### THE INDIAN INSTITUTE OF WELDING

(A Member Society of The International Institute of Welding)



Information Booklet for National Skill Competition on Elca Lab Best Welders

## Categories

A. Structural welder - SMAW Process – 4 G Position, Carbon Steel

B. Structural Welder - MIG – CO2 Process – 3 G Position, Carbon Steel

C. Pipe Welder - SMAW Process – 6 G Position, Carbon Steel

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## National Skill Competition

Best Welder (Three Catagories)

Sponsored by M/s. ELCA Laboratories, Thane

During the International Welding Congress 2008 (IIW-IC-2008) two awards for the Best Welding Engineer and Best Welder have been instituted. From NWS 2008-09, the Best Welder Award has been divided into two categories viz. Best Welder (Pipe) and Best Welder (Structural). From NWS-2015, the National Skill Level competition on Best Welder has been further divided into three categories viz. Best Welder (Pipe) in both SMAW processes and Best Welder (Structural) also in SMAW and MIG processes.Mr. N. Kalyan, a veteran member of our Institute and Managing Director of M/s. ELCA Laboratories is the Sponsor of these awards.

## **BEST WELDER COMPETITION - 2015**

The Indian Institute of Welding conducts a "<u>Best Welder" competition</u> every year. The preliminaries are conducted at local branches of IIW-INDIA. The winners from branch level competition are eligible to take part in the finals. This year "The National Level Competitions – Finals" - for the Best Welders (Best Structural Welder and Best Plate Welder) 2015-16 shall be held at Mumbai in late November / early December 2015.

This competition is FREE and open to all our members as well as to the non-members. Those desirous candidates are requested to contact the respective branches before 31<sup>st</sup> October.

The branch level competitions shall have to be conducted on or before 15.11.2015 so that the names of their selected personnel can be sent for the National Level competitions <u>before</u> 20.11.2015 positively. Only the best candidate at the branch level in each of the three different categories shall be eligible for the National level competitions.

The past winners of the National Level Competitions for the above are not eligible to take part in this competition.

The Best Welders selected at Finals shall be given a "<u>Elca Labs.</u> Best Welder <u>AWARD" consists of CASH of Rs 5000.00 and a certificate to each Catagory</u>.

The candidates selected for the National Level Competitions shall be provided with free Boarding and Lodging by the Organisers of the NWS 2015during the competition nearer to the venue. The eligibility criteria are given below.

Eligibility for the Best Welders:

- 1. Must be able to read and write in English and / or in any Indian Language.
- 2. Must have min.3 years' experience in practical welding of different materials.
- 3. Must have basic theoretical knowledge of welding of different materials.
- 4. Must have some knowledge of the Codes / Standards being followed in their work place.

### GENERAL RULES / PROCEDURES

- 1. To be held across all the (13) branches of I.I.W. in India for Preliminary Round.
- 2. Branches to propose one person as the responsible contact, for this competition.
- 3. NWS 2015 is scheduled for 9<sup>th</sup>, 10<sup>th</sup> and 11<sup>th</sup> December, 2015
- 4. Final competitions planned for Friday 4<sup>th</sup>& Saturday 5<sup>th</sup> December, 2015.
- 5. Final Round to be held at Mumbai at Don Bosco Maritime Academy.or at Baroda Exact venue will be communicated in due course.
- 6. Preliminary branch wise competitions to be completed by 15<sup>th</sup> November, 2015.
- 7. Carrying out the competition through the branch will be the responsibility of each branch.
- 8. Competition for Two types of Welders, Structural Welder and Pipe Welder.
- 9. A. Structural welder SMAW Process 4 G Position, Carbon Steel
  - B. Structural Welder MIG CO2 Process 3 G Position, Carbon Steel
  - C. Pipe Welder SMAW Process 6 G Position, Carbon Steel

### DETAILS OF COMPETITION

The criteria for the Best Structural Welders' tests are given below:

- 1. Only one pre-prepared test coupon (either two pipes or two plates, as applicable, to make one joint) shall be given to each competitor.
- 2. Total Marks: 100 Marks
  - The welded test coupon should qualify in Visual and Radiography Tests.
- 3. Viva Voce test: Only in case of a tie for either first or second position.

