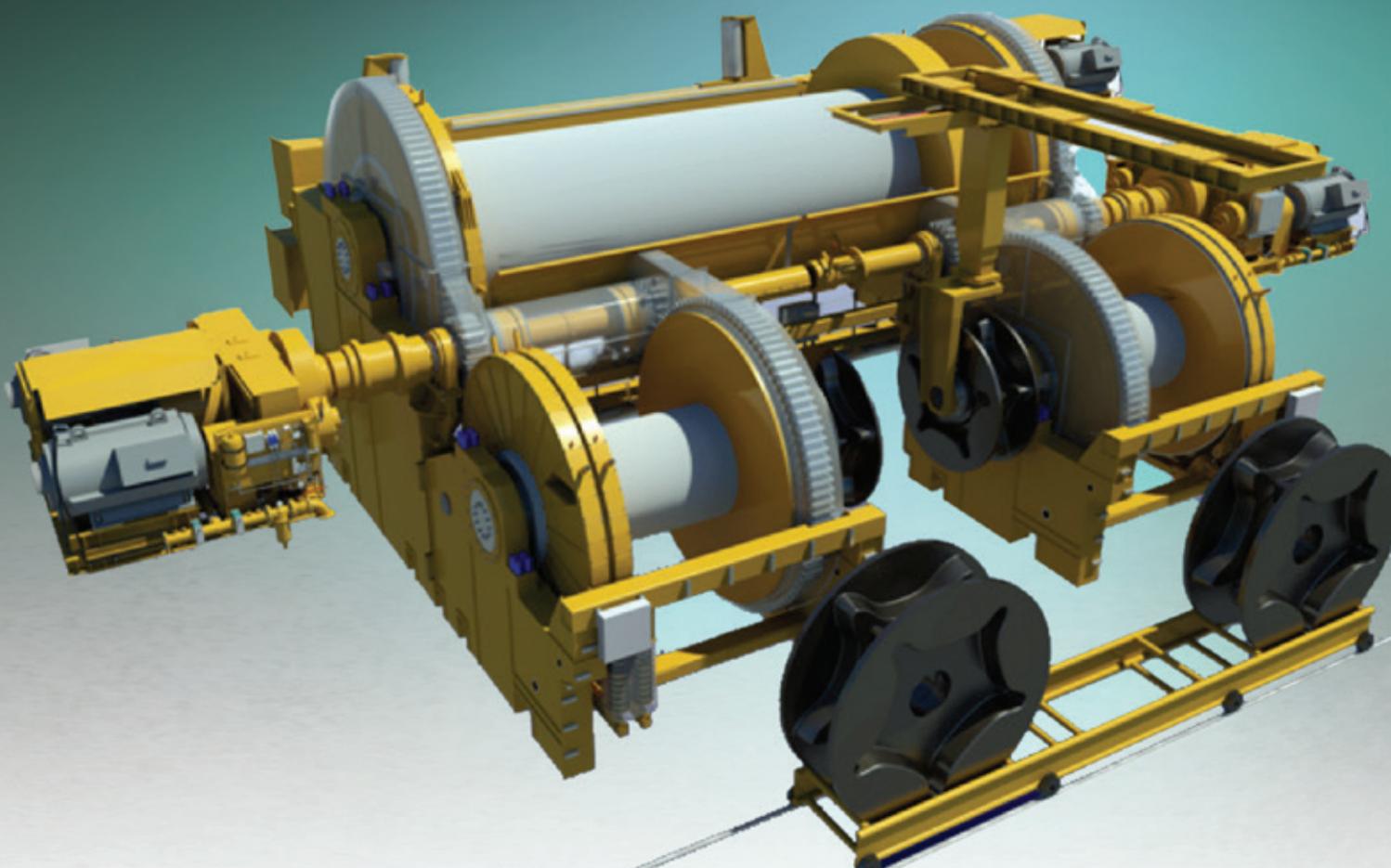


# Chain Wheel Replacement Tool



## Your partner for a Lifetime of Lifting

Major oil companies are now enforcing the requirement for an intelligent storage and manipulator system to replace wildcats (chain wheels) at sea when the vessel is rolling. To accommodate this it requires planning when the vessel is being designed, but a retrofit is also possible if space is available.

