造船专业英语

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内 容 简 介

本书为英文本船舶概论。全面、系统地介绍了签订造船合同、适航性、船体结构、船体建造工艺、船舶动力-推进系统、……乃至试航及质检等内容,是船厂及船舶行业工人、技术人员、管理人员必读的英语教材。

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再 版 说 明

随着我国改革开放的深入发展，造船工业大踏步进入了国际市场，外语在企业外向型经济中的地位和作用日益突出。在多年的教学和翻译实践中，编者深感造船行业缺乏切合实际的外语教材。为此，我们在1990年编写并出版了“造船入门”一书，现更名为“造船专业英语”，奉献给正在崛起的我国造船事业。

本书包含33篇课文，涉及船厂（集团）简介、造船合同、航海性能、船体结构、船艏、船体建造工艺、焊接、船用柴油机、推进装置、轴系、柴油机动力系统、船舶系统、电力系统、电力应用、主机和电站的自动化、导航设备、涂装、试航、质检以及计算机等项目，可以说是一本深入浅出的、中英文对照的船舶概论。

在课文中，我们尽可能多地编入了技术、外贸、经营和管理的新词汇。课文尽量做到知识性和趣味性并重，因而课文具有较强的可读性。每篇正课文后，均附有单词与词组、片语与搭配以及详尽的语法注释；此外，还附有参考译文和总词汇表。全书共收集造船工业最常用的词汇4000多个、片语和搭配600多个；上述词汇是我们在长期的外语教学和翻译实践中选编出来的，应该说是造船工业最低限度的词汇。

本书是按功能法编写的教材，即根据造船工业交际的需要，先确定交际项目，然后按由近及远的顺序安排各种项目；语言结构和词汇的安排则服从交际项目的需要，不另成体系。这样编写可以使学员在自己熟悉的情景中、形象而具体地理解语言素材，从而使教学生动活泼、激发学员内在的兴趣以及突出成人教育的实用性和速成性，也便于学员自学。

专业技术人员在学完本书后，就可看懂本专业的外文图纸和

说明书,为阅读合同书和技术规格书等比较复杂的外文资料打下了坚实的基础,并且为科技会话准备了丰富的语言条件。必须指出的是,本书力求全面介绍造船工业的专业词汇,但不可能也不必要提供某一专业的所有词汇,后者有待于学员自行收集和积累。另外,因为本书是按功能法编写的,所以在词汇和语法体系方面不得不打破按部就班的框框;学员在学习本书前应该首先具备一定的英语基础知识。

本书可以作为造船行业管理和技术人员岗位外语培训的教材,也可作为造船各个专业大、中专学生的阅读教材,还可作为翻译人员的参考资料;另外,在对高级技术工人进行外语培训时,也可选教相应的章节。本书于1990年6月被定为原中船总公司(部级)公开交流教材,并于1992年获得中船总公司优秀教材二等奖。本书在此次再版过程中,根据近十年来造船工业的迅猛发展,在内容上作了相当大的修改,并增加了片语和搭配、语法注释、参考译文和总词汇表;篇幅几乎增加了一倍。

参加本书编写工作的还有沪东中华造船(集团)有限公司教育培训中心叶春仙和刘孟晓二位同志。

由于编者业务水平有限和经验不足,所编教材肯定存在不少缺点和错误,敬请读者批评指正。

编 者

2002年8月

CONTENT

Lesson 1 An Introduction of H D Shipyard(1)

H D Shipyard, situated on the eastern bank of the River, is a comprehensive enterprise specializing in the manufacture of ocean-going vessels as well as marine diesel engines of medium and low speed with full capability in casting, forging and mechanical processing. Two slipways, with one for ships under 70 000 dwt and another for ships up to 100 000 dwt, and eight berths for ships under 5 000 dwt have been constructed in the yard. The outfitting quay, some 700 meters in length, is well equipped with about 3 600 kinds of various equipment. What is more, there stands a huge drydock of 160 000 tonnage in the mouth of the Yangtse River. The shipyard is noted for her high comprehensive productivity and facile adaptability.

Up to now, more than 1 200 vessels of different types have been completed, among which were the self-designed 25 000 dwt ocean-going bulk-cargo carriers that have been serving the ocean-going fleets of COSCO around the world for years. Starting from 1981, it has accepted orders from foreign customers for bulk-cargo carriers of the class of 36 000 dwt which were jointly designed with Japan, anchor handling supply vessels for offshore services of joint design with England which took the lead in the world in 1980's, 62 000 dwt oil tankers for Chile, 52 000 dwt floating production storage units(FPSU) which act as an oil refinery at sea, 2 700 TEU reefer container ships of the future type in the nineties to the design of which West Germany made her part of contribution, and guided-missile frigates of self-design which have been exported to the Royal Thai navy and the Egyptian navy.

