

NX interlocking controls switches and signals at entrances to receiving yard.

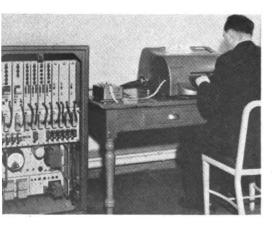
British Open New Class Yard

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● British Railways latest automatic yard is at Margam, on the Western Region in South Wales. This new automatic retarder classification yard features radar, an analog computer, cab signaling and punched tape programming for automatic switching. The yard has 12 receiving tracks and 50 classification tracks. It is capable of classifying 4,500 cars daily and can handle 220 trains arriving and departing each day.

An NX interlocking controls switches



and signals at the entrances to the receiving yard. Complete automatic control is provided on the master and all group retarders. These retarders are of the electro-pneumatic type. Actuation of wheel detectors, a weight detector, as well as information fed in concerning the physical characteristics of the yard, enable the analog computer to calculate the proper amount of retardation to be applied at the master and group retarders. Distance to go information from each class track is also fed to the computer. The hump locomotives are equipped with cab signals for displaying humping indications. These indications are sent through the track superimposed on the normal track circuit and detected by inductive receiver coils on the humping locomotive.

Two-way radio is provided between yard engines and the yard office. A radio transmitter on the switch engine working in the receiving yard, provides communication between this engine and the yard office. Two-way loud-speaker communication is provided between the yard office or control tower,

Classification track destination of each car is set up on reperforator. receiving yard tracks, and the east end of the classification tracks, as well as other locations in the yards.

Information concerning classification track destination of each car or cars in an arriving train is set up on a reperforating teleprinter. The perforated tape is then fed into the tape reader. This is started by a pushbutton on the control panel and feeds information regarding car destinations into the electrical storage system. The positioning of switches for successive routes is governed by track circuits. A separate track circuit is used for each switch and intermediate track circuits between the switches are also used. Each track circuit is short enough to reduce to a minimum the space which must be maintained between cars, but is longer than the maximum wheel base in use. When the tape is started, if the yard is clear, the switches will be set for the destination required by the first car or cars. When these pass over the switch, the first indication storage is cancelled and the remaining indications are moved up. Through the occupation and clearance of these track circuits the switches to the classification tracks are automatically set according to the destination of the approaching cars recorded on the perforated tape.

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