BRUKS Siwertell
BULK HANDLING & WOOD PROCESSING



SIWERTELL SERVICE - INDIA

RELIABLE SERVICE ENSURES CONTINUED PERFORMANCE OF SIWERTELL SHIP UNLOADER

IFFCO operates a Siwertell 790-D screw-type ship unloader at its Paradeep terminal, handling bulk materials such as rock phosphate and sulphur. After 12 years of continuous operation, key vertical conveyor components required replacement to maintain reliability and ensure sustained operational efficiency."Following the replacement of the vertical conveyor components, the screw unloader is operating smoothly without vibration and is performing almost like a new machine," said Mr. B. K. Raul, Chief Manager (Mechanical), IFFCO Paradeep.

CUSTOMER NEED

To ensure correct installation and reduce operational risk, IFFCO requested Bruks Siwertell to take responsibility for the project as an EPC (Engineering, Procurement and Construction) solution, including supervision of the replacement of the vertical conveyor tubes and transport screws. The physical installation work was carried out by a qualified local contractor under close supervision by Bruks Siwertell's service engineers.

IFFCO's ship unloader plays a critical role in handling raw materials at the terminal. After over 18,000 operating hours, some parts on the vertical conveyor had never been replaced since the unloader was originally commissioned. Their replacement required meticulous planning and technical expertise to ensure correct alignment and installation of the vertical conveyor system.

Additionally, the project faced constraints due to a limited maintenance window between vessel operations. The available shutdown period was significantly shorter than standard requirements, making efficient planning and execution essential. To ensure adherence to OEM standards and enable rapid return to service, IFFCO opted for an EPC solution with OEM service supervision.

OUR SOLUTION

Bruks Siwertell executed the project through a comprehensive EPC approach, combining engineering expertise, component supply, and on-site supervision. Experienced service engineers were deployed to oversee the local contractor and ensure compliance with original design specifications and quality

FACTS

CATEGORIES:

- Service

MATERIALS:

- Sulfur
- Other

CUSTOMER:

Indian Farmers Fertilizer Co-operative Limited (IFFCO)

ADDITIONAL FACTS:

Unloader model	Rail-travelling Siwertell 790 D-type
Unloading capacity	1400-1500t/h
Maximum ship size	Panamax vessel up to 75,000 dwt
Total weight	725t

LOCATION:

Port of Paradeep, Odisha, India

FOR MORE INFORMATION, PLEASE CONTACT US

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standards.

To minimize downtime, extensive pre-assembly activities were carried out before the maintenance window. Conveyor tubes, screw sections, and associated components were prepared in advance, enabling efficient installation once the equipment was released.

The scope of work included:
• Dismantling of existing vertical conveyor components
• Installation of new transport tubes and vertical screw assemblies
• Installation and alignment of OD & ID bearings
• Handling and installation of the vertical gearbox
• Complete alignment checks of the Vertical conveyor system

IFFCO emphasized the importance of OEM presence during critical installation and alignment activities. The Bruks Siwertell team ensured high technical precision, structured planning, and effective execution throughout the project."The Bruks Siwertell supervision team provided excellent technical support. The work was executed with careful planning, clear scheduling, and strong technical guidance," added Raul.

Following installation, the system underwent a complete commissioning sequence. The vertical conveyor performed smoothly during trials, and the unloader was successfully returned to operation.

CUSTOMER RESULTS

Through the replacement of critical components and execution under OEM supervision, IFFCO has significantly enhanced the reliability and performance of its Siwertell ship unloader.The machine is now operating efficiently while handling rock phosphate, achieving unloading rates of approximately 1400-1500t/h, even under challenging conditions such as high moisture content.

"Overall, the replacement of the vertical conveyor components and the supervision provided by Bruks Siwertell have significantly improved the performance and reliability of the ship unloader," concluded Mr. Raul.