

Helpdesk Report: Senior Electrical Engineer

by

Incomes Data Research

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This report has been produced by Incomes Data Research Limited as part of the ECC Labour Market and Pay Data Service.

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1. Introduction

This report has been prepared by Incomes Data Research (IDR) and, as requested, it provides market salary data for the following role(s):

- Senior/Lead Electrical Engineer

2. Market salary data

This section presents the market salary data. We aim to provide a minimum of three sources of information for each job to enable ‘triangulation’ of the results, and thereby provide the widest possible assessment of the market for this role.

2.1. Market data

The tables in the following sections provide the aggregate market salary for a full-time Senior/Lead Electrical Engineer.

2.1.1. Official earnings data

The data provided below is based on the Government’s latest Annual Survey of Hours and Earnings (ASHE), for April 2021. This survey, conducted by the Office for National Statistics, provides a snapshot of earnings each April and is based on a 1% sample of National Insurance numbers. ASHE is considered a reliable source of official earnings data.

The following table details the median and average UK gross annual pay for full time employees in the closest-matched occupational category. It also provides information on the annual percentage change which can be an indicator of labour market pressures.

Annual pay - Gross (£)¹ - For full-time employee jobs: United Kingdom, 2021

Description	Code ²	No. of jobs (000s)	Median	Annual percentage change	Average	Annual percentage change
Electrical engineers	2123	29	50,354	-3.3	52,930	-0.8

Source: Table 14.7a, ASHE November 2021.

2.1.2. IDR data

The following tables contain data from IDR Pay Benchmarker, our online database of salary information. This data has been collected by IDR directly from employers through surveys and bespoke data collection for the IDR Pay Benchmarker service.³

Senior Engineer, whole economy, job level 6

Job level	Median	Average
Level 6	£55,175	£54,201

Source: IDR Pay Benchmarker.

2.1.3. Other data sources

Engineer, Electrical, Rank 4

Selection criteria	Lower quartile	Median	Upper quartile
National Range	£39,440	£46,400	£53,360
Public Administration	£39,834	£46,864	£53,893
North East	£37,862	£44,544	£51,225

Source: Commercial survey.

¹Gross pay excludes bonuses but includes basic pay, shift premium payments, overtime pay, paid leave, maternity pay, sick pay and other pay.

²Standard Occupational Classification (SOC) codes are a coding system used to classify occupations. A four-digit SOC indicates the closest occupational match. Three digits cover a slightly broader job group, while two and one-digit codes are broader still.

³Refers to the IDR Job Level. These typically cover the following types of roles: 1 and 2, admin, support and manual roles; 3 and 4, secretarial and craft roles; 5 and 6, vocational and supervisory; 7 and 8, professional and managerial; 9, senior management; 10a and 10b, directors; 11, senior directors/chief executives.

3. Job advertisements

This section details current comparable vacancies from our database of advertised positions.

3.1.Data and summary

Senior/Lead Electrical Engineer - job advertisements

Reference ID	Organisation	Job title	Min	Max	Location
ID638	Diamond Light Source	Senior Electrical Power Engineer	£43,790	£59,245	South East
ID639	MTrec*	Electrical Process Lead	£45,000	£55,000	North East

*Recruitment agency.

3.2.Job advertisements

The following pages present the job advertisements for the above vacancies.



Senior Electrical Power Engineer

Diamond Light Source

Location:	Harwell, Oxfordshire	Placed On:	26th August 2022
Salary:	£43,790 to £59,245 per annum dependent upon skills and experience	Closes:	18th September 2022
Hours:	Full Time	Job Ref:	10888
Contract Type:	Permanent		

[Apply](#)

Full time / Flexible hours considered.

About Us

Diamond Light Source is the UK's national synchrotron; a huge scientific facility designed to produce very intense beams of X-rays, infrared and ultraviolet light. Our scientists use the light to study a vast range of subject matter, from new medicines and treatments for disease to innovative engineering and cutting-edge technology.

About the Role

At Diamond we now have an opportunity for a talented Senior Electrical Engineer to join our Installation and Facilities Management (IFM) Group. IFM is responsible for all technical aspects of the electrical facility ensuring they are statutory compliant, while integrating new projects, buildings, and electrical enhancements to the existing facility. IFM is responsible for all power on site, from the High Voltage distribution to Low Voltage network supplying the accelerators, beamlines, laboratories, and offices.

The electrical facility encompasses

- 11kV & 3.3kV High Voltage Network including protection relays
- LV Switchboards & Protection Relays and metering
- Critical and essential supplies with UPS and standby Diesel generator systems
- Earthing and Lightning Protection Systems
- Lighting & Emergency Lighting Systems
- Fire Alarm & Voice Activation System including smoke extract fans and curtains
- Energy conservation; Solar PV systems

The key duties of the role will include:

- Project Management for small to medium sized projects ensuring technical compliance to the specification and contract.
- Management of external consultants, contractors, service engineers and suppliers including 'design and build' contracts.
- Providing high level technical support including technical reports, fault diagnosis and assessment investigations, electrical enhancement, and efficiency proposals.

