

DATA LINK CONSIDERATIONS FOR INDUSTRIAL APPLICATIONS



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ABSTRACT

The benefits of increased production, more predictable product quality and greater return on investment can be directly related to improved process control.

The micro electronics development and manufacturing explosion has provided unusual opportunities for control system engineers to implement improved control system design. The most recent opportunity for these benefits is the present day distributed control systems. These systems exist only because of the microprocessor-base controller, video displays and communication links. The basic elements of this system are equipments, programming and data movement. It is this later element, data movement, with the associated programming that is the thrust of this presentation. The initial portion addresses data. The second portion address the movement.

Plant locations, geography, environment, materials, processes, and products are only some of the factors that determine the kinds of data. The types of data that are utilized in industrial applications are analyzed and characterized for consideration.

The movement of data is discussed with respect to equipment feature, transmission rates, distances between equipments, conformance to standards, programing and other pertinent factors. The types of equipment presently available are analyzed and characterized for considerations.

A discussion of future developments will conclude the presentation.