bulk solids handling Journal



Case Study

Railroading of Phosphate

Edited by on 28. Nov. 2023

Published in bulk solids handling, Vol. 2 (1982) No. 4

Agrico Chemical Company, a leading phosphate producer and processor in Florida s Bone Valley area, is the proving ground for a new manual door operating system which Ortner Freight Car Company has developed for its Rapid Discharge aggregate car. Dubbed the Versalok, the new system enables one man to open and close a Rapid Discharge car's doors from either side of the car with a simple twist of a spud bar.

Fifteen Versalok-equipped cars went into service in January 1981 supplementing the 215 "wet rock hoppers that Agrico already owned. Although the company's involvement with railroading is no longer as heavy as in the time when it had an interest in the old Charlotte Harbor Northern there is still a significant commitment to rail, transportation on .Agrico's 65,000-acre site.

In addition to the 230 wet rock cars, Agrico owns 13 locomotives and maintains 63 miles of track, 21 miles of which is 115-pound welded rail. The rail system and equipment fleet are the largest owned by any phosphate operation in the area. While other companies in the area marshal cars for the Seaboard Coast Line with random manpower Agrico has five specific railroad crews on duty per shift 30 men every 24 hours. It also has its own set of railroad rules and regulations to follow.

With its historical founding. in railroading, it was natural for Agrico to expand its in plant system as mining operations gradually stretched further from the main drying and blending area at company headquarters in Pierce. The SCL moves the company's products from Pierce to the Port of Tampa, but Agrico still has plenty to handle between the far-flung mines of Payne Creek. Fort Green, the chemical works at South Pierce, and the drying operation at Pierce (Figs. 1, 2 and 3).