

FABWELD ACADEMY – A giant leap forward in the field of welder training, fulfilling the job aspirations of unemployed youth

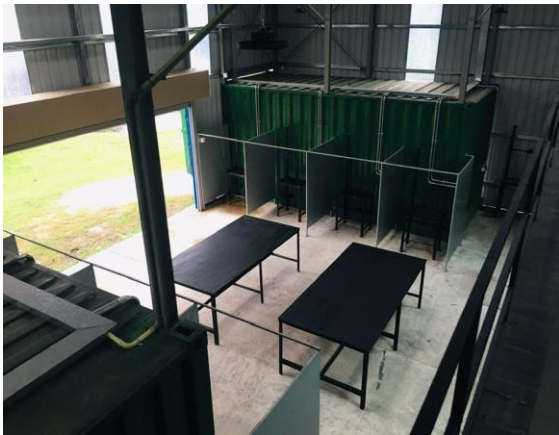


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FABWELD Academy established recently in Magalle, Galle will be the most sought and foremost state-of-the-art welding institute exclusively dedicated to producing skilled and competent welders and fabricators for the shipbuilding and ship repairs, oil-exploration, heavy engineering and automobile industries in the foreseeable future. Located in a convenient and a spacious environment, two kilometers away from the Galle town on Matara road, it has all the modern equipment & machinery, tools, air-conditioned lecture rooms fitted with smart boards and other requisite paraphernalia to provide high degree of theoretical and practical training to the youth who aspire to be professionally qualified welders under the tutelage of well-experienced and internationally renowned academic staff. Having obtained the TVEC (Tertiary Vocational Education Commission) approval, it has now made all the arrangements to commence training.



Market Survey

Prior to the establishment of this training center, the services of an Australian based consultancy firm were obtained and its depth research study justified the rationale of the establishment of a fully-fledged welding training institute, considering the foreign and local demand for welders and fabricators. This market research disclosed that the global welding market which was US\$ 24 billion in 2023 is expecting a monumental growth at a CAGR of 4.71 till 2030 mainly driven by heavy engineering automotive, ship-building and ship repairs and construction industries.

It was also revealed that the Asia Pacific welding market is also expected to have an unprecedented growth from US\$ 8.29 billion in 2022 to US\$ 11.06 in 2030 much faster than the European welding market. It also made a similar forecast that the demand for welders in the Sri Lankan market would make a progressive demand with the foreign investment of heavy industries. This research study pointed out that there would be a significant shortage of skilled welders in Sri Lanka with a gap of 76%. A disturbing news that came to surface at a discussion held at the Sri Lanka Bureau of Foreign Employment (SLBFE) within the supply of welders for foreign countries is that the failure rate is 70% when the local welders are screened by the foreign companies. The pertinent question that arose was why Sri Lanka is unable to produce the required number of welders despite the availability of a plethora of welding training centers managed by the public and the private sectors.

Sri Lankan Scenario

The prospect of job opportunities for Sri Lankan welders has a bright future worldwide in that Japan will have a severe shortage of welders within the next three years because of the simple reason that 50% of the Japanese welders would leave the job market on attaining the age of compulsory retirement. According to the Korea Offshore and Shipbuilding Association (KOSHIPA) the shortage of skilled welders is expected to reach over 11,000 in June next year with an additional 36,000 welders needed by the turn of 2027. According to the Ministry of MSME, the estimated investment in infrastructure projects in India has been estimated for US\$ 650 billion making a massive demand for welders in India.

Currently, Sri Lanka is dependent on Indian welders and sizable foreign exchange is siphoned by the Indian welders employed in the heavy industries including the Shipbuilding and Repair Industry. On the other hand, Chinese investment is pouring into the Hambantota Off-shore industries within the next couple of years and the market demand for skilled welders have tremendous potential. This would literally mean that the unemployed youth should grasp this opportunity by undergoing welder training.

Justification to embark on a welding career

It may be opportune to advise the unemployed youth who are desirous of entering into welding profession that they should not hesitate to join a reliable welder training school now itself and qualify as a professional welder in view of the fact that the median salary of a welder would be much more than a university graduate within the next ten years. In other words, what has to emphasize at this juncture is attending a vocational training center to become a welder is definitely an investment that pays off quicker dividends rather than pursuing a four-year degree in a university, as per the details given below.