We have developed a set of tools, frame structures, and manipulators that will solve most challenges.

| Chain Wheel Replacement Tool (CWRT)       | Capacity and Performance | Chain Wheel Size | Weight   |
|---|--------------------------|------------------|----------|
| Extraction/Installation stroke            | 750 mm                   | 100 mm           | 4200 kg  |
| Horizontal frame stroke horizontal        | 3800 mm                  | 114 mm           | 4600 kg  |
| Vertical frame stroke                     | 400 mm                   | 127 mm           | 6300 kg  |
| (1) Rotation and handling arm             | From -90 to +90°         | 133 mm           | 7100 kg  |
| (1) Maximum vertical load on handling arm | 16 ton                   | 152 mm           | 11000 kg |
|   |                          | 165 mm           | 14000 kg |



# Chain Wheel Replacement Tool (CWRT-16T)

## The Chain Wheel Storage Rack

The chain wheel replacement system is built up by three different function units:

### (1) Wildcat storage rack (2) Wildcat extraction system (3) Wildcat transport frame

The storage system will provide room for four to eight chain wheels, or more. Racks are made to position and pick up the selected size wildcat. Several rack storage systems are available.

## Chain Wheel Extraction System

A high pressure extraction/installation hydraulic cylinder is built into the main winch shaft.

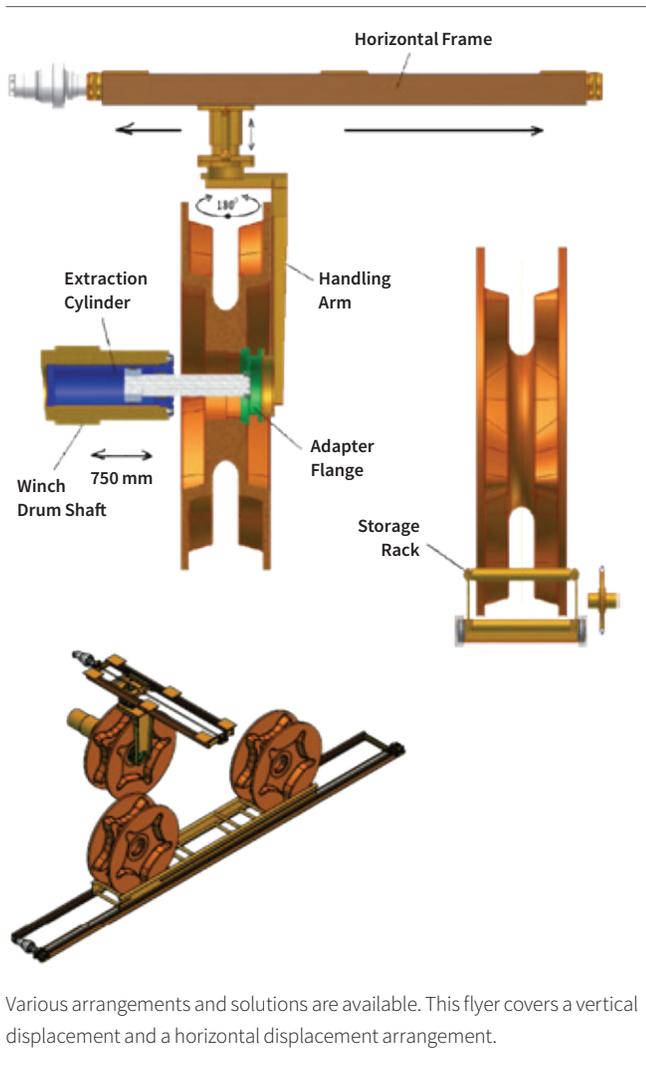
An adapter flange is used to connect the chain wheel with the cylinder piston on one side, and the handling arm on the other side, before wheel extraction. The cylinder piston rod is designed to hold the weight of the chain wheels.

The chain wheels often get stuck on the winch shaft and create trouble for the crew. This problem is now solved because the extraction cylinder will do the job.

## Horizontal Transport Frame

Several standard transport frame configurations and sizes are available.

The system is powered by an hydraulic motor that drives a planetary gear, that in turn drives a screw mounted along the frame. A matching nut is mounted on the moving frame. This carries the handling arm and its rotation drive.



Various arrangements and solutions are available. This flyer covers a vertical displacement and a horizontal displacement arrangement.

