Resume

Name: Heyn, Gunnar Address: Germany - Leipzig

Born: 1965 Nationality: German

Education:

Technical University of Zittau
Degree as 'Diplom-Ingenieur'
for power plant and district heating

technologies

Language skills:

German Native language

English Fluent spoken and written

Russian Good education over 10 years;

currently poor because it has not been practised for 20 years.

Dutch Basics (poor)

Further trainings / courses

- □ Project management,
- ☐ Time scheduling with Primavera,
- □ Controlling for non-traders,
- ☐ Contract law for the industrial plant construction sector.
- □ Claim Management,
- □ Negotiations training,
- ☐ Safety for Operational Supervisors (SCC).
- □ Safeguarding acc. to IEC 61511 (SIL), -
- □ RAMS/LCC (2012, 2013)
- ☐ From staff to executive,
- □ Situational Leadership,
- ☐ The structured appraisal interview,
- □ Personal Coaching

International experience

(living in the country)

The Netherlands

Computer skills

- □ Word, Excel, PowerPoint, Access, MSVisio.
- □ MSProject, Primavera,
- □ Visual Basic,
- □ Caesar II.
- ☐ ACAD and its application CADWorx,
- ☐ Lauterbach software (process
 - engineering),
- ☐ Hydraulic network calculation by EcNetz,
- ☐ Thermodynamic-Excel (process engineering),
- □ Lotus Notes,
- □ SAP

(short term assignments)

China (Shanghai), France, England, Poland, Czech Republic, Sweden, Finland, Latvia, Italy, Austria, Switzerland, Belgium

Employment Record relevant to the assignment:

| Period | Employing organization | Country City | Summary of activities performed relevant to the Assignment |
|----------------------|---|----------------------|--|
| 04/2012 - present | CME Projekt GmbH Managing Director | Germany Leipzig | Project Manager, Consultant, Engineering and Safety Manager, Planning Engineer |
| 04/2010 - 12/2011 | Kraftanlagen München GmbH | Germany München | Senior Project Manager |
| 10/2009 - 02/2010 | TÜV Rheinland | Germany Hamburg | Business scope manager for different fields: pressure equipment, plant safety, conveyors, machines and lifts |
| 11/2006 - 09/2009 | RWE Power AG, Power plant planning and realization unit | Germany Essen | Senior Project Manager, Safety Manager, Engineering Manager |
| 2/2001- 10/2006 | FICHTNER GmbH & Co. KG Stuttgart | Germany Stuttgart | Project Manager; Quality Manager; Site Manager; Planning Engineer |
| 8/1998 - 12/2000 | Ingenieur und Anlagenbau Leipzig GmbH, (EPCC – contractor) | Germany Leipzig | Piping Lead Engineer, Claim - Manager |
| 3/1998 - 8/1998 | own planning agency (freelance) detail engineering for energy and heat industry | Germany Leipzig | Project Manager; Site Manager; Planning Engineer |
| 6/1992 - 3/1998 | Energietechnik Leipzig GmbH | Germany Leipzig | Project Manager; Planning Engineer |
| 9/1991 - 6/1992 | Technical University of Leipzig (now THWK) Faculty Power Engineering | Germany Leipzig | Research Assistant |

Professional experience

| Position year/year | Company Sector (Country) | Projects / Main responsibilities | | |
|---|---|----------------------------------|--|--|
| Executive Manager, Interim Manager, Project Manager, Consulter, Planner, 2012 / present | CME Projekt GmbH, Leipzig(Germany), Consulting and management and planning services | | Development and management of the own enterprise Turnover: - (start-up 03/2012) Employees: - currently 'one man company Project support for the energy and heat industry, power plant construction, plant engineering, plant safety management, railway industry, RAMS Projects as noted in the intended lines below | |
| Consultant, RAMS-Expert 04/2016-present | Zauner Anlagentechnik GmbH (Wels, A) for the operator Vattenfall (Berlin) | | Consulting services for safety and reliability investigations as part of a availability validation for a new interim district heating station on the plant location Wilmersdorf (Berlin) Focus: RAM - analysis implemented by FMECA and FTA | |
| Consultant, RAMS-Expert 06/2016-07/2016 | Siemens AG – Energy Sector (Erlangen; D) | | Supporting in drawing-up of a contractor target specifications for the offshore DolWin6 project based on TenneT performance requirements The focal point of interest was the evaluation of the requirement for RCM analysis and life time analysis within an EPCC project. CME worked out corresponding process proposals for project implementation. | |
| Safety Expert, RAMS-Manager 03/2016-04/2016 | CIDEON Engineering GmbH (Chemnitz; D); | | Fire risk analysis and consequence analysis of an air condition unit in accordance with the retrofit project of a local train type for "Die Länderbahn / Vogtland" | |
| Safety Expert, Consultant 03/2016 | RDC-Deutschland (Köln; D) | | Support on safety technology issues by means of risk analysis in accordance of an operation concept for a specific train | |
| Safety Expert, RAMS-Manager 01/2016-02/2016 | BGM Badische Gleisbaumaschinen (Meißenheim; D) | | Fire risk analysis as well as fire protection concept for a commercial vehicle as material conveyor and silo for rail track construction | |

