

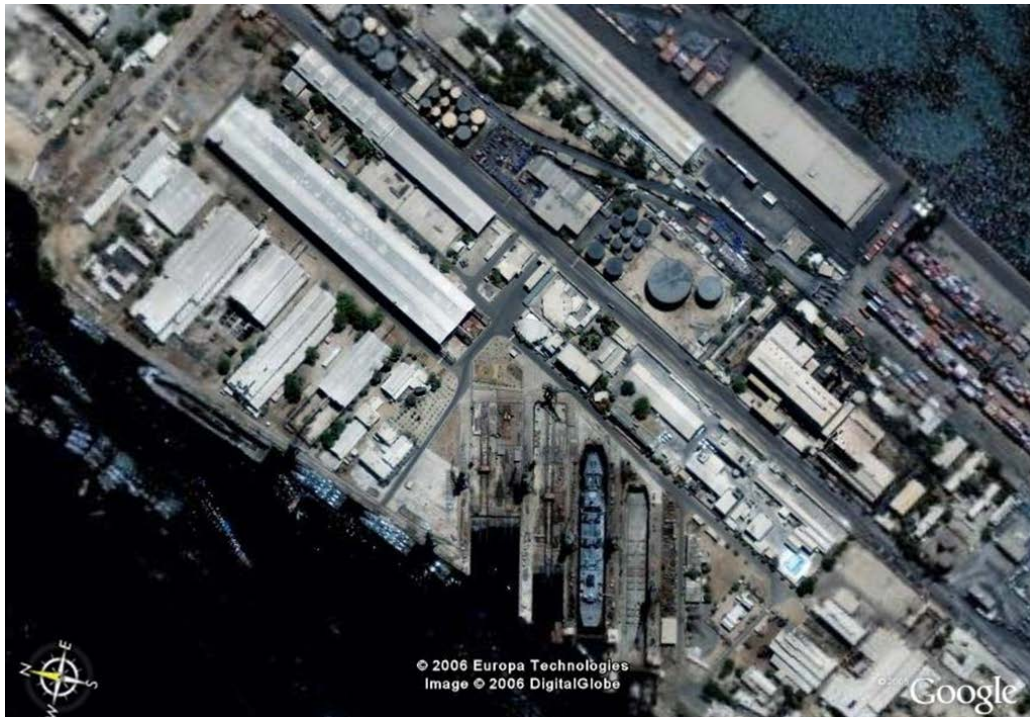


## KARACHI SHIPYARD & ENGINEERING WORKS LIMITED

Shipbuilding is regarded as the second oldest profession in the world and Noah's ark also bears a testimony to this. Starting from wooden logs and planks, moving to the use of iron and steel, then to alloys and recently to plastics also, we have seen this transformation over a very long time. But now with the rapid advancement in the last few decades, modern shipbuilding has become a highly complex, competitive and capital-intensive industry and requires long term planning due to ever increasing thrust of technology and competition in the market. A Shipyard equipped to construct sea-going vessels for Merchant Fleet, Warships for Navy and support vessels for the Port Complexes, is an inescapable need of any maritime nation.

### **Brief History**

Pakistan is fortunate to have a shipyard solely due to visionary outlook of our father of the nation, Quaid-e-Azam Muhammad Ali Jinnah ; who desired to see Pakistan's future as a maritime nation. Therefore, immediately after creation of Pakistan, steps were taken to organize a shipping company and a shipyard. Quaid's dream in respect of a shipping company came true during his lifetime; whereas, project known as Karachi Shipyard & Engineering Worked Limited, (KS & EW), was approved in a cabinet meeting, presided by the first prime minister of Pakistan, Liaquat Ali Khan, on the pursuance of the first naval chief. The establishment of facility was thought as essential as defence of Pakistan. The Government of Pakistan and Govt of Germany provided the financing for the project under a loan agreement in 1952. Finally, KS & EW came into existence as Pakistan Industrial Development Coporation (PIDC) project in 1955 and first vessel was constructed and delivered to KPT in 1957. KS & EW is a Public Limited Company and all shares are owned by GoP / Pakistan Navy. It is an autonomous Body with a Board of Directors, headed by Chief of the Naval Staff and working under Companies Ordinance 1984. KSEW is Integrated Management System (ISO 9001 : 2008, ISO 14001 : 2004 & OHSAS 18001 : 2007) certified from M/s Lloyds Quality Assurance.



Ariel View :

KS & EW spread over an area of 65 Acres

### **Areas of Business**

There are three (03) main areas of business i.e. Shipbuilding, Ship Repair & Heavy General Engineering

### **Shipbuilding**

Shipbuilding is the core activity of KS & EW, skillfulness and dexterity in shipbuilding has been highly recognized and praised from time to time by a number of our valued clients. This includes recognitions by China Shipbuilding Trading Co. Ltd., China, by our Navy for construction of Warships and by DCN International, France for significant contribution towards construction of submarines and by various other local port authorities and organizations in Pakistan

KS & EW is equipped to build all types of marine crafts, motor cargo vessels, container ships, oil tankers, harbour tugs, pilot boats, hopper barges, dredgers, launches and bulk carriers of upto 26,000 DWT.

In support of defence programs, KSEW has developed the capability of indigenous construction of Patrol Boats, Gun Boats & Missile Boats size vessels and construction of submarines.



State of the art Agosta 90B Submarine

KSEW has so far built and delivered over 400 ships and marine crafts of various sizes to local as well as foreign customers including China, Iran, Belgium, UAE, Saudi Arabia etc..

