

PEM

Volume 34 Issue 6

November/December 2015

Port Engineering Management



HALL

AUSTRALIA | ASIA | PACIFIC

Port Maintenance

New maintenance management software chalks up efficiency gains

Advances in computer processing capability have been a key factor in the recent development of planned and predictive maintenance technology. Applicable across most business sectors, a more structured approach has generated particular efficiency gains in the international transport sector. Pioneered by the aviation industry, planned and predictive maintenance is now making significant inroads in cargo shipping, service vessel operation and, increasingly, port asset management.

A small company in the south of France is a leader in the field. With the largest team of experts in the country, Carl Software has 30 years of experience in the development of computer-aided maintenance management systems (CMMS) and enterprise asset management (EAM). So far, the company has remained focused on the domestic market but is now embarking on a more aggressive strategy to promote its products in foreign markets.

Its software, which can be tailored to meet client requirements, is already demonstrating significant efficiency gains in the Languedoc-Roussillon region of southern France. Systems are evolving all the time but its early roll-out began in 2012. The Regional Council there has adopted Carl Software's CMMS across three of its main areas of responsibility including the maintenance of two ports – Sète and Port-La-Nouvelle – by the Transportation and Communications Division. The Division's mandate covers maintenance of two dredgers and other service craft, ensuring that channels and berths are maintained and remain navigable at all times, and the maintenance of four hoistable bridges between the Thau lagoon and the sea at Sète.

Versions of the software have been adopted by other divisions of the Regional Council too. They include the management of the local authority's 87 high schools which cover an area of 1.5m m² by the Education Division, and the management of 35 buildings with a combined floor areas of 75,000 m² by the Real Estate and Logistics Division.

CARL Software executives outline some key system benefits. Specifically for ports, there are organisational, financial and technical benefits, all of which can contribute to improved productivity by deploying resources more effectively. As well as avoiding breakdowns



The Cap Croisette

by adopting a preventive strategy, the system enables a better distribution of in-house and subcontractor workload as well as improved cost control, improved safety procedures, increased equipment life, energy savings, fewer spare parts in storage and better human resource productivity by optimising schedules.

On the technical front, the software reduces downtime, improves equipment availability and flexibility, records a comprehensive history for all maintenance assets and components and enables staff to be kept better informed. When the time comes for renewing existing assets or procuring new ones, discussions between the production department and potential suppliers can be based on complete and reliable data. In a nutshell, maintenance strategies can be optimised.

In Sète, the port operations department is responsible for the upkeep of 15 kms of dock and 7 kms of quay wall, as well as the maintenance of the hoistable bridges and all maintenance dredging operations. As well as two dredgers, the department has several small workboats, a large workshop with boiler, electromechanic, machining and storage facilities, a design office and a staff including specialist divers, masons and a bridge operations team. Meanwhile, also in Sète, the Regional Council is responsible for all servicing and maintenance operations relating

to infrastructure such as docks and quay walls, as well as related equipment such as fenders, bollards and lighting on dolphin structures.

So how does the CMMS work and in what way is it helping to raise productivity? The system, operated by the latest software called CARL Source, tracks all work requests and enables the time spent on all infrastructure maintenance and repairs to be entered and analysed. The main aim is to provide accurate cost accounting based on real-cost calculations.

Since the beginning of this year when CARL Source was first adopted, the software enables the entry of all activities by port operations personnel according to the nature of the work. CARL Source is currently being implemented in the warehouse which will make the stock handling of more than 3,500 separate components more efficient by reducing inventories. The software is in the process of being configured for smart-phone and tablet operation.

The system is also used to manage the two dredgers – the *Cap Croisette* is a trailing suction hopper dredger deployed in maintenance dredging involving the annual movement of 180-200,000 m³ of shifting sandbanks and sludge in the channel to Port-La-Nouvelle. She is supported by a second dredger, a cutter suction dredger which is not self-propelled.

PEM

Logiciel de GMAO CARL Source

Profitez d'une GMAO adaptée à votre secteur d'activité

Industrie

Logiciel de GMAO pour l'industrie agroalimentaire, pharmaceutique, aéronautique, automobile...

[CARL Source Factory](#)

Immobilier

Logiciel de Gestion technique du patrimoine immobilier, des infrastructures et réseaux des entreprises du secteur tertiaire.

[CARL Source Facility](#)

Santé

Logiciel de GMAO pour le secteur de la santé et la gestion des équipements biomédicaux.

[CARL Source Santé](#)

Transport

Logiciel de GMAO pour le Transport et les flottes de véhicules : métros, bus, tramways, engins, camions...

[CARL Source Transport](#)

Collectivités et Administrations

GMAO et GTP pour les collectivités territoriales et administrations.

[CARL Source City](#)

Paroles d'experts
en GMAO

FAQ
Nos réponses à vos questions
les plus fréquentes sur la GMAO

Success Stories

Découvrez les témoignages des utilisateurs de nos logiciels de GMAO

Renault Trucks



[Découvrir la Success Story](#)

Les îles Paul Ricard



[Découvrir la Success Story](#)

ArcelorMittal SSC



[Découvrir la Success Story](#)

Vous souhaitez plus de renseignements sur nos solutions de GMAO ?

[Demander une documentation](#)



www.carl-berger-levrault.fr