H D Shipyard has a history of over 40 years in her marine diesel

engine making with an independent production system. In addition to state-specified technology and products of her own, the yard has signed license agreements respectively with SEMT of France and B & W Co. of Denmark to make PC2-5 medium-speed diesel engines and B & W low-speed diesel engines, the actual production of which the yard has successfully made a reality.

H D Shipyard owns a technical force of distinguished engineers coupled with advanced techniques in scientific research. An engineering and technical team of more than 2 000 persons engaged in new technology research and physical-chemical experiments shares the responsibility of the research and design of the vessels and diesel engines. To meet the development of shipping and the need of modern management, the shipyard is equipped with general-purpose electronic computers, large NC drawing instruments and imported image display systems. Computer techniques have been applied and developed effectively in research, design and production. Now in order to enhance its competitiveness in the world shipbuilding market, a new round of technical upgrading is under way.

H D Shipyard possesses great industrial potentialities and is ready to serve customers all over the world.

New Words and Expressions

1. shipyard(yard) *n*. 船厂
2. shipbuilding *n*. 造船
3. manufacture *n*. and *v*. 生产,制造
4. ocean-going vessel 远洋船
5. marine diesel engine 船用柴油机
6. medium speed 中速
7. low speed 低速
8. casting *n*. 铸造
9. forging *n*. 锻造

10. mechanical processing 机加工
11. slipway *n*.(倾斜)船台
12. tonnage *n*.吨位
13. berth *n*.(水平)船台,(船上)床铺
14. deadweight ton(DWT) *n*.载重量,吨载重
15. outfitting *n*.舾装
16. quay *n*.(顺岸式)码头
17. equipment *n*.设备
18. drydock *n*.干船坞
19. mouth *n*.河口
20. comprehensive productivity 综合生产能力
21. facile adaptability 灵活的适应能力
22. self-designed *a*.自行设计的
23. bulk-cargo carrier 散装货船
24. ocean-going fleet 远洋船队
25. China Ocean Shipping Company(COSCO) 中国远洋公司
26. order *n*.*v*.订单,订购
27. class *n*.船级
28. anchor handling 锚操纵
29. supply vessel 补给船,工作船
30. offshore service 近海作业
31. joint design 联合设计
32. oil tanker 油船
33. floating production storage unit(FPSU) 浮式生产储油轮
34. oil refinery 炼油厂
35. TEU reefer container ship 冷风集装箱船
36. twenty-foot-equivalent unit(TEU)
20英尺国际标准集装箱
37. reefer *n*.(俗)冷藏船,冰箱
38. the future type 未来型
39. guided-missile frigate 导弹护卫舰
40. navy *n*.海军

41. state-specified *a*. 部颁的
42. license *n*. 许可证
43. SEMT of France 法国热机协会
44. B. & W. Co. 丹麦柴油机公司
45. technical force 技术力量
46. engineering and technical team 工程技术队伍
47. physical-chemical experiment 理化实验
48. shipping *n*. 航运
49. management *n*. 生产管理
50. general-purpose *a*. 通用的
51. electronic computer 电子计算机
52. numerical control(NC) 数控
53. drawing instrument 绘图仪
54. image display system 图像显示系统
55. upgrade *v*. 提升,改进
56. under way 正在进行

Verb Phrases and Collocations

1. (be)situated at 位于
2. (be)specialized in(specialize in) 专攻,专门从事
3. as well as *conj*. 以及
4. be equipped with 装备有
5. lie to 位于
6. be noted(famous)for 以……闻名
7. be jointly designed with 与……联合设计
8. take the lead 居于领先地位
9. act as 充当,担任
10. make contribution to 对……作出贡献
11. in addition to 除……之外
12. of one's own 自己的
13. sign an agreement with 与……签约

14. make something a reality 付诸实施,实现
15. (be)coupled with 与……结合
16. (be)engaged in 从事
17. share(shoulder/take)the responsibility of
肩负……的责任
18. be ready to 准备好,乐意

Supplementary Notes

(1)与 introduction 连用的介词:

an introduction of H D Shipyard = the general of H D Shipyard H D 厂概况

An Introduction to Radio = the ABC of Radio 无线电入门

(2)be situated at 位于;同义词为 be sited(located)at 或 lie to; situated on the eastern bank…,是过去分词短语,构成非限制性的后置定语以修饰 H D Shipyard;因受 bank 一词的影响介词选用 on。