Establishing training facilities to train high-caliber welders and fabricator who can immediately enter marine and offshore sector and in complex ship and tanker construction is an absolute necessity. In South Asian countries like Sri Lanka, it is essential to augment their theoretical knowledge and enhance practical knowledge in welding and release to the job market.

Currently most of the welder trainees who have acquired basic welding processes and trained mainly in welding positions listed below should be further trained.

- Flat welding position
- Horizontal welding position
- Vertical welding position
- Overhead welding position.

Fabweld has realized that it has an inescapable duty to upgrade the skills and the knowledge of the welder trainees by providing extensive practical experience in 3G 5G and 6G positions and the inculcate in them the following qualitative traits so that they would become specialists in the welding trade.

- Ability to read welding and fabrication drawings
- Selection of welding consumables
- Heat treatment process
- Non-destructive testing (NDT) of weldments
- Identification of welding defects and how to prevent them
- Fabrication of weld joints predominantly used in the Off-Shore construction.

Welder Qualification Test

It is essential that welder trainees who have completed training courses in the FABWELD should augment their skills and knowledge in the field of training with a special emphasis in providing test certificate as the relevant codes. Welder Qualification test shall be witnessed by one of the surveyors accredited by Society of Marine Surveyors such as Lloyd's, DNV, IRS, ABS. Negotiations are underway with the aforesaid surveyors to undertake this gargantum task of welder test and some of the surveyors have already given their green-light in this direction.

In addition to the welding skills plans are under afoot to provide soft communication skills such as English language and the South Korean language so that trainees would be in a stronger

position to converse more authoritatively with their superiors and peers in the discharge of their duties.

The return of investment by a welder and University Graduate

Over the next ten years

Type of Training	Length of the Course Program	Credential Earned	Median salary of a welder after 10 years
University Degree	Four Years	Bachelor's Degree	US\$ 231,600
Vocational Training School	6 to 12 months	Welding Certificate	US\$ 452,700

Shortage of 6G Welders

The 6 G pipe weld is one of the most difficult certification tests to pass because the pipe is at 45-degree angle and immovable. Welders performing the 6 G certification test must weld in all positions including horizontal, vertical and overhead and may have to weld both right-handed and left handed.

There is a shortage of 6G welders in Sri Lanka. The 6G category is the foremost position that a welder could reach and those who possess 6G position qualification have lifelong employment unlike other sectors. As per the Sri Lankan Bureau of Foreign Employment 96% of 6G welders are not being serviced due to the non-availability of skilled welders in this category.

Key Category Movement	2019	2020	2021
Welding – 6G			
No of Vacancies	50	80	-
Employed	14	12	-
Gap	72%	85%	0%
Welder –General			
No of Vacancies	2,594	1,648	2,523
Employed	85	26	90
Gap	97%	98%	0%
Total			
No of Vacancies	3752	1,897	3,135
Employed	163	40	110
Gap	96%	98%	96%

Why is FABWELD differentiated from the rest of vocational training centers?

A fact to be borne in mind is FABWELD has not mushroomed within an overnight project and it has seen light of the day after extensive market research and meticulous strategic planning after consultation with the relevant stakeholders to provide a qualitative vocational training to the marginalized segment of the unemployed youth. Hence, it may be worthwhile to list out the special features that have been provided to the trainees.

- Well-articulated course syllabuses and modules in consultation with the TVEC and responsible institutions.
- Deployment of highly qualified academic staff including the University academics for the conduct of course modules.
- Engagement of the services of professionals with over 50 years of hands-on-experience for the conduct of practical training.
- More weightage is given to practical training after theoretical exposure which include few lessons on metallurgy.
- Strategic and visionary leadership is given by the Chairman, former Managing Director of Colombo Dockyard PLC and his affiliation with the heavy engineering sector is an added advantage in finding practical training to the trainees of FABWELD.
- Brand new welding machines (both Arch and MIG) are used for the impart of practical training.
- Consumables such as plates, electrodes and tools are readily available for continuous practical training.
- Steel fabrication, Aluminum welding and underwater welding facilities are also available to meet the specific requirements of the foreign countries such as South Korea, Romania, Middle Eastern Japan, Singapore, Israel.
- Six-month practical training will be provided to the trainees after successful completion of the training in leading engineering institutions including the Shipbuilding and Ship repair industries.
- An internationally recognized certificate will be issued after a practical test to the trainees.
- Classes are conducted in air-conditioned rooms by using smartboard with electronic facilities.
- Accommodation facilities are provided for those who attend classes in a well-equipped hotel situated in the same premises.
- All facilities such as sanitary, water, electricity are available in the complex to enable trainees to undergo training in a conducive environment.