| Position year/year | Company Sector (Country) | Projects / Main responsibilities | | | |
|--|---|----------------------------------|--|--|--|
| Safety Expert, RAMS-Manager 01/2016-02/2016 | SRT Schörling Rail Tech (Sehnde; D/A) | | Fire risk analysis as well as fire protection concept for a commercial vehicle which shall be used for maintenance work on roads as well as on rail tracks of the "Wiener Linien" | | |
| Project Manager, Quality Expert, Engineering Manager 08/2014 – 01/2016 | TenneT TSO GmbH Offshore Projects | | The DolWin1 project realizes a direct current transformer offshore platform which connects wind parks with the land station in Dörpen Owners engineering and deficiency management according to auxiliary platform systems by technical project management | | |
| Consultant 08/2014 - 10/2014 | PROMECON - Prozess- und Messtechnik GmbH for Siemens Ltd. South Africa for Eskom (South Africa) | | Modification of life-ex study according to life- extended maintenance and retrofits of different technical disciplines (lots); Hendrina Power Station (10 units with a total capacity of 2000 MW) | | |
| Consultant 03/2014 - 06/2014 | Fichtner GmbH & Co. KG, Engineering company for energy industry (Germany) | | "feasibility study – optimization of heating" for Unipetrol RPA (Orlen Group); Czech Republic Due diligence of a heat exchange product line of a well-known manufacturer | | |
| Safety Expert, Quality Expert, Process Engineer 04/2014 - 05/2014 | Wagner Bayern GmbH, München, Rail vehicle industry (Germany / Swizerland) | | Consulting for RAMS activities in the Klang Valley Mass Rapid Transit (KVMRT) Project for the Metro of Kuala Lumpur Preparing verification documents to give evidence for a SIL2 level of a fire detection system (ETA, FTA, SIL proof calculation) | | |
| Consultant 01/2014 - 06/2014 | Community Steyerberg (Germany) and others | | Consulting and strategic planning within the meaning of project development for innovation projects as part of the turnaround in German energy policy | | |

| Position year/year | Company Sector (Country) | Pr | ojects / Main responsibilities |
|--|--|----|--|
| Consultant, Safety Expert, Process Engineer 12/2013 - 01/2014 | RWE Technology GmbH, Essen energy industry, power plant construction (Germany) | | Consulting for safety management activities Pilot project for 2x 800 MW hard coal power plant: process to implement verification calculations for already installed safeguarding instrumented systems according to defined safety integrity levels (SIL) – including 4 sample calculations; |
| Consultant, Process Engineer 04/2013 - 07/2013 | ExxonMobil Production energy and gas industry (Germany) | | Qualitative water management study regarding to respective disposal wells by analysing production data of natural gas Turnover: worldwide: 370 billion US\$ Employees 2010: → Germany: 1150; → worldwide: 83000 |
| Interim Manager, Consultant, Safety Expert, 03/2012 - 05/2013 | Stadler Pankow GmbH Berlin Rail vehicle industry (Germany) | | Management consulting service to optimize working processes of the engineering as well as safety department. They had to bring into the line of a new manufacturer safety manual. |
| Interim Manager, Process Engineer 10/2012 - 11/2013 | ExxonMobil Production Brake energy and gas industry (Germany) | | Compilation of operating manuals as CAS work procedures for a sulphur transhipment terminal (residual material of natural gas treatment plant) Turnover: worldwide: 370 billion US\$ Employees 2010: → Germany: 1150; → worldwide: 83000 |
| Interim Manager, Safety Expert, 04/2012 - 05/2013 | Bombardier Transportation GmbH Berlin Rail vehicle industry (Germany) | | Development of a fire risk analysis as well as fire protection concept for the automatic people mover transport system on the Munich airport (train, infrastructure and technical buildings, maintenance and recovery vehicle) Turnover: worldwide: 10 billion US\$ Employees: → 2002 Germany: 9300; → 2010 worldwide: 33800 |

