

Welder

Welders cut, join and shape plates or sections of metal together by applying extreme heat using electric or gas equipment. The edges of the metal melt and then bind together as they cool, creating a permanent join.

The Work

There are three main types of welding: manual (using hand held equipment), semi-automatic and fully mechanised, so the job can vary.

Depending on the type of industry you work in, you could be:

- studying engineering drawings and deciding on the best welding method for the job
- making sure that the plates or sections for joining or cutting are shaped and positioned correctly
- hand welding the pieces using methods such as: manual metal arc (MMA), flux core arc (FCA), oxyacetylene or tungsten inert gas (TIG) welding
- welding the pieces using a semi-automatic method such as metal inert gas (MIG) welding, using argon or helium
- welding the pieces using mechanised processes such as resistance welding (spot welding) or laser and ultrasonic welding
- inspecting and testing the cuts and joins you make, sometimes using radiographic or ultrasonic techniques
- cleaning and degreasing parts to be welded using wire brushes, grinders or solvents
- specialising in one or two of the welding methods.

Pay

The figures below are only a guide. Actual salaries may vary, depending on:

- where you work
- the size of the company or organisation you work for
- the demand for the job.

A Modern Apprentice may start on the National Minimum Wage (NMW). At present the apprentice rate, for those aged under 19 or aged 19 or over and in the first year of their apprenticeship, is £4.15 an hour (1 April 2020). Some employers may pay their apprentices more.

Salaries for qualified welders are normally in the range of £10.00 to £18.00 an hour, depending on specialist skills. Bonuses and extra pay for shift work are common.

Conditions

- Working conditions vary. For example, some welders work indoors, in factories or workshops, others outside, on construction sites, shipyards or oil rigs.
- In a factory or workshop, you might work behind screens to protect other workers from glare. Otherwise, you could be working outdoors in all weathers or in cramped conditions.

- You would have to wear tinted goggles or a headshield to protect your eyes. You would also have to wear other protective gear such as overalls, aprons, gloves, ear protectors and a hard hat.
- You would have to take great care to avoid accidental injury.
- You might have to travel to different sites and spend some time away from home.
- Many firms have a shift work system, and there may be opportunities for overtime.

Getting In

- You could complete the Engineering Foundation Apprenticeship (FA), while in S5 or S6 at school. Entry requirements vary between colleges, but you usually need 3 subjects at National 5 including English and Maths. Some colleges also ask for Physics.
- You might get in through a Modern Apprenticeship in engineering.
- You normally need 3-4 subjects at National 4 or 5, preferably including English, Maths and science or technological subjects.
- You may also have to sit an entry test to see how suitable you are for this type of work.
- Workers in the construction sector must hold a Construction Skills Certification Scheme (CSCS) card and possibly a Client Contractor National Safety Group (CCNSG) passport to work on site.
- You need physical strength and stamina as the job can involve kneeling, bending and lifting.
- A driving licence may be necessary.

There are openings for welders in both heavy engineering industries and shipyards and in light engineering factories. There can also be jobs in construction, transport, civil engineering and the oil and gas industry.

What Does It Take

You need to be:

- accurate and methodical in your approach
- health and safety conscious
- good at problem solving
- able to understand technical drawings.

You need to have:

- good hand to eye co-ordination
- practical and technical ability
- good team working skills and the ability to work on your own
- good concentration skills
- numeracy skills for working out measurements.

Training

- Training is through a Modern Apprenticeship with on the job training as well as time spent at college.
- You would work towards SVQ Fabrication and Welding Engineering at SCQF Level 6.
- After your training, you must also pass a Welder Approval Test, before you can begin work as a welder.
- There are different tests depending on the type of welding you do.

- The Welding Institute runs training courses in welding and qualifications for inspection and testing.