- Being a technical specialist in electrical systems including - protection, harmonics, inverters, solar PV, electrical noise / EMC and earthing systems.
- Carrying out Safe Systems of Work including permits, risk assessments, method statements and controlling of contractors applicable to both CDM and non-CDM projects.

About You

You will have a Degree in Electrical Engineering or demonstrate equivalent experience, and either be chartered or working toward being a Chartered Engineer.

You will demonstrate experience of:

- HV & LV Electrical systems including protection grading, harmonics, EMC, electrical noise, and associated earthing systems to counter electrical noise.
- Project management, including working on significant engineering projects.
- HSE and CDM legislation, preparations and reviewing of RAMS, operating Safe Systems of work, and issuing electrical permits.

It is desirable for you to be a HV Senior Authorised Person with high voltage experience of operating and switching 11kV networks.

You will display excellent interpersonal and communication skills.

Benefits

Diamond offers an exceptional benefits package to support staff in achieving a positive work/life balance. This includes 25 days annual leave plus 13 days of statutory and company holidays, along with flexible working hours and an excellent pension scheme. Staff also have access to a range of amenities on site including a nursery, cafes, a restaurant and sports and leisure facilities. A relocation allowance may also be available where applicable.

To Apply

Please use the online application process to apply and tell us why you believe you are suitable for this role.

The closing date for applications is 18th September 2022. Interviews will be w/c 26th September.

Advert information

Type / Role:

Academic or Research

Professional / Managerial / Support Services

Subject Area(s):

Engineering & Technology

Electrical & Electronic Engineering

Senior Management

Location(s):

South East England

Electrical Process Lead



MTrec ★★★★★ 167 reviews

Tyne and Wear

£45,000 - £55,000 a year - Permanent

You must create an Indeed account before continuing to the company website to apply

[Apply on company site](#)



Job details

Salary

£45,000 - £55,000 a year

Job type

Permanent

Full Job Description

Company Description

MTrec Technical are proudly representing our prestigious Engineering client, based in Tyne and Wear, with their plans for growth and expansion, by recruiting a permanent Electrical Process Lead to join their team. You will be joining a fast-paced, dynamic company, with an excellent team-based culture and huge opportunities to progress your career. Our client is a major international player in their specialist industry sector and supplies its quality products globally. They will be soon entering a period of sustained growth and expansion and require an Electrical Process Lead to facilitate their development. You will be joining a very secure and expanding business, where you will enjoy a varied working environment, a great team culture and a great new career move.

If you are an Electrical Process Lead, with a technical background in electrical design, apply now for an immediate response.

Job Specification

Rewards and Benefits on Offer;

- Competitive salary
- Career progression opportunities.
- Stable growing organisation.
- Permanent employment.
- Immediate start.

The Job You'll Do;

- To be an operational member of the electrical design team to ensure systems are delivered on time and to specification.
- Ensuring all documentation, calculations and drawings performed by the team are undertaken, checked and approved prior to issue for manufacture
- Check 3D layout drawings of the given plan, components and devices
- Work closely with other design team discipline engineers and leads
- Liaise with Mechanical Engineering regarding interface between electrical and mechanical designs
- Check component specification and verification in accordance with operating environment.
- Check bill of materials are correct before release to manufacturing
- Be involved with continuous improvement and design standardization
- Check drawing updates are correctly carried out on existing systems in line with company procedures and processes
- Check and approve project documentation for designed systems including:
 - Electrical functional design specification (FDS)
 - System calculations – Power requirements, IS circuit calculations etc.
 - Technical files and customer specific quality documentation
 - Operation and maintenance manuals/documentation
 - Coordinating and taking a leading role in design review meetings
- Review all current department procedures recommending improvements to improve efficiency and quality of work
- Liaise with the Quality department to ensure documentation is completed for a system within a timely manner
- Familiarization with planning tools (MS Project or equivalent)
- Support the continuous improvement program and embrace as part of standard work
- Work under the supervision of senior engineers

About You;

- Minimum HND and 5 years' experience or Degree and 3 years' experience in electrical engineering or relevant experience in this field
 - Experience of designing systems for use in hazardous areas
 - Must possess knowledge of Electrical Engineering & Standards
 - Must have a strong understanding of the electrical software engineering principles
 - Have the ability to Interpret Flow diagrams (Visio etc.)
 - Have excellent interpersonal skills
 - Have excellent foresight and strong analytical thinking skills that allow you to troubleshoot and prevent issues.
 - Be computer literate and able to use a wide range of software packages
 - Take reasonable care of the health and safety of themselves and of others who may be affected by what they do or do not do.
 - Cooperate with the employer processes and procedures regarding health and safety matters.
 - Must not misuse any equipment that is provided to them for safety purposes.
 - Follow instructions from the employer on health and safety matters and attend relevant health and safety training.
 - Report hazards and defects observed in the workplace.
 - Comply with the company Code of Ethics and standards.
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