

# Welding Certification and Material Services

Welding is a common method used for joining metallic materials. Before welding can take place, welding contractors and fabricators need to develop welding procedures and qualify welders. Specific procedures must be followed to meet the requirements of recognised welding codes (e.g. ASME, AWS or CSA), in accordance with either statutory or client requirements. The basic requirements for a welding procedure are that the weld properties meet or exceed the material properties of the pieces being joined. However, a good welding procedure will also ensure simple and efficient welding and mitigate common welding problems such as distortion, hardening and weld defects. Optimisation of a welding procedure is an iterative science and normally relies on the skills and past experience of the welding engineer.



## THE Applus+ SOLUTION

Due to statutory and client requirements, it is necessary for manufacturers to verify that welding procedures are suitable for the construction materials chosen and that their welders are capable of performing these welding procedures competently. Therefore, manufacturers should always have their procedures and welders approved and certified. The materials used are also scrutinised to make sure that they conform to the parameters of their chemical and mechanical properties. This has led to a requirement for the authentication of materials certificates.

Applus+ provides important testing and approval certification services for welding procedures and welder competency. We evaluate each welding procedure to ensure that it is suitable and safe. Our welding engineers can also help clients develop their procedures if they lack that capability in-house. When a procedure has been approved, we test the client's welders against it to make sure that they are capable of conducting the procedure.

We offer materials certification services by conducting source inspection on site during manufacturing, through surveillance inspections or detailed inspections, and providing certification according to BSEN standards. Successful certification results in issuing the 3.2 certificate as defined in EN 10204 'Metallic Products - Types of inspection documents'. Our inspectors observe the full testing process to ensure the integrity of the materials.

Traceability is mandatory under statutory requirements; however, Applus+ can assist clients if they have a material that lacks traceability by authenticating it at a recognised laboratory. We are also authorised to supervise and endorse materials transfers and materials certificates.

## Target customers

Welding contractors and fabricators need welding procedures in place prior to the commencement of any welding work (new constructions or refits and repairs). They also need to ensure that their welders are fully qualified for the job at hand.

Purchasers may also require third-party review of welding documentation to ensure compliance with their specifications and any other regulatory requirements.

## Key customer benefits

By using our comprehensive services, clients will:

- guarantee that their product is being manufactured or service delivered using sound practices and good materials
- ensure that their welding procedures, welders and materials are properly approved and certified in line with statutory requirements and industry expectations
- build customer confidence