Cystadleuaeth Sgiliau Cymru | Skills Competition Wales

Cronfa Gymdeithasol Ewrop
European Social Fund

Competition Brief

Competition title

Advanced Welding

Competition overview

The competition will involve welded joints is the following processes.

- MAGS Welding
- MMA Welding
- TIG Welding

Please see drawings for details.

Competition Outline

Stage One: Internal qualifying/ selection process with partner institutions.

Stage Two: Applicant registrations completed online by 20/10/19

(http://www.skillscompetitionwales.ac.uk).

Stage Three: Partner institutions will be informed of their place allocation depending on applications.

Stage Four: Top three competitors from the combination of both regional finals will be invited to a Celebration of Skills night at Sophia Gardens, Cardiff on the 19th of March 2020.

Entry criteria

The competition is intended for students, apprentices studying towards or have recently completed a level 3 Welding qualification

Number by location/organisation

The capacity at both venues will be a maximum of 12 candidates

Maximum of 4 candidates per organisation and Maximum of 3 candidates per individual campus

Brief

The competition will involve welded joints is the following processes.

- MAGS Welding
- MMA Welding
- TIG Welding

A range of welding positions will be used including:

- PB
- PC
- PD
- PF

Ariennir gan Lywodraeth Cymru
Funded by Welsh Government

The Four test pieces will be

MAGS Welding Tee Fillet Plate PF position (Carbon Steel)

MMA Welding Pipe to Plate PB position (Carbon Steel)

TIG Welding Tee Fillet Plate PD position (Stainless Steel)

TIG Welding Pipe to Pipe PC position (Carbon Steel)

All welds to be visually inspected only

Infrastructure List

Each venue will have the minimum requirements of

- Sufficient Welding bays
- MAG Welding sets
- MMA Welding sets
- TIG Welding sets
- Hand held Grinders
- Fume Extraction
- Welding Consumables
- Hand tools
- Scrap pieces for practice.

Resources, equipment available at the venue

Competition rules

Competition specific rules

- Competition specific rules
- All competitors will receive a health and safety briefing at the start of the competition and these rules must be adhered to throughout the competition
- Competitors who arrive late for competitions will not normally receive additional time.
- Competitors will start and finish work as instructed by the judges.
- During the competition, competitors should not disturb other competitors or speak to members of the public.
- Any competitor who wishes to leave the area during the competition must seek the permission of the judges.
- Competitors will not be allowed contact with tutors/coaches during the live competition. Non-compliance with this may result in deduction of points.
- If there is a power stoppage or accident, the competitors must act according to the instructions of the judges

- Competitors who break or damage equipment during the competition will not receive any additional time.
- Where a competitor is observed working in an unsafe manner they will be stopped and not permitted to continue unless willing to follow the judges' directions.
- The competition will be assessed and marked by a panel of judges (from industry, colleges or training providers) using the competition criteria and allocation of marks**.**

Generic competition rules

- Mobile phones to be switched off during competition activity.
- Listening to music via headphones is not permitted during competition activity.
- Any questions during competition activity should be addressed to the competition judging panel.
- Competitors should not communicate with other competitors during competition activity.
- It is the responsibility of each competitor to arrive on time for each competition session. No additional time will be allowed if you arrive late.
- Technical failure of your equipment should be reported immediately to the judging panel. Additional time will be allocated if the fault is beyond the control of the competitor.

Marking and assessment

All four of the test pieces will form part of the competition with the marks awarded as follows.

Each test piece will be marked from a total of 30 points, making a total of 120 points with a further 10 points awarded for overall quality. The total marks awarded is 130 points.

The example below is for a Carbon Steel Tee fillet joint welded in the PF Position

- Stop start 5 point
- Leg length 5 points
- Undercut 5 points
- Weld Regularity 5 point
- Overfill 5 points
- Cold Lap 5 points

Overall Quality of the work will be marked from a total of 10 points Points awarded will be as follows

- Stray arcs 2.5 marks
- Tooling marks 2.5 marks
- Sharp edges 2.5 marks
- Presentation 2.5 marks

Feedback and recognition

Individual and Group verbal feedback will be provided at the end of the competition. (Written feedback will not be provided)

No results or awards will be awarded on the day, as marking will be quality assured.

