

TECHNICAL CURRICULUM · METAL, PROCESSES & QUALITY · FULL-TIME

WELDING & JOINING

A complete, hands-on training programme, from the base material to the tested weld seam.

Real processes, real test pieces, standard-compliant quality.

THE PROGRAMME

A good weld is no accident. This programme builds the skill for it, from the base material to the tested seam.



17

TECHNICAL MODULES · CORE

1.500_h

TECHNICAL LEARNING

130₊

PRACTICAL EXERCISES

270₊

EQUIPMENT ITEMS

2_{Years}

FULL-TIME

Welding & Joining is a hands-on, full-time programme for metalworking production.

Across seventeen technical modules, trainees progress from occupational safety, materials science and technical drawing through gas, arc, MIG/MAG and TIG welding to pipe welding, weld testing and welder qualification to DIN EN ISO 9606.

The focus is on practice throughout. Learning happens on real power sources, real materials and real test pieces, with around 1.500 hours of technical learning and over 130 assessed exercises.

Every module concludes with an assessed test piece, so competence shows in real work and not on paper. The framework follows DVS-IIW/EFW Guideline 1111, and the examination anchor is DIN EN ISO 9606.

The programme is offered as a curriculum, as a matching equipment specification, or as a turnkey package for the site.

PRACTICAL CURRICULUM

Seventeen modules, in phases.

From occupational safety, materials and joining through the welding processes gas, manual arc, MIG/MAG and TIG to pipe welding, quality assurance and welder qualification, concluding with the capstone project.

MODULE

01 – 17 · PHASED

01 Occupational Safety & Health
FUNDAMENTALS

02 Materials & Weldability
FUNDAMENTALS

03 Technical Drawing
FUNDAMENTALS

04 Welding Calculations
FUNDAMENTALS

05 Key Competencies
FUNDAMENTALS

06 Joining & Joint Prep
FUNDAMENTALS

07 Fabrication & Fitting
FUNDAMENTALS

08 Gas, Cutting & Brazing
WELDING PROCESSES

09 Manual Arc (111)
WELDING PROCESSES

10 MIG/MAG & Flux-Cored
WELDING PROCESSES

11 TIG (141)
WELDING PROCESSES

12 Positions & Plate Test
WELDING PROCESSES

13 Pipe Welding
ADVANCED & COMPLETION

14 Weld Testing & QA
ADVANCED & COMPLETION

15 Weld Defects & Distortion
ADVANCED & COMPLETION

16 ISO 9606 Qualification
ADVANCED & COMPLETION

17 Capstone Project
COMPLETION

EQUIPMENT

Trained on equipment and test technology.



01

Welding Stations & Power Sources

Welding booths, tables and power sources for manual arc, MIG/MAG and TIG.

02

Gas & Oxy-Fuel Technology

Oxy-fuel equipment, flame cutting, plasma cutting and cylinder securing.

03

Workshop & Cutting

Angle grinders, saw, drilling as well as fabrication and fitting tools.

04

Measuring, Testing & QA Technology

Weld gauges, VT, PT and MT test equipment, bend and fracture testing, macro section.

05

Occupational Safety & Extraction

Personal protective equipment, fume extraction, ventilation and fire protection.

06

Consumables & Filler Materials

Electrodes, wires, shielding gas, filler materials and flux.

~270 ITEMS · 6 CATEGORIES

BRING THE PROGRAMME TO YOUR SITE

LET'S GET STARTED.

AVAILABLE AS · **Turnkey** (Consulting + Equipment + Delivery + Curriculum + Setup)