

# FERRY LANDINGS



*Value-added resilience and security to your maritime structures*

**MAADI** Group knows how to optimize the design and manufacture of ferry landings and maritime structures to meet or exceed national and international design codes. Our vast engineering expertise in shipbuilding and ship design gives your maritime structures the value-added resilience and security that comes with our full complement of engineering services on every marine-related project.

Our engineers evaluate three key load considerations for each maritime structure:

- 1. Mooring and Anchoring Loads:** mooring loads are those imposed on a maritime structure when a vessel is tied up alongside, through contact between vessel and structure or its fendering system, and through tension in mooring ropes. Mooring loads in harbors and sheltered anchorages are mainly determined by winds and currents. MAADI designs your structure's anchoring system to sustain any wind or current velocities, in shallow or deep waters.
- 2. Berthing Loads:** through the berthing process, loads are generated between a vessel and its berthing structure from first contact until the vessel is at complete rest. Load magnitude depends on multiple factors: evaluating vessel size and velocity, nature of the structure including fendering, and degree of resilience under impact.
- 3. Gravity Loads/Buoyancy and Static Stability (Naval Architecture):** live loads are loads specified by maritime codes for various uses of restricted or unrestricted access and occupancies of a floating structure, covering occupants and movable equipment. Dead load is a structure's weight plus onboard services such as electrical cables and water supply. Minimum buoyancy force allows a maritime structure to remain floating in water when fully loaded. The marine structure is determined to be stable when able to float upright in still water and return to its original position if temporarily deflected to either side by external force.