RIKON cranes: efficient bulk handling for ports and terminals

Bulk cargo moves a large share of global trade — coal, ores, sugar, sand, stone, and wood chips all travel from extraction sites to processing plants. That journey often starts at the quay. How quickly and cleanly you unload a ship affects everything downstream.

Unloading vessels and moving cargo smoothly is demanding work. Cranes sit at the centre of it. The right crane cuts cycle time, energy use, maintenance, and environmental risk. The wrong one adds cost for years.

RIKON builds fully electric, rail-mounted double-jib level-luffing cranes for grab unloading and related port work. Below is what that means for buyers — and why major ports choose them.

Built for bulk — and built to adapt

RIKON's RPS cranes are designed so the grab can move efficiently along the hold with controlled, level motion. With the right modes and attachments, they handle bulk, general, and containerized cargo — useful when commodity mix shifts.

RIKON also supplies turn-key packages with matched grabs and hoppers, so the system is engineered as one solution.

Throughput range:

Model	RPS-300
Capacity	400tph (tonnes per hour)
Up to RPS-1600	1,600tph

Standard models cover a wide band; custom builds scale capacity to the customer's layout and commodity. Cranes run in semi-automatic mode. RIKON is also capable of supplying the 'kangaroo' type of cranes, which feature a built-in hopper in the gantry.

Ports handling coal and other bulk often cite versatility, energy efficiency, and easier maintenance of RIKON cranes. Optional dust protection walls and dedusting filters help limit dust during handling — important for regulators, neighbours, and workforce conditions.

A specialist with a long track record

RIKON traces its roots to 1954; the modern company has operated since 1991. For 35 years, its core product has been the double-jib level-luffing crane — not a side line, but the main focus.

Reference sites include the Port of Marseille, Riga, Brest, and Isdemir, among others. Long-term operation at these hubs reflects judgments made on uptime and total cost.

Proven parts, transparent sourcing

Roughly 90% of components come from Germany and France. RIKON names actual manufacturers on the equipment and provides a spare parts list, so ports can buy from OEMs, regional dealers, or other approved channels.

Drives and controls use serial products from suppliers such as Siemens, Flender, Sibre, and Conductix — supporting shorter lead times and stock availability. For operations and finance, that means less risk when something fails at peak season.

Fully electric: lower life-cycle cost

RIKON cranes are fully electric — no hydraulics. Seaport experience shows hydraulic bulk cranes often carry higher operating and maintenance costs: more fluid, filters, and rope wear; specialized hydraulic skills; and typically higher power demand.

Electric drive means fewer leak points, more predictable maintenance, and no hydraulic oil on the quay — better for compliance and people working nearby.

Energy recuperation returns braking energy to the port network or the crane system instead of wasting it in resistors. AI-assisted collision avoidance and IoT structural health monitoring support safety and planned maintenance in busy terminals.



FOR DECISION-MAKERS

Priority: RIKON answer
Throughput: 400–1,600tph; custom options
Flexibility: bulk, general, containerized with right setup
Running cost: electric drive; energy recuperation
Spares & maintenance: standard components; transparent sourcing
Environment: no hydraulic leaks; optional dust control
Execution: in-house install and commissioning

RIKON has developed its own remote-operation system for gantry cranes, RROS, allowing operators to manage cranes from their offices. Use of RROS cuts health and safety risks in challenging environments, like bulk coal handling.

Safety first

RIKON electric cranes lower fire and environmental risks in coal handling — and remove the danger of hydraulic oil spills which may bond with coal dust.

Moving bulk cargo almost always kicks up dust. RIKON designs its systems to keep that to a minimum. RIKON cranes can be fitted with dust screens and dust filters to contain dust on site and clean the air where needed.

One partner through handover

RIKON performs installation and commissioning in-house — no outsourced handover. That tightens schedule control, reduces interface disputes on site, and speeds the path to first production shift.

International references include Grand Port of Marseille, Port of Brest, Madrid-Vicálvaro Intermodal Terminal, Riga Central Terminal (five cranes), Port of Brcko where RIKON cranes handle coal alongside other bulk cargo, Isdemir Port, port of Safi in Morocco, and Port of Batumi — where cranes have operated since 2013, with further deliveries reflecting continued confidence.

RIKON cranes move bulk off ships efficiently, reliably, and with lower long-term cost than many hydraulic alternatives. The right question is not only capital price — it is tonnes per hour, energy per tonne, downtime, spares, and compliance over the life of the asset. RIKON's customers involved in coal handling prefer this equipment for its versatility and safety.