Certificates of Participation will be issued on the day.

Medallists will be invited to a Celebration Event which will be held on 19th March 2020 at Sophia Hall, Sophia Gardens, Cardiff CF11 9XR from 12pm to 5 pm, where the First, Second and Third Awards will be presented. https://www.sophiagardens.wales/venue/the-sophia-hall.html

Competition Lead

Lead Contact

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Expert Contacts

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Briff y Gystadleuaeth

Teitl y gystadleuaeth
Weldio
Trosolwg o'r gystadleuaeth
Bydd y gystadleuaeth yn ymwneud â chymalau wedi'u weldio gan y prosesau canlynol. • Weldio MAGS • Weldio MMA • Weldio TIG Gweler y darluniau am fanylion os gwelwch yn dda. Amlinelliad o'r Gystadleuaeth **Cam un**: Proses gymhwyso / ddethol fewnol gyda sefydliadau partner. **Cam dau**: Cofrestru ymgeiswyr wedi gorffen ar lein erbyn 20/10/19 (http://www.skillscompetitionwales.ac.uk). **Cam tri**: Rhoddir gwybod i sefydliadau partner faint o leoedd a ddynodwyd iddynt, yn ddibynnol ar geisiadau. **Cam pedwar**: Tri chystadleuydd gorau o'r cyfuniad o'r ddwy rownd derfynol ranbarthol yn cael eu gwahodd i noson Dathlu Sgiliau yng Ngerddi Sophia, Caerdydd ar 19 Mawrth 2020.
Meini prawf cystadlu
Bwriedir y gystadleuaeth ar gyfer myfyrwyr, prentisiaid sy'n astudio tuag at gymhwyster Weldio Lefel 3 neu sydd newydd ei gwblhau
Nifer fesul lleoliad/sefydliad
Lle i uchafswm o 12 ymgeisydd fydd ar gael yn y ddau leoliad. Uchafswm o 4 ymgeisydd fesul sefydliad ac uchafswm o 3 ymgeisydd o bob campws unigol
Briff
Bydd y gystadleuaeth yn ymwneud â chymalau a weldiwyd gan ddefnyddio'r prosesau canlynol: • Weldio MAGS • Weldio MMA • Weldio TIG Defnyddir ystod o safleoedd Weldio gan gynnwys: • PB • PC • PD • PF Y pedwar darn prawf fydd

Weldio MAGS Plât Ffiled Tee safle PF (Dur Carbon)

Weldio MMA Pibell i Blât safle PB (Dur Carbon)

Weldio TIG Plât Ffiled Tee safle PD (Dur Gloyw)

Weldio TIG Pibell i Bibell safle PC (Dur Carbon)

Dim ond yn weledol yr archwilir pob asiad

Rhestr Seilwaith

Bydd gan bob lleoliad o leiaf y gofynion hyn:

- Baeau Weldio digonol
- Setiau Weldio MAG
- setiau Weldio MMA
- setiau Weldio TIG
- Peiriannau Llyfnu llaw
- Tyniadau mygdarth
- Nwyddau traul Weldio
- Offer llaw
- Darnau sgrap i ymarfer arnynt

Adnoddau, offer ar gael yn y lleoliad

Rheolau'r gystadleuaeth

Rheolau penodol y gystadleuaeth

- Bydd pob cystadleuydd yn derbyn sesiwn friffio iechyd a diogelwch ar ddechrau'r gystadleuaeth a rhaid glynu wrth y rheolau hyn drwy gydol y gystadleuaeth.
- Ni fydd cystadleuwyr sy'n cyrraedd yn hwyr ar gyfer y cystadlaethau'n cael amser ychwanegol fel arfer.
- Bydd cystadleuwyr yn dechrau a gorffen gwaith yn ôl cyfarwyddyd y beirniaid.
- Yn ystod y gystadleuaeth, ni ddylai cystadleuwyr darfu ar gystadleuwyr eraill na siarad ag aelodau'r cyhoedd.
- Rhaid i unrhyw gystadleuydd sy'n dymuno gadael yr ardal yn ystod y gystadleuaeth gael caniatâd y beirniaid.
- Ni fydd gan gystadleuwyr hawl i gysylltu â thiwtoriaid / hyfforddwyr yn ystod y cystadlu byw. Fe all methu â chydymffurfio â hyn arwain at eich diarddel o'r gystadleuaeth.
- Os oes toriad yn y pŵer neu ddamwain, rhaid i'r cystadleuwyr weithredu'n unol â chyfarwyddiadau'r beirniaid.

