

## SHIPBUILDING IN TUSCANY

### How the sector operates

The boat industry is located in Versilia, precisely in the port of Viareggio (700 firms out of one thousand of the Lucca province). The recent crisis has depressed the demand for medium-sized boats (50-100 metres), and caused instead an increase in the production of watercrafts and, most of all, mega yachts. Having moved towards a luxury-oriented market, to enhance its repositioning and growth the sector needs specialist competencies all through the value chain, which can be separated into the following five macro-areas:

- (1) shipbuilding yards;
- (2) repair and refitting;
- (3) supply of: a) carpentry and upholstery, b) technology, c) planning (engineering and executive design, interior and exterior design, etc.);
- (4) port services (docks hosting the boats);
- (5) inland port services.

While Viareggio accounts for 25% of the world's mega-yacht production – and Italy 38% for over 30 metres boats – our shipbuilding industry is weak in terms of availability of on-board personnel (only 5% is Italian), and supply of hospitality services, thus leading to a poor exploitation of tourism in this direction.

### Skill needs: strategic competencies and job profiles

In general terms, enterprises are complaining of a chronic lack of skilled staff, due to the scarce attractiveness of the sector on the young people and to the diminished capability of naval schools to provide trained personnel. Today, all the five macro-areas need a vocational education that meet highly qualified requirements, and is completed by direct coaching experiences in the yards or enterprises. A common, much demanded skill is the knowledge of general and technical English.

As regards production, the needed profiles are **woodworkers, carpenters, electricians, plumbers, outfitters, painters and welders** with a background in boat building, repairing and refitting.

As regards planning, the need is felt for **CAD programmers** specialized in boat design and attentive to the new technologies (3d scanners, viewers, domotic systems). A special training to work in the luxury yacht business (rather than in merchant ships) is also required for the **on-board personnel (captains, cooks, hostesses and stewards)**, whose training is similar to that given for the hotel and restoration sector, apart from the on-board experience. A key profile identified for the future is the **coordination expert** on port reception facilities, whose task is to match the needs expressed and the available professionals and services. And also, the **project manager for pleasure craft**, who is a post-graduate engineer with economic competencies working for different local firms and pulling together the necessary information to develop common courses of actions.

**Entrepreneurial training** is considered vital, especially in small and medium enterprises, to the updating on legal procedures, and to facilitate collaborative programmes within the industry.

## A taxonomy of the required professional qualifications

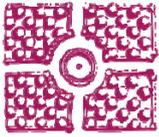
The table below combines data from three sources: the mandatory employment notices from firms to job centres, introduced in 2008; the IRPET survey on the training needs of the Tuscan firms having recorded higher-than-average turnover and employment rates after the crisis; the focus groups with firms belonging to strategic sectors for regional growth. The quantitative and qualitative data collected were used to classify occupations by employment capacity (number of newly employed), and job stability (combination of days worked and contract type).

### Overview of the most sought-after and in-demand shipbuilding jobs\*

		Job stability	
		Medium-high	Medium-low
Employment capacity (number of newly employed)	Medium-large	<b>Carpenters and carpentry assemblers</b> <b>Artisan and industrial painters</b> Wood workers and tool-makers Marine mechanics and technicians Machine operators in other rubber product manufacturing Porters, deliverers and related workers <b>Welders and flame cutters</b> Artisan mechanics, vehicle maintenance and repair and related workers <b>Industrial designers and related workers</b>	Construction carpenters and woodworkers Non-qualified industrial workers and related workers Metal plating operators Ship's captains and officers
	Medium-small	Civil construction labourers and unskilled workers, and related workers Plumbers, steamfitters and pipefitters Scaffolding workers Civil engineering electricians and electrical installers	Insulation and soundproofing installers Electrical- and electronic-equipment installers and repairers Production planning technicians Handicraft workers in wood and related materials Tool-makers and related workers Automated-assembly-line operators Ships' deck crews Energy and mechanical engineers Motorboat and vessel pilots Cooks

\* Key professional qualifications, whatever class they belong, are highlighted in bold.

The analysis of recruitment capacity resulted in two occupation groups (medium-large and medium-small), depending on the number of newly employed (larger/smaller than the median value). The analysis of job stability resulted in two occupation groups (medium-high and medium-low), depending on the value of the composite indicator (higher/lower than the median value).



### Territorial localization

The map below shows the location of local units in the sector, highlighting the most dynamic firms in terms of turnover rate and number of workers for the period 2007-2011. This graphical representation allows to appreciate the degree of diffusion/concentration of production activities on a regional basis.

### The shipbuilding firms

