# Onomichi passing on shipbuilding techniques to the rest of Japan

# Innoshima Technical Center

The Innoshima Technical Center is a career training school established in 1999 as a joint effort by the public and private sectors, namely the government and the shipbuilding and marine equipment industries, with the goal of 'fostering human resources for the next generation' and 'passing on specialized knowledge and skills' of the shipbuilding and marine equipment industries, core industries of the Onomichi, Innoshima region.

The City of Onomichi and shipbuilding and marine equipment companies around Onomichi have an operating committee, whose office is located in the Shimaokoshi section of the City of Onomichi's Innoshima General Office. It has no training facilities of its own, so it rents out actual facilities in operation depending on what it needs for the required length of time to provide various types of training. Training offered is divided into three categories, namely specialized skills, technology, and safety (see chart). The number of students that enlist in the courses is rising each year, and there have even been students from outside of the Onomichi area, from regions such as Hokkaido. Thus far, 3,226 students have undergone training (as of June 2012).

The institute received approval as a 'Joint Certified Vocational Training School', the first ever amongst Japan's shipbuilding and marine equipment industry, from the governor of Hiroshima in January 2001. Given the high corporate retention rate of those who have undergone training and the cost-benefit performance of the training, it has come to be called the 'Innoshima Model for Human Resources Training', and has received high evaluations from all over the country.

In order to spread its training know-how and employ the Innoshima Training Center

business model throughout the country, the Shipbuilding Technique Development Center was established within the Cooperative Association of Japan (CAJS) with Shipbuilders financial support from the Nippon Foundation and the Ministry of Land, Infrastructure, Transport & Tourism (MLIT) in fiscal 2004, and using that support, similar



training centers have been established in Imabari, Usuki, Saiki, Yokohama, Nagasaki, and Aioi. The Innoshima Training Center's efforts now reach across the entire country. In recognition of such efforts, it was awarded the Hiroshima Governor's Award (Award for Excellence as an Accredited Career Training Group) in 2005, and the Minister of Health, Labor & Welfare's Award (same as previous) in 2011.

#### **Contact information:**

## Innoshima Technical Center Operating Committee Office

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## Innoshima Technical Center Office

2418-2 Innoshimahabucho, Onomichi City, Hiroshima 722-2323 Hitachi Zosen Innoshima yard, former general ship office, 2nd floor E-mail: innoshima.gijutsu@ia6.itkeeper.ne.jp

	Training course	Place	Major focuses of the course
Craftsmanshi p courses	Beginner training	Hitachi Zosen Innoshima yard Naikai Zosen Innoshima yard IMEX	Students learn the foundation and basics of shipbuilding, and upon completion of training, will be an immediate asset to any worksite. In terms of practical technical training, students can choose from and become certified in various fields, including shipbuilding welding, boiler welding, shipbuilding assembly, and finishing assembly.
	Intermediate skill training for metal bending	Sanwa Dock	In this course, students will aim to become proficient in the formation of complex curved plates, including the deep drawing of saucer shapes, saddle shapes, and twisted shapes by pressing and linear heating. Upon completion, students will be able to acquire Class 2 Metal Forming certification issued by the Shipbuilding Technical Development Center.
	Intermediate skill training for welding	Hitachi Zosen Innoshima yard	In this course, students will aim to become proficient in all position welding, including fillet welding methods and butt welding methods, as well as correction methods for each. Upon completion, students will be able to acquire their Welder Performance Certificate (requires passing the skill performance test) issued by ClassNK, and their Class 2 Welding & Cutting certification issued by the Shipbuilding Technical Development Center.
	Beginner skill training for pipe laying	Naikai Zosen Shigei factory	In this course, students will aim to become proficient in a variety of areas, from the basics of pipe laying and the handling of pipe benders, to the fabrication of finished pipes (Z-shaped pipes), methods for attaching supports and flanges, and the fabrication and attachment of adjustable pipes (L-shaped pipes). Upon completion, students will be able to acquire their Class 3 Pipe Laying certification issued by the Shipbuilding Technical Development Center.
Technical courses	Ship and ocean engineering training	Hitachi Zosen Innoshima yard	This course will be taught in conjunction with the National Maritime Research Institute (NMRI) to train new skilled shipbuilding workers. Classes for this course will be made possible in real-time via a video conferencing system that connects the main NMRI campus with the Innoshima Technical Center.
	PSPC coating efficiency standards course	Onomichi Geiyo Culture and Information Center	In this short-term intensive course, students learn the application control know-how necessary for dealing with PSPC (performance standards for protective coatings), including their purpose and scope, an overview of the specifications, coating selection for actual applications, application methods, product quality management, and measurement techniques.
Safety courses	Hands-on safety training	Hitachi Zosen Innoshima yard Naikai Zosen Innoshima yard	This course will attempt to break away from the traditional form of safety education through instructional materials such as textbooks and DVDs, and instead use new safety education methods that include hands-on experiences of workplace accidents that could occur at a shipyard in an attempt to improve safety awareness and workers' abilities to avoid danger.