

Port Autonome de Nantes Saint-Nazaire

A fault in Nantes dredger

The technical teams at the Port Autonome de Saint-Nazaire were obliged to act quickly due to a significant crack on the André Gendre Port dredge during its de-watering.



OUR CUSTOMER

Corporate name

Port Autonome de Nantes Saint-Nazaire

Workforce

700 people

Sales turnover

85,9 million euro

Country

France

Activity

Placed under the supervision of the Ministry of equipment, transport and territorial development, the port of Nantes Saint-Nazaire was created in 1965. It is the 4th largest french port after Marseille, Le Havre and Dunkirk and has connexions with nearly 400 ports in the world. It is in charge of extension and improvement works, of renewal and rebuilding, as well as of operating and maintaining the port and its extensions

Built in 1984, the dredger André Gendre is used regularly to clear the bottom of the Loire in order to maintain the waterway's depth between Nantes and Saint-Nazaire. When it was set in drydock for maintenance in April 2006, the engineering teams of the Port authority of Nantes Saint-Nazaire (PANSN) detects an important crack on the starboard main strut at the front of the crane holding the suction pipe.

One month for repairing...

Concerned about the safety of its teams, it calls upon Cetim's experts to repair this failure as well as possible.

"A nice challenge when you know that the technical stop was not to exceed one month" says Christophe Legal, in charge of production upstream maintenance at PANSN. And he adds: *"We are a maintenance workshop and have no research office. Analysing this failure required an engineering service able to carry out simulations and complex load computations"*.

... a 50 cm long crack

Analyzed in-depth, the crack (long of 500 mm) literally "cut" the main strut (a 4,8 meters long steel tube) on half its circumference. At the request of the maritime inspector on board, Cetim

studied and proposed a provisional reinforcement solution, achievable without heavy disassembling, including in particular the addition of a reinforcement having an optimized shape, able to take up the efforts which caused the problem.

...While waiting for the new crane

Launched again in May 2006, the dredger André Gendre will be stopped for of long time in December 2006. The teams of PANSN, which attended meanwhile a training at Cetim, prepare the design of a new crane, working particularly on the nodes and welded connections. *"We will call again upon Cetim to guide us in this task, since the dredger will still stay on duty probably for several years..."* concluded Christophe Legal.

Cetim's asset



- the reactivity in answering
- the teams' skill in the field of aptitude for use of structures submitted to high dynamic loads
- the listening and taking into account of the customer's specific needs