(3)enterprise 带有两个后置定语,即 specializing in the …(and)和 with full capability …;其一为现在分词短语,其二是介词短语。两个后置定语中间的 and 可以省略,以求文章的流畅。近年来,英语中并列定语或并列状语之间的连接词常常省略,这是语言发展的新趋向。Specialize in 专攻,专门从事,同义词为 major in。

(4)as well as conj. 以及;侧重点位于前边。

(5)casting, 铸造;但铸工车间为 foundry。

(6)mechanical processing 机加工;这个概念的外延要大于 machining 机加工,因为 machining 一般仅指车,铣,刨等,并在精度上有较高的要求。

(7)two slipways…and eight berths 为并列主语;而 with one for ships under 70 000 dwt and another for ships under 100 000 dwt 是独立主格,其中 one(slipway)和 another(slipway)为逻辑主语。

(8)some 700 meters in length 可看作是一个插入语,作补充说明;或理解为数词短语,充当非限制性的后置定语,以修饰 the

outfitting quay。Some,about,around 等词常作副词,意为“大约”。

(9)quay 顺岸式码头;pier 凸式码头;wharf 浮码头;landing-place 码头(总称)。

(10)outfitting 外舾,船舾;furnishing 内舾,房舱装饰。furnish 还有其他用法,例如:owner-furnished 由船东提供的,此时一般不用 supply 或 provide。

(11)be equipped with 装备有,同义词为 be armed with。

(12)在 There be 句型中可使用许多不及物动词,以代替 be;例如:stand,seem,live,exist,appear 等。

(13)船只的完工习惯上用 complete 一词,例如:completion drawings 完工图。切记不要使用 finish 一词,因其贬义有“完蛋”之意。

(14)among which were the self-desinged 25 000 dwt ocean-going bulkcargo carriers 非限制性定语从句,修饰 vessels。由于受到 among 的影响,句子常可倒装,其中 among which 充当表语。

(15)that have been serving the ocean-going fleets of COSCO around the world for years 限制性定语从句,修饰 bulkcargo carriers。

(16)for years 等于 for many years。

(17)starting from 1981,意为 from 1981 on,从 1981 年起。

(18)for bulk-cargo carriers …,(for)anchor handling supply vessels …,(for)62 000 dwt oil tankers.…,(for)52 000 dwt floating production storage units (FPSU) …, (for) 2 700 TEU reefer container ships,and(for)guided-missile frigates…可理解为介词 for 带有六个并列宾语,构成介词短语作分割定语,修饰 orders。

(19)accept orders 不同于 receive orders。

(20)A: which were jointly designed with Japan 定语从句,修饰 bulk-cargo carriers。

B: which took the lead in the world in 1980's 定语从句,修饰 anchor handling supply vessels;take the lead in the world 居于世界领先地位,领导世界新潮流 ;也可以说 lead the world。

C: which act as an oil refinery at sea 定语从句,修饰

floating production storage units(FPSU);act as 充当,担当,用作;同义词为 serve as。

D: to the design of which West Germany made her part of contribution 定语从句,修饰 TEU reefer container ships;其从句引出方式为:介词 + n. + 介词 + which。

E: which have been exported to the Royal Thai navy and the Egyptian navy 定语从句,修饰 guided-missile frigates。

(21)ship type 指船只的种类,如:ro-ro(roll on and roll off)ship 滚装船,LNG(liquefied natural gas)或 LPG(liquefied petroleum gas)液化气船 等。ship form 则指船只的线形(lines)和型值(offset)等。

(22)medium speed 中速;也可说 intermediate speed,但较少见。另外高速为 high speed。

(23)with an independent production system 介词短语充当状语。

(24)通常,造机用词为 make 和 diesel engine making;而造船用词为 build 和 shipbuilding。

(25)the actual production of which the yard has successfully made a reality 非限制性定语从句,修饰 medium-speed diesel engines 和 low-speed diesel engines;其从句引出方式为:n. + 介词 + which。make sth. a reality 付诸实施,实现;同义词为 realize。

(26)coupled with advanced techniques in scientific research 过去分词短语充当后置定语,修饰 distinguished engineers;be coupled with = be combined with 与……相结合。

(27)engage in 从事;常用被动语态 be engaged in。

(28)manage v. management n. 生产管理;run v. running n. 经营管理;administrate v. administration n. 行政管理。

