Westinghouse Electric Corporation Engineering and Instrumentation Services Division 875 Greentree Road, Bldg, No. 8 Pittsburgh, Pennsylvania 15220 Descriptive Bulletin 49-062

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New Information
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Dragline/Shovel Control Revamp



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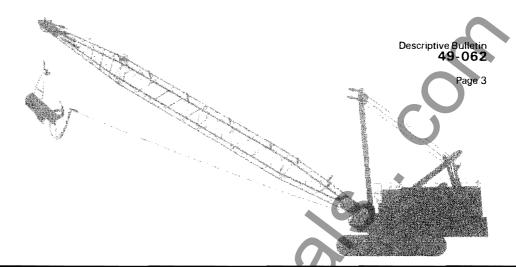


Dragline/Shovel Control Revamp

- 1. Westinghouse improves control regulators with state-of-the-art components.
 2. New components are skillfully assembled in modular configurations.
 3. Westinghouse engineers work on-site to assure accurate, timely conversion.







Innovative Modernization Techniques from Westinghouse Engineering & Instrumentation Services

The Westinghouse Engineering & Instrumentation Services Division (E&ISD) is one of the largest and most experienced industrial service organizations in the nation. With more than 80 fully-staffed Engineering Service Offices throughout the continental U.S., E&ISD has complete local capabilities to provide a wide range of electrical and mechanical equipment services in three broad categories: installation, physical maintenance, and engineering advisory services.

At E&ISD, we have established an ongoing program to identify emerging customer needs, and evolve effective service technologies and procedures to meet them. The Dragline/Shovel Control Revamp is just one of many capabilities we have developed in order to enhance both the quality and scope of service options available to our customers.

Dragline/Shovel Control Revamp by Westinghouse quickly replaces existing regulators with new and more efficient regulators to optimize power output, minimize instability and improve the productivity of your dragline/shovel operations.

Control Revamps for Improved Stability and Added Responsiveness

Original control equipment on vintage draglines and shovels are subject to operating instabilities which can contribute to machine downtime.

Revamping by Westinghouse is achieved through replacement of existing regulators, including Westinghouse M-2 and M3 magnetic amplifiers, F-56 and F-100 pulse position modulators and equivalent General Electric components. Replacement regulators are current production, high-efficiency components in modular configurations with easy plug-in circuit board installation. A complete revamp includes installation of regulators, power supplies, TPM and isolation transformer. In some cases Westinghouse can perform partial revamps, or perform a complete revamp in phases.

If required, Westinghouse can prove the revamped system prior to permanent installation. This is accomplished by leaving the existing control functioning in parallel operation with the new controls. When the operation of the new system has met or exceeded design requirements, one additional shutdown is scheduled to permanently install the new controls. At that time the old control is decommissioned.

Features

Replace vintage regulators with current-production, state-of-the-art components—improves regulator efficiency and response time, and optimizes power output without corresponding overshoot. Minimizes instability and drift. In addition, ready availability of renewal parts reduces maintenance and inventory costs.

Retain existing generators and operator interface—promotes quick installation for faster conversion turnaround.

Uniform replacement configurations—permits standardization of several generations of control components while reducing parts inventory requirements.

Simplified troubleshooting—new control components permit faster identification of problems or malfunctions in control systems. In addition, the problems associated with complex set-up and re-tuning can be eliminated when you revamp with current-production control components.

Westinghouse Engineering Service Locations*

Alabama Birmingham 35209 133 West Oxmoor Road Suite 205	205-942-7432	Kansas Overland Park 66210 (8900 Indian Creek Par Building 6, Suite 200
Mobile 36607 3400 Meador Drive	205-473-8642	Kentucky Louisville 40208 2605 South Fourth St.
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Unit 3-C 1500 W. Hampden St	303-987-4269	Monroe 71202 506 South Third Stree
Florida Tampa 33619 8507 Adamo Drive	813-837-7537	NewOrleans (Metaine 3500 N. Causeway Bo Suite 118
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Washington Seattle 98168 10831 E. Marginal Way. South	206-292-4047
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West Virginia Beckley 25909 Route 21 North P.O. Box 8	304-255-4121
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Wisconsin	
Appleton 54952 1487 Kenwood Center	414-725-8099
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205 Bishops Way P.O. Box 1000	414-786-0260
Wyoming Casper 82601 1850 East F Street	307-266-3260
Green River 82935 P.O. Box 462	307-875-4910

*The offices which appear above represent a partial listing of Westinghouse Engineering Service offices located in the United States. For a complete list contact your closest office or call the Westinghouse Engineering Information Center at 800-441-3134. Outside of the continental U.S. call 412-928-2559.

Charlotte 28232 2001 W. Morehead St

Refer calls to Charlotte Office

Wilmington

505-265-6647

704-377-7710

Houston 77020

San Antonio

5722 Clinton Drive

Refer calls to Houston Office

713-675-9667

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