



02 Lightning and Storage unit "Alianza G2"

PROJECTS / Lightning



- Project
- Purchase engineering
- Direction and supervision of works

Design of a reception system in port side for the loading of grain, transferring system to port side with an intermediate weighing station, discharge to own cargo holds for storage or directly to a Panamax size (55 000 DWT) ocean vessel moored along the starboard side.

Length O.A.:	177,21 m
Beam:	21,00 m
Depth to main deck:	14,50 m
Draught:	9,15 m
Dead Weight:	37500 t
Transferring capacity:	1000 t/hr
Storage capacity:	37500 m ³
Unloading arms (500 t/hr):	Vertical operational range 0 to 15 degrees, Slewing range 0 to 45 degrees.



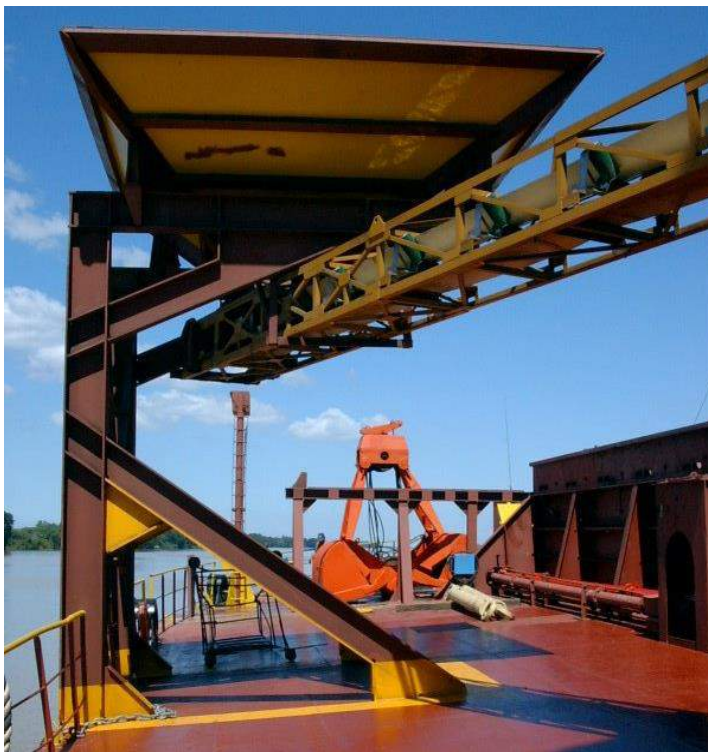
The design allowed receiving cargo directly from river barges transferring to ocean going vessels without the need of storage, complying customs and operational requirements.

The challenge was to accommodate all the bulky equipment in a deck completely taken by the side rolling hatches, without disturbing the opening area of the hatch covers.





Scale and discharge system



Cantilevered hoppers

To allow for the complete opening of the side rolling hatch covers.



Discharge arm turret
F.E.M. analysis.
Design of all the mechanical gears