- Ni fydd cystadleuwyr sy’n torri neu’n niweidio offer yn ystod y gystadleuaeth yn cael unrhyw amser ychwanegol.
- Bydd y gystadleuaeth yn cael ei hasesu a’i marcio gan banel o feirniaid (o blith diwydiant, colegau neu ddarparwyr hyfforddiant) gan ddefnyddio meini prawf y gystadleuaeth a dyraniad marciau.

Rheolau cyffredinol y gystadleuaeth

- Dylid diffodd ffonau symudol yn ystod y gystadleuaeth.
- Ni chaniateir gwrando ar gerddoriaeth gyda chlustffonau yn ystod y gystadleuaeth.
- Dylid cyfeirio unrhyw gwestiynau yn ystod y gystadleuaeth at y panel beirniaid.
- Ni ddylai’r cystadleuwyr gyfathrebu gyda chystadleuwyr eraill yn ystod y gystadleuaeth.
- Cyfrifoldeb pob cystadleuydd fydd cyrraedd ar amser ar gyfer pob rhan o’r gystadleuaeth. Pe baech yn cyrraedd yn hwyr, ni roddir amser ychwanegol ichi.
- Pe bai rhyw wall technegol ar eich offer, dylid rhoi gwybod i’r panel beirniaid yn syth. Bydd amser ychwanegol yn cael ei roi os bydd y gwall y tu hwnt i reolaeth y cystadleuydd.

Marcio ac asesu

Bydd pob un o’r pedwar darn prawf yn ffurfio rhan o’r gystadleuaeth, a dyfernir marciau fel a ganlyn. Rhoddir marciau allan o gyfanswm o 30 pwynt i bob darn prawf, gan wneud cyfanswm o 120 pwynt, gyda 10 pwynt ychwanegol yn cael eu dyfarnu am ansawdd cyffredinol. Cyfanswm y marciau a ddyfernir yw 130 pwynt.

Mae’r enghraifft isod ar gyfer cymal ffiled Tee Dur Carbon a weldiwyd yn Safle PF

- Gorffen a dechrau 5 pwynt
- Hyd y goes 5 pwynt
- Isdorri 5 pwynt
- Cysondeb yr asiad 5 pwynt
- Troslenwi 5 pwynt
- Lap Oer 5 pwynt

Bydd ansawdd cyffredinol y gwaith yn cael ei farcio o gyfanswm o 10 pwynt

Dyfernir pwyntiau fel a ganlyn

- Arcau strae 2.5 pwynt
- Marciau offeru 2.5 pwynt
- Ymylon miniog 2.5 pwynt
- Cyflwyniad 2.5 pwynt

Adborth a chydnabyddiaeth

Bydd adborth llafar, yn unigol ac mewn grŵp, yn cael ei roi ar ddiwedd y gystadleuaeth. (Ni roddir adborth ysgrifenedig)

Ni fydd unrhyw ganlyniadau na gwobrau'n cael eu dyfarnu ar y diwrnod oherwydd bydd angen sicrhau ansawdd y marcio.

Bydd Tystysgrifau Cyfranogi'n cael eu dosbarthu ar y diwrnod.

Bydd enillwyr medalau'n cael eu gwahodd i Achlysur Dathlu a gynhelir ar 19 Mawrth 2020 yn Neuadd Sophia, Gerddi Sophia, Caerdydd CF11 9XR rhwng 12pm a 5pm, lle y bydd y Gwobrau Cyntaf, Ail a Thrydydd yn cael eu cyflwyno. https://www.sophiagardens.wales/venue/the-sophia-hall.html

Arweinwyr y Gystadleuaeth

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