Courses conducted for trainees

In view of the heavy demand, the FABWELD has made arrangements to conduct following training programs at its training facility at 304, Magalle, Galle. All trainees are kindly requested to contact the academy on 0778810247 And Email address fabweld.academy@gmail.com well in advance to avoid any disappointments.

Name of the Welding Course	Facilities supported by	Remarks
1. Basic Welding Course (MMAW)	10mm 150mm x 150mm Plates -02 6mm 200mm x 125mm Plates - 10 6mm 125mm x 100mm Plates-10 12D and 10D electrodes will be supplied by the Academy	Ideal course recommended for beginners who aspire to be welders and exposed to the world of welding from the beginning.
2 MIG welding Course (FCAW)	6mm 125mm x 100mm Plates - 04 12mm 2 in – Plates 10 12mm 4in Plates - 10 1" X 8" Ceramic Flux – Cored Welding Wire and CO 2 will be supplied by the academy.	
3. Skilled welding Course(MMAW)	Skilled welder Course (MMAW) 10mm 150mm x 150mm Plates -02 6mm 200mm x 125mm Plates - 10 12D and 10D electrodes will be supplied by the Academy. LP and CO 2 required for Gas Cutting will also be supplied.	
4 Ultimate Welder Course (MMAW)	12 inch pipe Joint – 04 Schedule 80 pipe Joint 1Ft - 01	This training is applicable to people travelling to Europe Australia UK and USA

	12D and 10D electrodes will be supplied	including Japan to study as undergraduates or postgraduate courses They can carry ABS or AWS certificate as a 6 G welder and do part time jobs Most of Indians traveling to Canada from India get such training and work in shipyards or any other industry part time They can get access theory course also in the Academy
4 Gap Filling Upgrading Skilled Course	10mm 150mm x 150mm Plates -02 12D and 10D electrodes will be supplied.	2,600 welder vacancies are available for South Korea before the end of this year. Ideal tailor-made course recommended before applicants are screened by the Foreigners.
5. Tailor made welding courses required by the Industry on specific requirements		Employers are requested to contact FABWELD for the extensive training of their welders.

As a nation, we should be ashamed of ourselves for not producing the required amount of welders we need for the last 76 years (from the date of independence), despite the availability of a plethora of technical colleges, vocational training institutes and numerous other training institutes all over the country. On the other hand, the unemployment of youth has risen to unprecedented levels creating economic and social unrest among the youth. Sri Lanka has witnessed two T 56 cultures- one in 1971 and second in 1987/1988 for its dismal failure to address unemployment which has now risen to 38% and it is a moot point why the successive governments pathetically failed to find answers to this burning issue that begs an answer.

Attention given for entry to the South Korean market to be strengthened.

Right now an intense competition is prevailing to migrate to South Korea because of the heavy demand for welders. The Korean Off-Shore industry is a significant sector in South Korea's economy with a strong focus on shipbuilding, off-shore construction and oil and gas exploration. The country is home to some of the world's largest shipbuilders such as Hyundai Heavy

Engineering Industries Samsung Heavy Industries and Daewoo shipbuilding and marine engineering.

Korean companies are known for their expertise in building a wide range of off-shore vessels including drill ships, floating production storage and offloading (FPSO) units and liquefied natural gas (LNG) carriers. They also have a strong track record in off shore construction projects such as the installation of oil and gas platforms subsea pipelines and offshore wind farms.

In terms of oil exploration, South Korea has been actively expanding its presence in international markets with Korean companies participating in off shore projects in countries such as Brazil Angola and the Middle East. The Korean government has also been promoting the development of off-shore renewable energy particularly off shore wind power as part of its efforts to reduce greenhouse gas emissions and transition to a more sustainable energy mix.

Overall the Korean offshore industry plays a crucial role in the country's economy providing jobs, driving innovation and contributing to economic growth and technological advancement.

The amount of attention to penetrate into the South Korean market by Sri Lanka is woefully inadequate well knowing the enormous potential. It is strongly suggested for the EDB to devise a strategic plan to penetrate into this vibrant market with the collective participation of Sri Lanka Bureau of Foreign Employment (SLBFE), Tertiary Vocational Education Commission (TVEC) and the key training welding institutions.

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