

SWS as ANB of IIW
S-ANB Transition Arrangements and Access Routes to IIW Diplomas

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SWS is pleased to announce that, at the recent meeting of the International Authorisation Board (IAB) Group B of the International Institute of Welding (IIW) on 14 and 15 January 2008 in Paris, SWS was granted 1-year preliminary authorisation status as an IIW-approved Authorised National Body (ANB), thereafter known as S-ANB. Full authorisation status would only be granted after a full initial successful audit by IIW some time at the middle of this year.

Approval of Access Routes was granted for International Welding Engineers (IWE), International Welding Technologist (IWT) and International Welding Specialist (IWS). Access Route specifies the prerequisite education, training and/or experience required for entry into the IIW Welding Personnel Scheme as administered by the IAB Group B on behalf of the IIW. For IWE, the Access Route requirement is an Engineer Degree with at least Bachelor level minimum three (3) years of studies at university level. For IWT, the Access Route requirement is a Polytechnic Engineering Diploma with Bachelor level with three (3) years of studies. For IWS, the Access Route requirement is either a Diploma of Pre-University School/Junior College A-level (Science) with five (5) years of experience in the welding field or Diploma from an Institute of Technical Education in Engineering Fields with National Recognition.

Approval of Transition Arrangements was also granted for International Welding Engineer (IWE), International Welding Technologist (IWT), International Welding Specialist (IWS), International Welding Inspector (IWI) and International Welding Practitioner (IWP). Transition Arrangements are the plan by which experienced individuals are recognized and approved for receiving a diploma of the IIW Qualification Scheme (as administered by the IAB Group B on behalf of the IIW) without attending a full course.

With the grant of the preliminary authorisation, practising welding personnel, welding inspectors and NDT inspectors in Singapore who have the required qualifications and experience with or without additional training and tests may apply to S-ANB for IIW diplomas under the Transition Arrangements that have been approved by the IIW. These Transition Arrangements allow such individuals to qualify for appropriate IIW diplomas without having to undergo the prescribed full extent of the course for the diplomas.

The conditions of the Transition Arrangements are detailed in the following table.

1. Transition Arrangements for International Welding Engineer (IWE) Diploma

Welding Personnel who could apply	Basic Educational Requirements	Additional Specific Requirements	Minimum Years of Experience
Local "Welding Engineer"	1. Engineering Degree (Bachelor Degree in Material Science & Engineering, Mechanical & Production Engineering; Metallurgical Engineering, Civil Engineering, Electrical Engineering), and 2. Professional Engineer qualifications under the Professional Engineers Board of Singapore	(i) 80 hours of special course on Part 3 of the IWE syllabus approved by S-ANB, and (ii) Written examination and professional interview to assess knowledge against IIW curriculum for IWE	Minimum five (5) years as welding engineer equivalent to IWE level in the last eight (8) years

2. Transition Arrangements for International Welding Technologist (IWT) Diploma

Welding Personnel who could apply	Basic Educational Requirements	Additional Specific Requirements	Minimum Years of Experience
Local "Welding Engineer"	1. Engineering Degree (Bachelor Degree in Material Science & Engineering, Mechanical & Production Engineering; Metallurgical Engineering, Civil Engineering, Electrical Engineering), or 2. Polytechnic College (Diploma in Mechanical Engineering, Manufacturing Engineering, Civil Engineering, Electrical Engineering)	(i) 80 hours of special course on Part 3 of the IWT syllabus approved S-ANB, and (ii) Written examination and professional interview to assess knowledge against IIW curriculum for IWT	Minimum five (5) years in welding coordination at IWT level in the last eight (8) years