| Position year/year | Company Sector (Country) | Pr | rojects / Main responsibilities | | |
|--|---|----|--|--|--|
| Consultant, Process Engineer 04/2012 - 08/2012 | ExxonMobil Production Steyerberg energy and gas industry (Germany) | | client's engineering, support in work permit processes, safety management, engineering management according to changes in demand of thermal process energy Turnover: worldwide: 370 billion US\$ Employees 2010: | | |
| Senior Project Manager 2010 / 2011 | Kraftanlagen München GmbH, München; energy industry, power plant construction and pipeline construction (Germany) | | → Germany: 1150; → worldwide: 83000 project responsibility for engineering, production and installation of high-pressure piping systems within the power plant project Eemshaven (NL) of RWE AG with a capital expenditure of 75 million. € coordination of project management activities and supervision of convoy topics for two identical plants in the RWE hard co | | |
| | (Germany) | | power plant convoy project (180 million. €); overall time scheduling; technical responsibility to prepare CE conformities, safety management as well as operating manuals, strategic planning to support department processes management functions as well as employee training Turnover: 366 million. € (2010) Employees: 2360 (2010) | | |

| Position year/year | Company Sector (Country) | Projects / Main responsibilities | | |
|--|--|----------------------------------|--|--|
| Business scope manager 2009 / 2010 | TÜV Rheinland, Sales Region North with office in Hamburg; Services for test and inspection activities; Notified Body, Accredited Authority (Germany) | | management of 12 authorized experts within the technical fields □ production of pressure equipment, □ plant safety □ conveyors, machines and lifts consulting regarding safety related process engineering (safety management) within the hard coal power plant convoy—project of RWE Power AG coordination of accredited authority activities for the power plant project of GDF Suez (site Wilhelmshaven) coordination of notified body and accredited authority activities for the Vattenfall's power plant project (site Moorburg) Turnover: 1.3 billion € (2010) In 2009 the business unit "Industry Service" made a turnover of 322 million. €. Employees: 14000 (2010) | |

| Position year/year | Company Sector (Country) | Pro | ojects / Main responsibilities |
|---|--|-----|--|
| Senior Project Manager; Engineering Manager 2006 / 2009 | RWE Power AG, Essen energy industry, power plant construction (Germany) | | main tasks at the hard coal power plant within the convoy–project of RWE Power (invested amount: 6.6 billion €): □ technical and commercial responsibility as technical project manager □ Chief negotiator and contract manager of general engineering services (Sub Project Budget: 220 Mio. €) □ coordinator of the general engineer 'Envicon' □ responsible coordination to prepare a new standard vendor contract for large projects with the procurement and legal departments □ strategic planning to define project workflows and processes as well as tools □ Engineering Management (interdisciplinary technical responsibility) □ contract manager for accredited authorities for the German Project (ZÜS) and the Dutch project (AKI) (subproject budget: 625000 €) □ facilitation of safety related process engineering and coordination of HAZOP meetings RWE AG □ Turnover: 51.7 billion € (2011) □ Employees: 72068 (2011) RWE Power AG □ Turnover: 1.435 billion € (2008) □ Employees: 17505 (2008) |

