

# Britain's First Automatic Yard

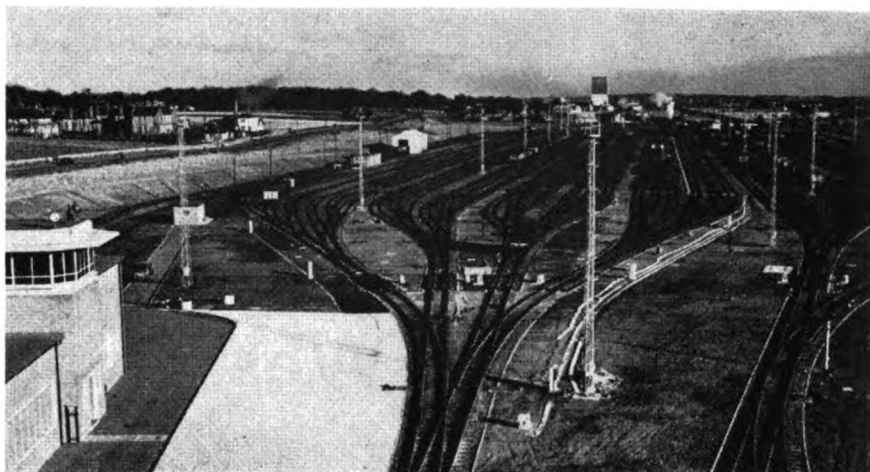
By H. C. Towers\*

THE FIRST FULLY AUTOMATIC gravity classification yard in Europe was brought into operation in January 1957. This yard is at Thornton, on the Scottish Region of British Railways, and is situated in the heart of the Fife coalfields. It was constructed to cater satisfactorily for the planned expansion of output from the coalfields and forms part of a complete plan prepared by the railroad for the replacement of a number of classification yards, concentration and assembly points throughout the region, by a smaller number of fully mechanized modern yards. The classification yard at Thornton employs new technical devices for automatic sorting, speed control of cars and automatic operation of the points leading to the sorting sidings.

It was recognized that modern installations were needed to replace the small inadequate uneconomical yards originally constructed in the early days of railroads in Scotland and scattered throughout the area. The site for the yard was selected in consultation with the National Coal Board, to occupy a central position in the colliery area and at the same time be free from mining subsidence. During the next decade an additional 15,000 tons of coal per day will be mined in the area and a considerable portion of this will pass through Thornton. At present, the volume of traffic in each direction is roughly equal.

Features of the yard include talk-back speakers and closed circuit television. The latter provides the yardmaster with a view of the sorting sidings and the hump. A diesel engine-alternator set provides complete standby power supply.

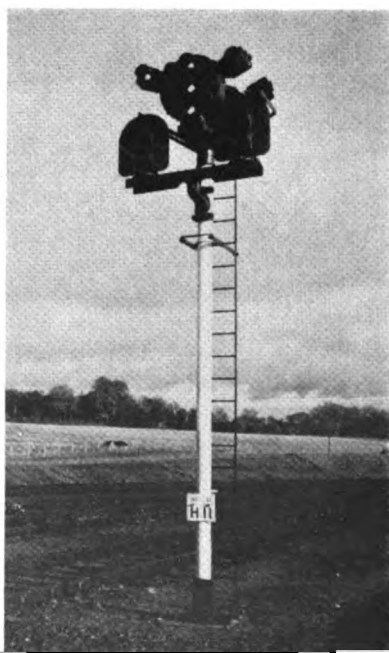
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A general view of Thornton Yard, Britain's first fully automatic yard.



One of the secondary retarders. Radar head can be seen between the rails at the lower end. Points are also thrown by air motors.



The hump signals are comprised of a line of three lunar white lights for each indication. The illumination of three lights arranged horizontally indicates "Stop," three lights at an angle of 45 deg indicates "Hump Slow" and three lights arranged vertically, "Hump Normal." These signals are surmounted by two wing application lights, fixed each side of the main aspect. Only one of these is illuminated at a time and indicates to which reception track the signal applies. Each signal is double-faced so that the indication it is displaying can be conveniently observed from any position on the reception line. The hump signals are provided with engine release signals fixed underneath the hump signals and which display red and yellow aspects.