QUEST ELECTRICAL

# Production Line Electrical Installation

TECHNICAL DATA SHEET | INDUSTRIAL & MANUFACTURING FACILITIES

## Service overview

Design, installation, modification and commissioning of electrical infrastructure for new production lines, machinery relocations and manufacturing line upgrades. Works are coordinated with equipment manufacturers, automation specialists and site teams to minimise disruption.

## Installation scope and system interfaces

| System / element | Typical scope |
|---|---|
| **Power distribution** | Single-phase and three-phase machinery supplies; sub-mains; connections to LV switchgear and distribution boards. |
| **Cabling and containment** | SWA power cables, control wiring, cable ladder, tray, basket, trunking and conduit. |
| **Machinery connections** | Conveyors, pumps, compressors, CNC machinery and processing equipment; disconnection and reconnection for relocations. |
| **Motor control** | MCCs, motor control panels, motor starters and variable frequency drives (VFDs). |
| **Automation and instruments** | PLC/HMI interfaces, control panel connections, sensors, actuators and instrumentation wiring. |
| **Machine safety interfaces** | Emergency stop circuits, safety interlocks and local machine isolation systems, subject to risk assessment. |
| **Expansion and upgrades** | Electrical infrastructure modifications to support additional machinery and production capacity. |

## Installation, testing and handover

Site survey and load assessment; equipment and route coordination; installation and termination; inspection and electrical testing; functional interface checks and commissioning support. Planned shutdowns or phased works may be used where appropriate.

## Applicable standards and considerations

BS 7671 for fixed electrical installations; Electricity at Work Regulations 1989; PUWER for work equipment; and BS EN 60204-1 where applicable to machinery electrical equipment. Safety functions require appropriate risk assessment, design and validation.

## Project-specific design note

Supply voltage, load/current demand, cable sizing, fault level, protection, segregation, environmental ratings, controls interfaces and shutdown arrangements are established from site conditions and machinery manufacturer information. This sheet is a service overview, not an equipment-specific specification.