Getting On

- After gaining experience, you may be able to get promoted to foreman or forewoman or supervisor, and then to fabrication shop manager.
- With further training, you may be able to move up to technician level, non destructive testing or inspection work.
- Some welders work on a freelance self-employed basis, and there can also be opportunities in projects abroad.

Contacts

Engineering Construction Industry Training Board (ECITB)

Website: www.ecitb.org.uk

Twitter: @ECITB_Skills

Facebook: www.facebook.com/ECITB

Enginuity (formerly SEMTA)

Tel: 0845 643 9001

Email: Customer.Services@enginuity.org

Website: enginuity.org

Twitter: @Enginuity_Org

Facebook: www.facebook.com/EnginuityOrg

GoConstruct

Website: www.goconstruct.org

Twitter: @GoConstructUK

Facebook: www.facebook.com/goconstructuk

Welding Institute (TWI)

Tel: 01223 899000

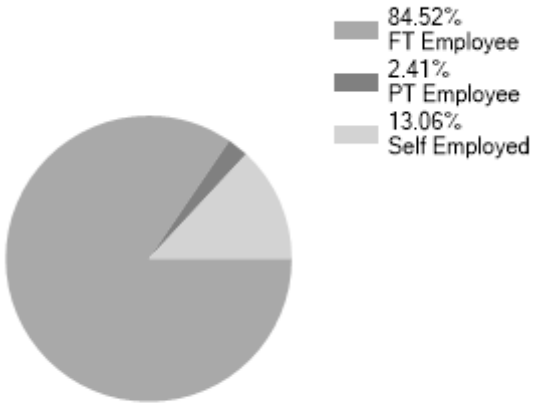
Website: www.theweldinginstitute.com

Twitter: @WeldingInst

Facebook: www.facebook.com/TheWeldingInstitute

Statistics

Employment Status UK %



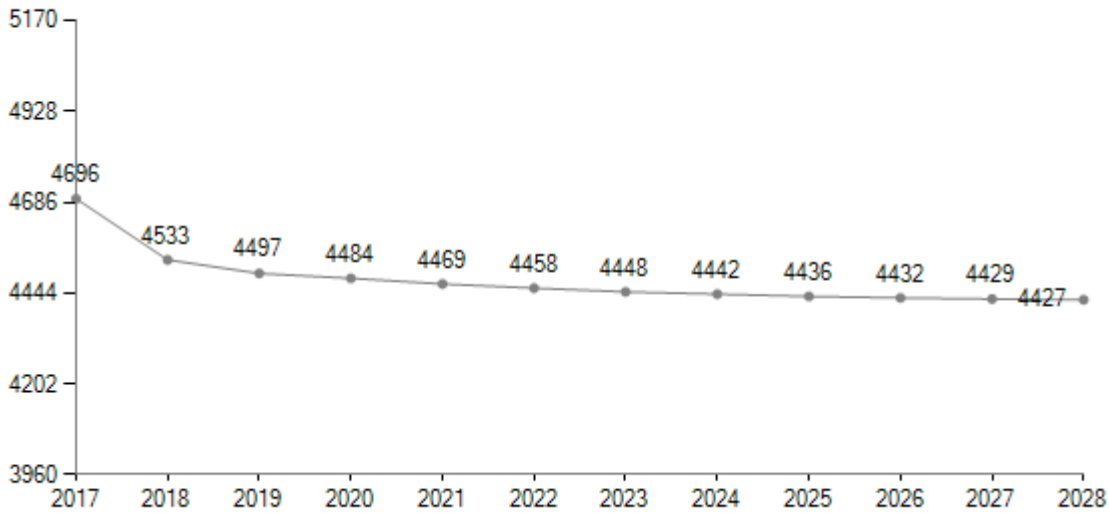
Past Unemployment - Scotland

Date	Unemployed
Dec 2018	0.64%

LMI data powered by [EMSI UK](#)

LMI data powered by [LMI for All](#)

Predicted Employment in Scotland



LMI data powered by [EMSI UK](#)