervision of series production
- Functional test of vehicles / components
- Technical welding test of components and assemblies
- Test of conformity of parts, components and assemblies
- Supervision the proper execution of the corrosion protection in accordance with the contract



Thank you for your attention!



CE cideon engineering GmbH & Co. KG
Bautzen, Chemnitz, Leipzig, Essen – Germany

CE cideon engineering Switzerland AG
Basel - Switzerland