(29)be ready to 可有两种含义;一为 be willing to 乐意;一为 be prepared to 准备好。

(30)常用的商务文件名称有:agreement 协议(书),contract 合同,precontract 准合同,memorandum 备忘录(缩写 memo 常用于口语中),a letter of intention 意向书,technical specification 技术规格书(缩写 spec 常用于口语中)。

Lesson 2 An Introduction of H D Shipyard(2)

Now H D Shipyard has rapidly expanded into one of the largest groups in the shipbuilding industry of China. There are at present four main production lines in the group. They are the merchant ship production line, the military ship production line, the diesel engine making line and the non-standard product line.

H D Shipbuilding Group is capable of building not only bulk-cargo carriers, passenger-cargo vessels, oil tankers, floating production storage units, supply vessels , reefer container ships, navy underway replenishment ships and guided-missile frigates but also various kinds of engineering vessels, such as multi-purpose oceanographic research vessels, geo-physical prospecting vessels and marine geological research vessels. The two oceanographic research vessels, Xiangyanghong 09 and Shijian, which entered for the United Nations' atmospheric survey in the name of P. R. China, have accomplished the assignment with great success.

In the aspects of hull lines, hull structure and piping system, mathematical lofting skill has been widely adopted. And at the same time accurate and effective management has been step by step carried out in shipbuilding. Steel plate pretreatment by shot-blasting and primer painting has been put into service. NC cutting machines have been applied to a great extent. Imported 3-roller bending machines and 7-roller planing machines and latest large millers with gantry and computer control console and other large-size equipment have increased her capability in mechanical processing.

Moreover, the group can design and make low-speed marine diesel engines of up to 30 000BHP and medium-speed marine diesel engines of up to 12 000 BHP. The excellent power plants supplied by

the yard have been widely taken on freighters, passenger-cargo vessels, oil tankers, container ships and a variety of engineering vessels . It is also worth mentioning that in the last few years H D has been involved in the making of land-based diesel engines for power plants.

The branch company under the group, H D Heavy Machinery Co. Ltd. has applied advanced technology, superior testing facilities and precision testing instruments to the making of diesel engines. With high capability in forging, casting and mechanical processing, the company utilizes her own machining workshops in making diesel engines and the production line ranges from blank forging and casting to finished products of elements and parts which is serialized on their own efforts.

Apart from the shipbuilding and diesel engine making systems, there exists the non-standard product line in the group. Armed with different sorts of brand-new equipment introduced from U. S. A, the emerging line takes over miscellaneous production tasks. To cite a few, it is in charge of the manufacture of steel structures for either bridges or mansions as well as the manufacture of subway shields and metallic equipment for steel plants in addition to the assembly and testing of automobile automatic production lines.

To sustain the above production lines, the group has spared no effort to have developed a mighty technical staff, among whom approximately 300 have won the title of senior engineers equal to professors or vice-professors, and more than 800 have obtained the title of engineers equal to lecturers. And, a shipbuilding technology research institute, an electronic computer institute, a marine engineering research institute, a welding laboratory, a physical-chemical experimental center, a measurement laboratory and other technical departments have been established.

H D Shipbuilding Group is independently capable of designing vessels and diesel engines. She is resourceful in new technology

research and physical-chemical experiments. Furthermore, she has rich practical experiences in the application of computer techniques.

Top people in the group owe all this to the successful development of man power resource and they believe in that the essence of the fierce competition among enterprises is the competition for talent. Under the care of the group headquarters, the enterprise Master degree system and postdoctoral centre have been set up and the group is evolving into an enterprise of teaching and learning.

With the growth of the socialist market economy and the improvement upon the modern enterprise system, H D Shipbuilding Group has been rapidly expanding and emerging into one of the 500 most powerful key enterprises in China. H D Shipyard serves as the core enterprise of the group. Circling the yard, a great many of branch companies and affiliated factories are then twinkling stars.

With her ships sailing across the four oceans and her friends all over the world, H D wishes for genuine cooperation and universal progress. Emphasizing on mutual benefit in dealing in both export and import business, she is keen on learning advanced foreign techniques to ensure high quality products and to promote foreign trade as well as international cooperation.

New Words and Expressions

1. expand *v*. 扩张,扩建
2. group *n*. (企业)集团
3. shipbuilding industry 造船工业
4. production line 生产线
5. merchant ship 民用船
6. military ship 军用船
7. non-standard product 非标产品
8. passenger-cargo vessel 客货船