## 13 A) METHOD / SPECIFICATIONS/ ASSESMENT FOR BEST STRUCTURAL WELDER'S TEST:

- A. Practical test (Butt welding): Structural welder SMAW Process 4 G Position, Carbon Steel
- 1. Plate Specification : ASTM A 36 / IS 2062 / SA 516 Gr. 70
- 2. Plate dimensions : 100 X 300 X 10-12 mm thick
- 3. Process : SMAW
- 4. Position : 4G without backing
- 5. Weld fit-up
- Root gap Welder's Choice
- Root face 1.5 to 2.00 mm
- Bevel angle 60 65 degree
- 6. Welding consumables
- Root, Hot pass and subsequent pass E7018
- Electrodes size -2.5mm / 3.15mm
- 7. Cleaning: Grinding is not allowed during and after welding. Hacksaw Blade, file and brush can be used for cleaning.
- 8. Completion time: Three hours maximum
- B. Assessment: The test coupons should qualify in Visual and Radiography Tests.

## 13 B) METHOD / SPECIFICATIONS/ ASSESMENT FOR BEST STRUCTURAL WELDER'S TEST:

A. Practical test (Butt welding): Structural welder - MIG/ CO2 Process - 3 G Position, Carbon Steel

1. Plate Specification ASTM A 36 / IS 2062 / SA 516 Gr. 70

: 100 x 52 : MIG / CO2 2. Plate dimensions 100 X 300 X 10-12 mm thick

3. Process

4. Position 3 G without backing

5. Weld fit-up

- Root gap Welder's Choice
- Root face 1.5 to 2.00 mm
- Bevel angle 60 65 degree
- 6. Welding consumables
- Root, Hot pass and subsequent pass wire ER70–S–6, 1.2 mm dia.
- Wire size -1.2 mm
- 7. Cleaning: Grinding is not allowed during and after welding. Hacksaw Blade, file and brush can be used for cleaning.
- 8. Completion time: Three hours maximum
- B. Assesment: The test coupons should qualify in Visual and Radiography Tests.

## 5.0) Assessment

Preliminary Round - Visual for all coupons + Radiography only for those which qualify in Visual Round (subject to a maximum of half the participating number for Radiography) - Final Tally of marks both in Visual & Radiography.

Final Round - Visual for all coupons + Radiography only for those which qualify in Visual Round (subject to a maximum of half the participating number for Radiography) - Final Tally of marks both in Visual & Radiography.

Applicable Criteria for Visual Round - Similar to Worldskills Norms. Will be conveyed to each centre.

Radiography Criteria - as per ASME SEC. IX 191. 2.

Radiography Laboratory also to act as Third Party for Assessment and will give marks for coupons. These results are to be moderated by the team of Assessors, if required, after assessment of the Radiography Films.

- 6.6) Certificate of Participation to be issued to each welder at Branch Level by the branch. Certificates may also be issued to Winner in each category - by the branch.
- 6.7) Certificate of Participation to be issued to each welder at Finals Level by the I.I.W. H.O. Certificates may also be issued to Winners in each category at Finals by the I.I.W. H.O.

## **Contact Persons**

1 Branch Level Competetion Local Branch Secretary/ Chairman

Name:

E Mail ID:

Mobile no

2 National Level Competetion Chairman, NWS-2015. Mr. G. A. Soman

E-Mail ID: gsoman02@gmail.com

Mobile no +919819451277

# PROFORMA FOR APPLICATION/ NOMINATION OF BEST WELDER'S COMPETITION

Application for Best(Please write whether Structural or Pipe Welder)				
From I.I.W. Branch				
<ol> <li>Name         <ol> <li>Date of Birth</li> <li>Present Address</li> <li>Mobile &amp; landline nos.</li> </ol> </li> <li>E-mail id:         <ol> <li>Photo identity Reference Document:</li> <li>Name of Sponsoring Organization (if Applicable):</li> </ol> </li> <li>Organisation's Address:         <ol> <li>(with Tel. No., Fax No. &amp; Email)</li> </ol> </li> <li>Educational Qualification of the Candidate (Not Compulsory to write):</li> </ol>				
S.No	Qualification	Institute	Major Subje	ects
6. Professional Experience :				
7. Specific achievements in the Welding Field (Not Compulsory to Write): (State in about 100/150 words attaching separate sheet)				
Declaration : I hereby declare that, I will follow all instructions given for the Best Welder Competition. I will take part in a fair and friendly manner and will accept the results declared, as final. I also declare that all the particulars stated above are true.				
Signature of	the applicant		Date	
Signature of the Nominating authority (if Company Sponsored)				
Name: Designation				
Branch Office Entries:				
Form Received From				
onday,(date) atHrs.(Time)				
Form No of Structural Welder / Pipe Welder				
Signature of Receiving Authority of the branch				
Name		Designation		