3. Transition Arrangements for International Welding Specialist (IWS) Diploma

Welding Personnel who could apply	Basic Educational Requirements	Additional Specific Requirements	Minimum Years of Experience
Option A	1. Polytechnic College (Diploma in Mechanical Engineering, Manufacturing Engineering, Civil Engineering, Electrical Engineering), or 2. Institute of Technical Education (Higher Nitec Technician Certificate in Mechanical Engineering, Electrical Engineering or equivalent)	(i) A welder training course in accordance to Part 2 of the guideline for IWS at a recognised institute, and (ii) 40-hr welder training refresher course approved by S-ANB in accordance with Part 3 of the IWS guideline, and (iii) Written and oral examinations to assess knowledge against IIW curriculum for IWS	Minimum three (3) years of relevant experience at IWS level just before the application in the last five (5) years
Option B	1. Polytechnic College (Diploma in Mechanical Engineering, Manufacturing Engineering, Civil Engineering, Electrical Engineering), or 2. Institute of Technical Education (Higher Nitec Technician Certificate in Mechanical Engineering, Electrical Engineering or equivalent)	Candidates who fulfil the following conditions: (i) In-house welder training OJT course in accordance to Part 2 of the IWS guideline, and (ii) 40-hr welder training refresher course approved by S-ANB in accordance with Part 3 of the IWS guideline, and (iii) Written and oral examinations to assess knowledge against IIW curriculum for IWS	Minimum three (3) years of relevant experience at IWS level just before the application in the last five (5) years

4. Transition Arrangement for International Welding Inspector – Comprehensive Level (IWI-C) Diploma

Welding Inspection Personnel who could apply	Basic Educational Requirements	Additional Specific Requirements	Minimum Years of Experience
Option A	1. Polytechnic College (Diploma in Mechanical Engineering, Manufacturing Engineering, Civil Engineering, Electrical Engineering) or 2. Engineering Degree (Bachelor Degree in Material Science & Engineering, Mechanical & Production Engineering, Metallurgical Engineering, Civil Engineering, Electrical Engineering)	(i) Holders of valid AWS Certified Welding Inspector or AWS Senior Certified Welding Inspector, and (ii) Oral examination to assess knowledge against IIW curriculum for IWI-C	Minimum five (5) years of relevant welding technology and welding inspection experience at IWI-C level in the last eight (8) years
Option B	1. Polytechnic College (Diploma in Mechanical Engineering, Manufacturing Engineering, Civil Engineering, Electrical Engineering) or 2. Engineering Degree (Bachelor Degree in Material Science & Engineering, Mechanical & Production Engineering, Metallurgical Engineering, Civil Engineering, Electrical Engineering)	(i) Holder of two valid ISO 9712 (e.g. BINDT PCN) Level 2 or 3 or ASNT ACCP Level 2 or 3 certificates in at least 2 NDT methods, one of which shall be RT or UT, and another shall be PT, MT or ET. One of these certificates shall be at least Level 3, and (ii) Oral examination to assess knowledge against IIW curriculum for IWI-C	Minimum five (5) yrs of relevant welding technology and welding inspection experience at IWI-C level in the last eight (8) years

5. Transition Arrangements for International Welding Inspector – Standard Level (IWI-S) Diploma

Welding Inspection Personnel who could apply	Basic Educational Requirements	Additional Specific Requirements	Minimum Years of Experience
Option A	1. Polytechnic College (Diploma in Mechanical Engineering, Manufacturing Engineering, Civil Engineering, Electrical Engineering) or 2. Engineering Degree (Bachelor Degree in Material Science & Engineering, Mechanical & Production Engineering, Metallurgical Engineering, Civil Engineering, Electrical Engineering)	(i) Holders of a valid AWS Certified Welding Inspector or AWS Senior Certified Welding Inspector certificates, and (ii) 24-hr course on NDT, and (iii) Oral examination to assess knowledge against IIW curriculum for IWI-S	Minimum five (5) years of relevant welding technology and welding inspection experience at IWI-S level in the last eight (8) years
Option B	1. Polytechnic College (Diploma in Mechanical Engineering, Manufacturing Engineering, Civil Engineering, Electrical Engineering) or 2. Engineering Degree (Bachelor Degree in Material Science & Engineering, Mechanical & Production Engineering, Metallurgical Engineering, Civil Engineering, Electrical Engineering)	(i) Holders of two valid ISO 9712 (e.g. BINDT PCN) Level 2 or 3 or ASNT ACCP Level 2 or 3 certificates in at least 2 NDT methods, one of which shall be RT or UT, and another shall be PT, MT or ET, and (ii) 40-hr course approved by S-ANB on welding inspection at the minimum level of AWS Certified Welding Inspector , and (iii) Oral examination to assess knowledge against IIW curriculum for IWI-S	Minimum five (5) years of relevant welding technology and welding inspection experience at IWI-S level in the last eight (8) years