| Position year/year | Company Sector (Country) | Pro | ojects / Main responsibilities |
|--|--|-----|--|
| Project Manager, Quality Manager, Site Engineer, Consulter Planner; 2001 / 2006 | FICHTNER GmbH & Co. KG Stuttgart consulting and complete planning service for energy and heat industry; (Germany) Project – Highlights: | | technical and commercial responsibility as project manager, consulter and expert Turnover: 82.8 million. € (2004); 201 million. € (2011) Employees: approx. 900 (2004); approx. 1800 (2011) |
| | Gemeente Amsterdam Afval Energie Bedrijf (AEB), Waste Treatment Plant: AVI Amsterdam, Phase 2 (NL) 2004 - 2006 | | project quality manager, expert for power plant technology compilation of quality manual, quality process workflows, quality data base coordination of lead engineers, site supervisors, inspectors coordination and monitoring of inspections and site acceptance tests; record keeping of lists of deficiencies, non-conformities and technical queries strategic planning, design review, planning and preparation of declarations of conformity for operator's in-house productions, comprehensive support of project and engineering management; expert engineer and contract manager of the Dutch accredited authority (AKI) |
| | Mainova AG Frankfurt am Main, Niederrad Cogeneration Plant (Germany); 2003 - 2004 Shanghai International Automobile City Real Estate Co. Ltd. Shanghai, China 2002 - 2003 | | modernization and construction of a 75 MW _{el} combined cycle cogeneration plant in the existing building, interim project manager, interim overall construction management, expert for power plant technology, project quality manager, specialist site engineer, mechanical engineer Anting New Town: conceptual engineering of energy supply (including district heat and cooling systems) technical advisor, lead mechanical engineer, lead process engineer, calculation expert, compilation of technical study, plant specification, P&ID scheme; design of process plant and components; layout |

Position year/year

Company Sector (Country)

Projects / Main responsibilities

EDF-Pôle Clients (France); Brownfield 400 MW CCPP project, (Italy) 2002

- in connection with plans to erect a 400 MW combined cycle power plant in Italy for supplying an industrial facility, exporting power to the grid and supplying district heating to neighbouring properties,
- □ support of scheme by conducting the permit application process Supply utility,
- compilation of P&ID scheme, project development study, process engineering
- project manager, power stations expert, mechanical engineer

mechanical enginee

Dubai Electricity & Water Authority Dubai, seawater desalination and power plant, Phase K (United Arab

Emirates); 2001

- power plant planning and implementation,
 Phase 2 for Jebel Ali Power: 880 MW_{el} gasfired power plant with extension of existing desalination plant
- □ expediter and quality manager
- coordination and quality assurance of final acceptance tests

Deutsches Zentrum für Luft- und Raumfahrt – DLR; German Aerospace Center P4.1 test bench (Germany); 2001 Planning preparation to draw up tender documents for a test bench to research a rocket engine unit of Ariane 5; Pipework Expert, Mechanical Engineer, Calculation Expert

| Position |
|-----------|
| year/year |

Company Sector (Country)

Projects / Main responsibilities

Piping Lead Engineer, Claim Manager 1998 / 2000

Ingenieur und
Anlagenbau Leipzig
complete planning
service for the
chemical industry,
plant engineering for
EPCC Projects
(Germany)

Activities:

- □ Specialist responsibility for 40 team members of the 'Pipeline planning Task Force', tasks were design, calculation, material administration and documentation
- ☐ Claim management and project planning, support during construction
- Preparing the fundamentals for the piping works
- □ Development of planning tools

Key Tasks:

- ☐ Responsible for the technical quality of the team's work, job planning
- ☐ Interface coordination and communication with other technical disciplines and external partners
- □ Reporting on status and progress of the work
- □ Preparing works standards
- □ Turnover: 100 million. DM (1996)
- □ Employees: 250 (1996)

In 2000 IAB went into administration due to the insolvency of the Korean Shareholder Dong Ah Construction Industrial Co., Ltd.,

Project – Highlights:

Radici Chimica Italy; Zeitz Olone Plant (Germany) 1998 - 2000 Piping Lead Engineer for erection of the Olone complex comprising 38 coded static systems (148 pipelines), which represents 22% of the entire piping

EVC/Bechtel, PVC Upgrading Schkopau; (Germany) 1998-1999

Responsible stress analyst for the PVC complex pipelines comprising 31 static systems:

Interface coordination and communication between design engineers as well as external

