

## **PROJECT PROFILE**

The Scripps Institution of Oceanography in San Diego is one of the most prestigious research facilities in the world. Its 6 research Vessels berth at the Nimitz Marine Facility in Point Loma, San Diego, CA, or MarFac for short. MarFac serves as the home port and technical support center for the Scripps oceanographic research fleet. MarFac can berth up to seven ships at a time, plus the research platform FLIP, along their 110-meter finger pier and 85-meter quay wall, with complete support for cold-iron berthing including power, potable water, telecoms, broadband, and other vital utilities.





In 2015, the berthing facilities, Wharf, Pier and all utilities were completely revitalized to prepare for the next century of Ocean exploration. The "Harbor Camel" manufactured by Harbor Technologies a division of the Kenway Corporation, was chosen by engineers to act as the primary fendering system for the Scripps Fleet. The Harbor Camel's are used between the ship and the pier or wharf structure. They provide a vessel

standoff from a pier or wharf and spread berthing loads across a number of fender piles, or footprint of a pier or wharf structure. They are usually allowed to float with the tide and are secured in the desired position through chains running through hawse pipes or connected to eyebolts. For more information visit our site at http://schraderco.com/harbor-technologies/ or contact us directly at the numbers below.

FLIP, the Floating Instrument Platform, is a very unique vessel and is shown below berthed next to the Harbor Camels...it is not a ship, but a 355-foot-long research platform that can be deployed for oceanographic research. Designed by scientists at the Marine Physical Laboratory, FLIP is operated by Scripps Oceanography for the U.S. Navy. Normally docked with Scripps's fleet in San Diego, FLIP can be towed to out to sea in its horizontal position and then "flipped" 90 degrees so that 300 feet of its length are under water. This turns FLIP into a "spar buoy," a tall, thin, weighty structure designed to be uniquely stable and resistant to wave motion.









For information on this project or the many other products that Schrader Company Sales represents, visit

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Schrader Co. presents environmentally-conscious products for the industrial marine market and other applications for a variety of uses including piers, wharves, marinas, bridges, boardwalks and seawalls.