





Skillweld Competition Brief

Need

To provide a skilled workforce to meet the needs of UK Industry

<u>Aim</u>

Is to raise the standard of training to provide multi skilled welders, with increase employability, and productivity

Objective

The objective of the Skillweld competition is to:

- Challenge Trainee Welders to develop their skills in a competitive environment
- To inspire Trainee welders to be ambitious to develop their careers
- To assess an individual's knowledge, practical skills against a set of strict criteria.
- To assist employers and training providers to benchmark their own apprenticeship and training programmes.

Method:-

The Skillweld competition has 3 progressive stages; each stage builds on the last to challenge the competitor to develop their weld skills. At each stage the competitors Welding test pieces are marked against a set criteria in accordance with BS EN ISO 5817 criteria D.

Stage 1 - Passive Heat (recommended but not mandatory):-

The training provider can decide on the most appropriate method to deliver the competition to suit their local need's All competitors must complete the welding geometry listed below, these can either be completed as individual test coupons or as a single fabricated structure which ever is the most appropriate method of delivery that will challenge the competitor and bring more purpose to their learning experience.

Training providers should aim to hold their Passive heat as a competition as this will be more challenging for the competitor when they are being judged against their peers.

Single test coupons can be used as part of the competitor's assessment for external awarding bodies. The minimum length of competed weld should be 200mm.

Welding	Welding	Description	Welding position	Material	Thickness
process	position				
MMA	PF	Tee Fillet	Vertical Up	M ild Steel	6mm
MAG	PF	Tee Fillet	Vertical Up	Mild Steel	6mm
TIG	PD	Tee Fillet	Overhead	Stainless ste	eel 3mm
TIG	РВ	Tee Fillet	Horizontal/vertical	Aluminium	3mm
TIG	PB	Pipe to Plate	Horizontal/vertical	Mild Steel	3/6mm
	process MMA MAG TIG TIG	processpositionMMAPFMAGPFTIGPDTIGPB	processpositionMMAPFTee FilletMAGPFTee FilletTIGPDTee FilletTIGPBTee Fillet	processpositionVertical UpMMAPFTee FilletVertical UpMAGPFTee FilletVertical UpTIGPDTee FilletOverheadTIGPBTee FilletHorizontal/vertical	processpositionVertical UpM ild SteelMMAPFTee FilletVertical UpM ild SteelMAGPFTee FilletVertical UpMild SteelTIGPDTee FilletOverheadStainless steelTIGPBTee FilletHorizontal/verticalAluminium







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Welding test piece must be marked to the set criteria, this will sent to the Training provide on registration

Stage 2 - National Qualifiers

National Qualifiers are held between May and July. Competitors scoring well from the passive heats or of a good level can elect to compete at a regional competition that meets their personal circumstance. The competition is held over 1 day. All competitors are allowed a familiarization session at the start of the day.

The competitors must complete the following test pieces in a 4hrs

Test piece	Welding	Welding	Description	Material
No	process	position		
1	TIG root MMA	HLO 45	Pipe Butt weld	Carbon Steel
2	TIG	PB	Pipe to plate fillet weld	Aluminium
3	TIG	PD	Tee Fillet weld	Stainless Steel
4	MAG	PF	Tee Fillet Weld	Carbon Steel

The welding test pieces will be marked by independent judges on the day; the marking is carried out by visual inspection and is based on BS EN ISO 5817

The 1st three places will be announced on the day. Competitors will be given feedback by the judges to assist them in improving their welding skills

All competitors who meet the required standard in WTP No 4 Tee fillet will be given to opportunity to gain a Welder Qualification to BS EN ISO 9606-1: 2017. The test is carried out by a Recognised Third Party Organization (RTPO) Code A Weld, who offer this free of charge to the competitor

Stage 3 National Finals

The Skillweld National Final will be held in November at World Skills Live. The top 10 competitors nationally will be invited to compete.

The competition is spread over 3 days and the competitors will have to complete the following WTP's over 19 hours

Test piece	Welding process	Welding	Description	Material
No		position		
1	TIG root/MMA fill and cap	HLO 45	Pipe Butt weld	Carbon Steel
2	MAG root/MAG fill and cap	PB	Plate Butt weld	10mm carbon steel
3	MAG root/FCAW fill and	РВ	Plate Butt weld	16mm Carbon Steel
	сар			
4	All	All	Fabricated	Carbon Steel
			pressure vessel	
5	TIG	All	Fabricated	Aluminium
			Structure	
6	TIG	All	Fabricated	Stainless Steel
			Structure	







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The welding test pieces will be marked by a team of independent judges to strict criteria and involve NDT, pressure testing and visual inspection.

Full details of the welding test pieces will be made available to all training providers and competitors so that they can prepare for the competition. All competitors will have a familiarization session at the beginning of the competition

1st 2nd 3rd Place and medallion of excellence will be announced at a presentation ceremony

Competitor who meet the skills and age profile may be invite to join the World Skill UK Squad for selection to compete at International level.

Conclusion

Entering the Skillweld Competition will enhance your students learning experience and prepare them to enter the workplace as multi-skilled welders.

The SkillWeld competition supported by:













