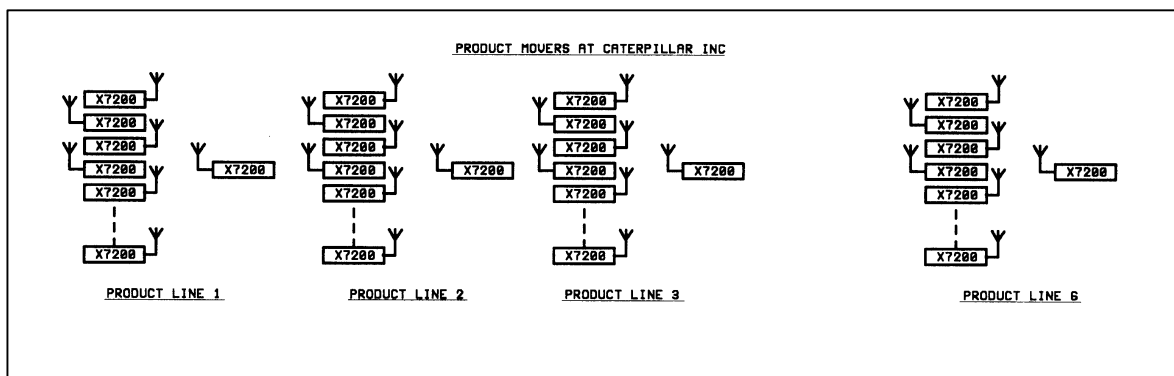


Overview

Caterpillar Tractors required a system to provide real time manufacturing data for every part assembly in the factory. Tractors in the plant are manufacture on powered mobile product movers therefore the only means of communication was by X7200 Radio Modems.

Six production lines were automated requiring 30 radio modems on each. As each production line had to be operated independently, six RF frequencies were needed. In addition the radio modems on different frequencies had to operate in close proximity with each other. This was achieved by selecting 6 frequencies out of the 17 available on the UK licensed exempt band which were separated by the maximum amount.



System Specification

Each production line was controlled by an Mitsubishi A1S PLC. A X7200 was connected to the C24 Communication port. Each of the 30 product movers contained Mitsubishi PLC and a X7200 Radio Modem. The PLC used its standard protocol to communicate with the PLCs in the product movers.