6. Transition Arrangements for International Welding Inspector – Basic Level (IWI-B) Diploma

Welding Inspection Personnel who could apply	Basic Educational Requirements	Additional Specific Requirements	Minimum Years of Experience
Option A	1. Polytechnic College (Diploma in Mechanical Engineering, Manufacturing Engineering, , Civil Engineering, Electrical Engineering) or 2. Pre-University School/ Junior College (GCE A-Level), or 3. Institute of Technical Education (Higher Nitec Technician Certificate)	(i) Holders of at least a valid AWS Certified Associate Welding Inspector (CAWI) certificate, and (ii) 24-hr introductory course on NDT, and (iii) Oral examination to assess knowledge against IIW curriculum for IWI-B	Minimum five (5) years relevant welding technology and welding inspection experience at IWI-B level in the last eight (8) years
Option B	1. Polytechnic College (Diploma in Mechanical Engineering, Manufacturing Engineering, , Civil Engineering, Electrical Engineering), or 2. Pre-University School/ Junior College (GCE A-Level), or 3. Institute of Technical Education (Higher Nitec Technician Certificate)	(i) Holders of two (2) valid ISO 9712 (e.g. BINDT PCN) Level 2 or 3 or ASNT ACCP Level 2 or 3 certificate in at least 2 NDT methods, one of which shall be RT or UT, and another shall be PT, MT or ET, and (ii) 40-hr course approved by S-ANB on welding inspection at the minimum level of AWS Certified Welding Inspector, plus (iii) Oral examination to assess knowledge against IIW curriculum for IWI-B	Minimum five (5) years relevant welding technology and welding inspection experience at IWI-B level in the last eight (8) years

7. Transition Arrangements for International Welding Practitioner (IWP) Diploma

Welding Personnel who could apply	Basic Educational Requirements	Additional Specific Requirements	Minimum Years of Experience
Option A: Local “Welding Supervisor”	Institute of Technical Education (Higher Nitec Technician Certificate in Mechanical Engineering, Electrical Engineering or equivalent)	(i) Recognised welder training course in the industry, and (ii) Holder of valid welder certificates according to what is defined in the IWP guideline, and (iii) 40-hr welder training refresher course approved by S-ANB, and (iv) Written examination and professional interview to assess knowledge against IIW curriculum for IWP	Minimum three (3) years of professional experience at IWP level in industry in the last five (5) years
Option B: Local “Welding Master”	Institute of Technical Education (Nitec Technician Certificate in Mechanical Technology, Electrical Technology or equivalent)	(i) In-house welder training programme and OJT in welding acceptable to S-ANB, and (ii) Holder of valid welder certificates according to what is defined in the IWP guideline, and (iii) 40-hr welding training refresher course approved by S-ANB, and (iv) Written examination and professional interview to assess knowledge against IIW curriculum for IWP	Minimum five (5) years of professional experience at IWP level in industry in the last eight (8) years

SWS is now in the process of finalising the charges for the Transition Arrangements. The application forms for the Transition Arrangements will be available from the SWS Secretariat soon.

Transition Arrangements are available for only a very limited time frame. Practising welding personnel, welding inspectors and NDT inspectors in Singapore are strongly urged to take advantage of the opportunity now available in the Transition Arrangements to upgrade themselves with IIW diploma.