Connectix Cabling Systems™

Connectix Case Study
Port of Felixstowe

During 2005 the single mode fibre was laid throughout ducts across the port before termination and testing. This was a major undertaking in an operational port with 24 / 7 working hours, high level security, exposed working environment and strict health and safety regulations.

Project Scope Overview	
Customer:	Port of Felixstowe
Installer:	Port of Felixstowe, Information Systems Department, Network Planning Division
Site Location:	Felixstowe, Suffolk
Requirements:	Single mode fibre optic ring
Requirements:	• 40 Single mode fibre optic cables (12 to 48 core) pulled into ducting servicing the whole port area • 375 Multi mode fibre optic cables averaging 650m long • Gigabit backbone supporting a range of applications across the port for PFL and their customers

Project Brief

Port of Felixstowe (PFL) is the largest container port in the UK, and one of the largest in Europe. PFL is a member of the Hutchison Port Holdings (HPH) Group. HPH is the world's leading port investor, developer and operator, with interests in 21 countries throughout Asia, the Middle East, Africa, Europe and the Americas.

Today, HPH operates a total of 251 berths in 43 ports, together with a number of transportation-related service companies. With industry-recognised core competence in the effective and efficient management and operation of ports, HPH Group handled 51.8 million TEU in 2005.

Felixstowe leads the port industry with its application of information technology. It pioneered the introduction of a computerised Customs clearance system in UK ports. Known today as FCPS, the system has developed through close co-operation between the Port, Customers and HM Customs & Excise. The system is regularly upgraded and enhanced to meet the evolving needs of the trading community; covering imports, exports, transhipments and DG declarations.

Through extensive use of proactive EDI, online access via the internet and a dedicated managed network, Shipping Lines, Agents, Forwarders and Hauliers carry out the majority of their business transactions electronically in real-time. This results in information becoming immediately available to those who need it, and eliminates unnecessary and time consuming paperwork. FCPS arose from the rapidly expanding volume of cargo being handled at Felixstowe and the resulting pressure this placed on manual documentation procedures.

Day-to-day operation of FCPS is vested in the Port of Felixstowe's Information Systems Department as the System Operator. The Port is also an end user in its capacity as a Terminal Operator.

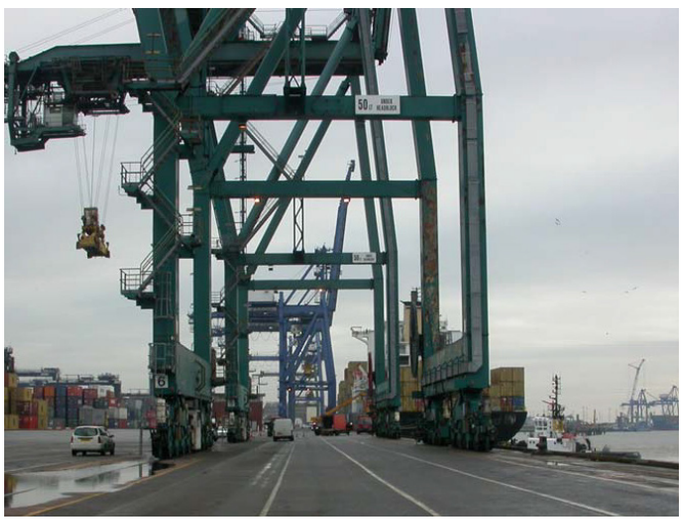
The Port of Felixstowe operates an extensive suite of computer systems which interface with the FCPS inventory control. These include container / ro-ro control (CHARTS), Navis (SPARCS) Ship and Yard Planning, RTG real-time work scheduling and recording (RTO), Tug Scheduling systems to control the allocation of work to Internal Movement Vehicles (TSS), a graphic based real-time management system (RTM), a park hazardous inventory system (PHIS) and a Rail Management and Control System (SCORPIO). All of which are designed to provide accurate up-to-date information on cargo passing through the port.

One of the key elements to this highly complex list of applications was a fast, rugged network linking Main Comms room, South Key, North Key, Substation, Centenary House, back up comms room and Wick House. This ring of single mode 48 core CST armoured fibre plus a couple of backup links amounted to 11Km of 48 core fibre (over 500Km of 9/125 core). Each link was terminated in SC APC connectors; then into 24 port SC patch panels before being patched into Cisco 6500 series switches, running rapid spanning tree protocol (802.1w). This ring forms the central nervous system for the port, without which it would become paralyzed. The network then spreads to a series of multimode links supporting the LAN environment for the port, customers and HM Customs & Excise.

"Connectix has supplied us with with quality fibre optic cable and components that have proved over the years to be reliable products that we can lay into our ducts without any issues. The price has to be competitive and we demand quality cable. We cannot afford any failures, this site is 24 / 7 and if the network failed we would have lorries queuing to Timbuktu. The port will continue to invest in IT over the coming years to ensure Felixstowe maintains its pre-eminent position and Connectix Ltd will certainly be considered as a trustworthy partner."
Manager at Port of Felixstowe

Connectix Case Study
Port of Felixstowe

SC patch panels in Centenary House communications room



Looking south along Felixstowe dock side towards Languard Terminal and Dock Basin

Estelle Maersk at the Port of Felixstowe the world's largest container ship