



PROBLEM SOLVED™ PAPER

SOLUTION: Martin® Services

INDUSTRY: Bulk Transportation

LOCATION: Canada Steamship Lines Self-Unloading Vessels



CSL Spirit, the newest ship in the CSL International fleet, features a number of Martin Engineering products in the self-unloading ships material handling systems.

PROBLEM

To maintain leadership in self-unloading technology, CSL had set ambitious goals for the discharge systems of new ships, including simplicity, maintainability, increased load capacity, flexibility, high discharge rates and environmentally-friendly operation. In March 2001, the CSL Spirit joined sister ships Sheila Ann and Sophie Oldendorff as the newest additions to the CSL International fleet. These 78,000-ton vessels were built in the Jiangnan Shipyard in Shanghai, China. All three ships featured a patented gravity reclaim system developed by Seabulk Systems of Vancouver, Canada. For unloading, cargo is elevated to the deck by an incline conveyor and onto a fully enclosed tubular boom with a reversible shuttle for discharge to shore. The entire unloading system will be designed to minimize noise and for “zero tolerance” dust emission. The ships’ comprehensive dust management systems include 17 collectors each.

SOLUTION

Martin Engineering coordinated its customer service efforts to meet the needs of owners, designers and builders in locations spread round the world. Representatives of the International Sales Department worked with sales engineers from Engineered Projects Sales and Services (EPSS) to assist Seabulk Systems and the Shanghai Merchant Ship Design and Research Institute (SDARI) on the project.

RESULTS

For improved materials handling, a number of Martin Engineering products were specified and installed on the self-unloading systems on the CSL Spirit and her sister vessels. The Martin® Products installed include vibrators, Martin® QC1™ and SAF2™ Cleaners and Martin® ApronSeal™ Skirting.



The material handling system on CSL Spirit incorporates several Martin® Products.