partners and sellers

| Position year/year | Company Sector (Country) | Projects / Main responsibilities |
|--|--|---|
| Freelance Planning Engineer, Project Manager, Site Manager 1998 | Own planning office in Leipzig; detail engineering for energy and heat industry; plant engineering and pipeline construction (Germany) | STATOIL with Universal Troisdorf: EUROPIPE II, ERF Dornum: extension of boiler house for heating natural gas following on-shoring – Project Manager, Planner, Site Manager and Trainer for operating staff Preparing an energy balance concept (determination of competitive energy costs for all energy sources) and an energy accounting concept for Leipzig-Halle Airport |
| Planning Engineer, Project Manager 1992 / 1998 | Energietechnik Leipzig GmbH consulting and complete planning service for the energy and heat industry, (Germany) | Activities: Engineering of heating plants and cogeneration plants as planner and subsequently as project manager Drawing up tender documents, including contractual framework Site supervision, commissioning of plants Preparing economic analyses under energy aspects Key Tasks: Inter-disciplinary planning within the energy technology sector, starting from general plans and pipeline construction through mechanical and component know-how to power plant chemistry, automation and electrical engineering Project management Business promotion Specialization in pipeline planning Pipeline stress analysis |
| | Project – Highlights: Stadtwerke Leipzig municipal utility (Germany); 1993 - 1996 | □ Turnover: 3 million DM (1996) □ Employees: 20 Nine different projects, among others: □ Heat capacity extension in three steps on an existing district heating station (Möckern) □ For the cogeneration station Leipzig Nord □ Overall engineering of an auxiliary cooling circuit □ Planning of a thermal water treatment plant (feed water tank) □ Planning of a heat transforming station (2 x 90 MW) |

| Position year/year | Company Sector (Country) | Projects / Main responsibilities |
|--|--|---|
| | Weida Leder GmbH (Germany); leather processing 1996-1997 | general engineering, site supervision and commissioning for the erection of a cogeneration plant (14 t/h, 555 kW _{el} steam turbine); expert engineer and contract manager for 4 lots. |
| | Städtische Werke Borna-Wärme GmbH municipal utility (Germany); 1994 – 1996 VEAG now Vattenfall Power plant Lippendorf (Germany); 1995 | including tie-in of new locations into the existing district heating network; expert engineer and contract manager for 4 lots. |
| | Dessauer Versorgungs- und Verkehrsgesellschaft mbH municipal utility (Germany); 1995 Nickelhütte Aue nickel smelting plant | Complete piping stress analysis, pipeline supports (primary steel structure), secondary steel structure for the 2nd phase in Dessau Combined Heat and Power Plant (Tie-in of two steam turbines, one gas turbine, peak-load boiler, heat recovery boiler, reducing station) 13 sub-lots of the steam system, design parameters: max. 70 bar, 510°C General engineering and realization of a gas turbine cogeneration plant for heat and |
| | (Germany); 1994 | electricity supply for production processes; Phase I gas turbine and HRSG (3.3 MW _{th} , 1.5 MW _{el}); expert engineer and contract manager for 7 lots. |
| Scientific assistant 1991 / 1992 | Technical University of Leipzig, Faculty for Energy Technology (Germany) | Study area: Complex territorial heat supply model Fundamentals of thermodynamic analysis and evaluation methods Process models and balance equations Thermo-economic modelling and optimization Mathematical-statistical modelling in the energy sector |

Main disciplines

| Management: | | | Sectors: | | |
|-------------|--|----|----------|--|--|
| | consulting: economic analysis; technical optimising operations, safety management sectorial planning: process engineering, steam generating units, mechanical and piping engineering, overall interface management including civil, electro-technics and I&C | | | energy and heat industry power plant construction chemical plant engineering pipeline construction railed vehicles industry (for this safety management only) | |
| | contract manger of general engineering services safety management including coordination of HAZOP meetings RAMS management contract manager for accredited authorities business scope manager | | | rther cross-sector assignments, pecially for project development, oject management and safety anagement activities, are possible er having examined the enquiry. | |
| Pr | roject management: | | Sectors: | | |
| | project development as well as project management for planning an erection of power and heat generation as well as distribution plants, where applicable also | □р | OW | er plant construction cross-sector assignments for project | |
| | other industry sectors dditional to general project management asks the following specific responsibilities f project management can be taken on: engineering management time scheduling quality management and expediting claim management document management | | lop | ment activities are possible after examined the enquiry. | |
| | consulting projects drafting safety related process engineering concepts optimization of procurement activities technical studies conceptual engineering technical expert opinion - damage analysis drawing up energy and mass audits as well as accounting concepts for supply media | | | | |

Remarks:

- Information about CME Projekt GmbH is available at the website http://www.cme-projekt.de.
- Leaflets about the company's scope of service can be downloaded from the table under the following link: http://www.cme-projekt.de/referenzen/unternehmens-prospekte
- A complete resume until the year 2011 is available under: http://www.cme-projekt.de/uploads/heyn/projektlebenslauf_g_heyn_bis_2011.pdf

I, the undersigned, certify that to the best of my knowledge and belief, these data correctly describe me, my qualifications, and my experience.

Date: 4th of August 2016

Sunner ly