

A COST EFFECTIVE MODEL TO CREATE NEW WELDERS AND UPGRADE EXISTING WELDERS IN MANUFACTURING SHOPS



You see a welder. We see a nation builder.

Introduction

Welding is a critical activity in the manufacturing process; the skill for good welding is not easy to acquire. Yet, shop managers either outsource welded production or are continually grappling with the issues of reliable welder availability!

The ITIs, which probably train the largest number of welders, are handicapped by inadequate infrastructure, and below-average incoming candidates. The corporate sector offers some apprentice schemes for ITI pass-out welders, but these schemes could do with a more focused curriculum that competently serves production needs.

In the recent past, however, significant work is being done at improving the competency of fresh & existing welders. One set of noteworthy examples are the Public-Private Partnerships (PPP) where the corporate sector adopts ITIs and helps make their curriculum more industry-relevant.

This note presents a novel training model QBTW from Ador Welding Academy, designed to strengthen the above move, and create welders with better employment potential at lower costs.



Service Lines & Essentials of Training

QBTW addresses TWO broad service lines:

- The PRE-SERVICE line - addresses the need of fresh welders and how these can be created in a cost-effective way. The catchment areas for fresh welders are either ITIs or school drop-outs.
- The IN-SERVICE line - addresses the need to continually upgrade the skills of welders to new levels of manufacturing excellence benchmarks, and also create career-growth inspired motivation levels for the welders already working in the shop.

There are THREE parts to essentials of learning, for either of these service lines:

- ✓ English language and life sciences
- ✓ Related theory lessons on welding process that build the understanding of the skill requirements, and
- ✓ A hands-on practice for welding skills that enables the meet the requirements of the production manager at the basic level

Overall Training Objectives

In order to successfully meet the training requirements of corporate users, we need to address often conflicting objectives:

- Train as many people as possible, despite their location, language, and other constraints.
- Without compromising on the volume/ scale, maximally accelerate training of individual trainees by personalizing the content and delivery to their strengths and weaknesses.
- Where they are, when they need, trainees should have access to rich learning experiences.
- Fundamental concepts should be strong for each trainee, and they also need to be exposed to state-of-the-art tools and techniques
- Training should result in deep knowledge and skills in welding, accompanied with broad competencies such as communication skills and a positive approach
- Uniform standards of content and delivery quality should be maintained across the board.
- Training must be cost effective.

In addition, for any type of training program, the general problems faced in providing a good level delivery are -

- An engaging classroom / learning environment that encourages asking questions & clarifying doubts
- Availability of competent Trainers/ Teachers
- Availability of quality course curriculum and pedagogy
- Reliable assessment processes to keep track of the candidate's learning level

AWA, in association with its technical partner, M/s TEQNIUM, is pleased to unveil "**Quadratic Blended Training for Welders (QBTW)**", which successfully meets the diverse objectives above, using a combination of technology-enabled multimedia training, personalized assessment & learner tracking, state-of-the-art practical training and soft-skills training.



Pre-Service Training



In-Service Training



Consultancy & Research



Post Graduate Programs

QBTW provides Training curricula for Pre-Service as well as In-Service groups of trainees. Based on the assessed needs of the production manager, a suitable course curriculum is developed by our team of Curriculum and Pedagogy.

Learner-centric, multimedia course material is developed and hosted at a central server. Mentors are assigned to support queries from candidates.

QBTW self-learning modules have several state-of-the-art features that ensure an effective delivery of learning. For example:

- Lessons are vividly presented through pictures, animation, videos and explanatory texts/ narrations.
- At the end of every lesson, there are exercises and tutorials. There are assessment questions which help the platform understand how the student is progressing. Data on how the student performed will be available to trainers, so that individual attention can be paid on a need-basis.
- At the end of the course, the student can take a detailed ONLINE summative assessment- through an Objective type question paper. These tests can be administered by the e-assessment engine which is a part of this platform. The engine ensures that questions are randomly selected so that two students sitting on adjacent computers won't see identical questions.
- Access to human mentors is hugely valued by students taking e-courses.

Shortlisted students from the assessment of the Self-learning module are then provided intensive hands-on practice sessions. These sessions are designed by Trainers at AWA based on the actual need of the production manager- in terms of degree of complexity of the job, productivity and cost plans as devised under the manufacturing plan.



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