

Issues in the Welding Industry

Nowadays, the welding industry is faced with various problems among which are :

- the shortage of skilled labor
- an adequate training takes too long
- consumables are too costly
- the danger involved in the job is too high

In this context, it becomes necessary to develop training tools for today's welders.

The 123 Certification's Answer

A virtual tool able to respond to above problems.

arc+™ is user friendly and High-Tech thanks to:

- Motion tracking technology at the state of the art of spatial metrology
- Metallurgy processing with most recent research in CFD, thermodynamics and heat transmission
- 3D image rendering with state of the art computer language and platform

The goal here is not to replace the traditional learning methods, but rather to come as a complement, especially as regards to the beginners. Moreover, arc+™ allows you to optimize the welders' performances as well as the quality of the training while diminishing your training costs.



arc+™ : A THREE LEVEL SUCCESS

arc+™ offers many advantages, whether it is for the trainee, the trainer, the company or the organization who purchases the simulator.



TRAINEE

To master :

- multi-processes
- multi-positions
- multi-preparations
- multi-materials
- multi-geometrics
- multi-passes

To unify and to personalize the training while using a data bank built by welding experts

To remove the various dangers and accidents, in particular for the beginners who can concentrate only on their gestural, before adding the various safety build-up to their training

To allow just-in-time training with on the spot updates of knowhow

24/7 thanks to the Internet

The ability to adapt the training to your schedule and to your own rhythm



TRAINER

To reduce the initiation time to leave more time to real practices specifically for intricate weld or special cases

To analyse on the spot the results with all essential parameters and to evaluate the manual dexterity :

- the welding speed
- the straightness of the trajectory
- the angles of the welding gun
- the distance nozzle/plate

To analyse and evaluate the quality of the welding bead :

- size of the welding bead
- visual and internal defects
- thermal input
- penetration at the root

To spread knowledge in synchronicity to a wide audience.



COMPANY/ ORGANIZATION

To diminish:

- All storage costs
- All consumables costs used in the training (a minimum of 30%)
- Your insurance premiums and CSST (The virtual training is without risk to the student)

To increase:

- The image and the visibility of your company or organization due to the use of high-tech products

- The production (machinery will be less used during training thus avoiding damages)

To improve:

- The time-to-market (virtual training improves the speed of the welders)
- The relations and communications with partners, investors, suppliers, employees and clients

To react quickly to new market trends (an increasing demand for skilled welders).