

ITALY JUMBOIZATION OF 4 MSC CRUISE SHIPS IN PALERMO

| PROJECT | EQUIPMENT | WEIGHT |
|--------------------|--------------------|-----------------|
| H. INDU / SHIPBUI. | SKID SHOES / SPMTs | UP TO 13750 TON |



“Jumboization” is a term which means the enhancement of a ship by adding an entire section to it. Fagioli sometimes are called to perform this peculiar activity which involves the use of heavy equipment to execute the movement and skidding of entire huge ship sections. In Palermo, Fagioli were contracted by Fincantieri the equipment support to enhance a MSC cruise ship. The whole operation was divided in several steps. The cruise ship was long 182 mts, before the “jumboization” activity. First , within Fincantieri shipyard, Fagioli positioned some dedicated equipment to perform the operation of moving the bow of the ship ahead.

Once Fagioli equipment was positioned, the yard was filled with water to allow the cruise ship to enter into the dock. With a precise and delicate maneuver, the bow of the ship was positioned on top of the skid shoes while the stern laid onto concrete blocks. After the yard was freed from water, the ship was cut into two sections by the client.

The bow, cut from the rest of the ship, was weighing 13750 ton and was moved about 30 meters ahead. Pictures at the top show some details of the ship before and after the cutting operation.

Once the bow was moved away, Fagioli prepared 80 axle lines SPMTs for the transport of the new section. Detailed engineering studies were executed in order to minimize the risk of collision between the ship section and the walls of the yard.

The section was positioned onto supports while Fagioli trailers, thanks to the hydraulic suspensions were moved underneath. Once the whole load, about 1997 ton, was in charge of Fagioli SPMTs, the section was moved alongside the ship and inserted between the stern and the bow of the ship.

Each of the axles of the transporter moved independently and were monitored and controlled by the computerized control system of the transporter.

This system offered total flexibility of steering options with each wheel bogie able to swing through 260°(+130°). After the “insertion” activity, Fagioli scope of work was to bring back the 13750 ton bow of the ship in order to complete the jumboization process.

SPMT trailers adjusted and balanced the height of the new section allowing the alignment with the bow and the stern for the final phase of the operation consisted in the assembly of the whole ship by the client. The “jumboization” activity was successfully and safely completed on schedule.

The same operation will be repeated for three other cruise ships in 2015 using the same equipment.



On top: Section positioning by SPMTs



On top: Skid Shoes detail