### **SHIPBUILDING PERFORMANCE / ACHIEVEMENT GAINED**

#### **ORDERS COMPLETED DURING 2011**

- 02 x Small Tankers cum Utility Ships (STUS).
- 02 x 10 Tons Pusher Tugs and Dredge Tender
- Construction of 02 x 500 Tons Flat Bottom Non-propelled Cargo Barges.

#### **ORDERS IN HAND**

- i) **PUSHER TUGS FOR PAKISTAN NAVY (02 Nos)**

The project was started in Jan 12 and work is in progress as per schedule. Launching and delivery of tugs are scheduled during end of this year.



Pusher Tug (File Photo)

ii) **FAST ATTACK CRAFT (MISSILE) FOR PAKISTAN NAVY**

Fast Attack Craft (Missile) has a stealthier Design with state of the art missile and combat system. It has a maximum speed of 30 knots and full load displacement is of 560 tons. The ship is equipped with Anti Surface Warfare and used for surveillance and policing of EEZ and search & rescue operations. The ship has been launched on 16<sup>th</sup> Aug. 2012 and scheduled to be delivered by end of this year.



Fast Attack Craft (Missile) for Pakistan Navy

iii) **F22P FRIGATE FOR PAKISTAN NAVY**

A multi mission frigate fitted with state of the art weapon and combat systems is a prestigious addition to Pakistan Navy Fleet. The ship is equipped with surface to surface and surface to air missiles, radar controlled guns, integrated anti submarine system etc and used to interdiction of

hostile surface combatants, patrolling, monitoring and protection of EEZ, heliborne operations etc. M/s Hudong Shipyard (China) has constructed and delivered 03 ships to PN and 4<sup>th</sup> one is being constructed at KSEW, Harbour Test Trials are being done and scheduled to be delivered in April 2013



F 22P Frigate

#### **ORDERS RECENTLY SIGNED**

- 32 Tons Pusher Tugs for Pakistan Navy
- Multipurpose Barge for Pakistan Navy
- 09 nos Aluminum Boats for Military Vehicle Research & Development Establishment (MVRDE)
- ILS Package for Small Tanker Cum Utility Ship

#### **ORDERS IN PIPELINE**

- Repeat order of F22P Frigates
- Submarine construction project
- Repeat order for construction of 2 x 10 tons pusher tugs for KPT.
- Repeat order for construction of 1 x cargo barge for KPT.
- 04 x Split Hopper Barges for KPT

#### **Ship Repair**

KS & EW has a comprehensive setup for repair of naval and commercial vessels. So far over 5000 vessels of national and international origin have been repaired (including foreign flag carriers and warships belonging to France, Iran, Oman and Royal (UK) Navies etc). Pakistan Navy, Karachi Port Trust, Pakistan Maritime Security Agency and Port Qasim Authority are regular customers of KSEW. Modest facilities exist in the KSEW for undertaking all types of Above Water and Under Water repairs of ships and offshore drilling rigs. KSEW Ship repair Division is organized to undertake above / under

water repairs of vessels within KSEW premises, in Karachi Harbour and at the outer anchorage if required.

For under water repairs, two Dry Docks are available, which can take vessels upto 26,000 DWT.



Ships under repair at Dry Docks

A 500 Meters Quay Wall is available on the northern end and 165 Meters on the southern end for maintenance / berthing of vessels as required.

### **General Engineering**

KS & EW can rightly be called “the first major heavy mechanical engineering industry of Pakistan”. Although KS & EW is mainly designed for shipbuilding, however, its role in support of industry and developmental engineering is prominent. It has a long record of service to industry and during slump in the Shipbuilding industry, has promoted further diversification of its general engineering activities.

The Engineering Division undertakes construction of Package Type Fire-tube Boilers of upto 600 HP - 250 PSI, Water Tube Boilers upto 80 tons/ hour, Pressure Vessels, LPG Tanks, Heat Exchangers, Storage Tanks of all kinds, Gates for Dams, Barrages, Conveyors and Elevators for Chemical, Petroleum and Cement Industries, complete Sugar Plants ranging from 4000 – 5000 TCD capacity, Sugar Mill Machinery, all types of Cranes, Steel Structures and Towers, Caravans, Overhead Steel Bridges and Sewage Treatment Plants etc.

### **Sugar Mill Projects**

KS&EW rightly be called the pioneer of manufacturing Sugar Mills. In past, projects for 10 complete sugar mills have been undertaken out of which 07 are in Sindh. Last Sugar Mill was delivered in 1997. Since then the focus was towards shipbuilding only. Presently the size of sugar vendor industry is Rs. 22 B. Accordingly, serious efforts have been made to revive this facility at KS&EW. Recently a contract has been won to fabricate and install machinery of Baandhi Sugar Mill in Sindh.



Self Setting Roller Mill for Sugar Industry

### **Yard Up-Gradation of KSEW**

In order to enhance capacity and to handle production on modern lines, KSEW has undergone extensive up-gradation. This up-gradation is worth billions of Rupees and has converted KSEW into a state of the art Shipyard which should be able to compete with the similar size yards in the international market.

### **Ship Lift and Transfer System (SL&TS)**

In Ship Repair Div. demand is much more than capacity. In order to meet the demand and boost the business activities installation of SL&TS has been decided.

The project for installation of Ship Lift and Transfer System to lift and park ships, submarines and commercial vessels for repair, was approved by the Government in Sep 2007. The Consultancy Services were hired and now the contract for SL&TS procurement and installation has been signed. Once completed, the project has great potential to attract a vast range of clients for repair and new construction of warships, submarines and commercial vessels.