

APPRENTICESHIP STANDARD FOR: Organ Builder**Occupational Profile**

An Organ Builder is someone who uses their skill and labour for the bespoke fabrication and/or restoration of pipe organs and/or their constituent components. They will be competent in the design, manufacture and assembly of the components required in a pipe organ; in putting organ pipes onto speech and tuning them; and in the repair, maintenance and tuning of existing organs. They will be using materials such as wood, leather, tin and lead, and will be primarily working either in a workshop or on site (typically a church or public auditorium).

Links to Professional Registration

Successful candidates will be recognised by the Institute of British Organ Building (I.B.O.) as qualified organ builders, eligible for employment by any of its accredited business members. They would also be eligible themselves for Individual or Associate Membership of the I.B.O.

Knowledge	What is required – understanding of
Health & safety and working environment	how to comply with health & safety legislation and regulations in the work environment (in particular those relating to working at height, heavy lifting and noise abatement); the safe handling of materials and work processes that ensure the safety of self and others; the safe and sustainable disposal of waste materials.
Materials	the properties, uses and limitations of materials used in organ building (including the respective advantages and disadvantages of softwoods and hardwoods, the purposes of different grades of leather, and the tonal qualities of pipes made from different metal alloys); techniques for protecting, moving, handling and storing resources.
Tools	the key hand and machine tools and equipment used; the principles of how they work, are prepared, maintained and safely used (including how to sharpen chisels and hand planes; the different cutting actions of band-, cross-cut and rip-saws and how the material must be presented to them in each case; the importance of using the right combination of guards when creating mouldings using hand-held and fixed routers).
Quality	the application and monitoring of the employer's quality standards including methods of recording work.
Design and history of the pipe organ	the elements and principles applicable to the design of pipe organs; the historical and contemporary context of organ building, including the development & application of different forms of action & mechanisms; the key differences between rebuilding, restoration, conservation and reconstruction (and their respective advantages and disadvantages).
The manufacture, tuning and maintenance of pipe organs	how to diagnose, analyse and assess for manufacturing and maintenance options; relevant applied mathematics & science (for example metric & imperial dimensions and measurements, geometry, lever law, musical theory, acoustics and electric circuitry); anticipation of risks and resolution of problems; when it is appropriate to seek advice from other craft specialists and experts.

Skills	What is required – ability to
Health & safety and working environment	maintain good standards of health and safety for self and for others, using safe working practices (e.g. when handling heavy components); prepare and maintain materials, tools and equipment appropriately and safely, always fitting guards to machines as required; identify and minimise hazards and risks in the working environment, for instance when casting and soldering, or when treating timber with volatile compounds.
Technical interpretation and understanding	create and interpret technical specifications, drawings, and other written and verbal instructions (such as cutting lists, rollerboard layouts and soundboard plantings); identify and respond to problems appropriately (including testing and adjustment); seek advice and guidance when appropriate.

The manufacture of pipe organs	select and use the appropriate processes, techniques, materials, tools and equipment to undertake organ building tasks from inception to realisation; construct timber components such as soundboards and wind trunking; use leather to make hinges and gussets in bellows, and for pneumatic motors; connect and test low-voltage electrical equipment; make wooden and metal pipework; put pipes onto speech and tune them.
The tuning and maintenance of pipe organs	lay bearings for tuning; put individual pipes and complete ranks back into tune; identify and resolve action faults in existing instruments; remove and dismantle components safely and systematically; re-assemble and test that everything is working properly.

Behaviours	What is required – you should
Quality focused	follow policies and procedures; have a consistent attention to detail; apply quality assurance checks throughout the organ building process.
Professionalism	have a strong professional work ethic and pride in work; plan and manage time efficiently; communicate and work effectively with others; promote and represent organ building.
Self-development	keep up to date with best practice and emerging technologies within the organ building sector; respond positively to instruction and constructive criticism; offer constructive feedback to others; develop and maintain professional relationships.
Ethical awareness	apply an understanding of relevant sustainability and ethical issues to work; respect specific requirements and the cultural and ethical norms of different working environments.

Duration

Typically the apprenticeship will take 36 months to complete.

Level

This apprenticeship standard is set at Level 3.

Qualifications

Apprentices without Level 2 English and Maths will need to achieve this level prior to taking the end-point assessment.

Review Date

This apprenticeship standard will be reviewed no later than 3 years after its approval.