Material tracking in tubing manufacturing

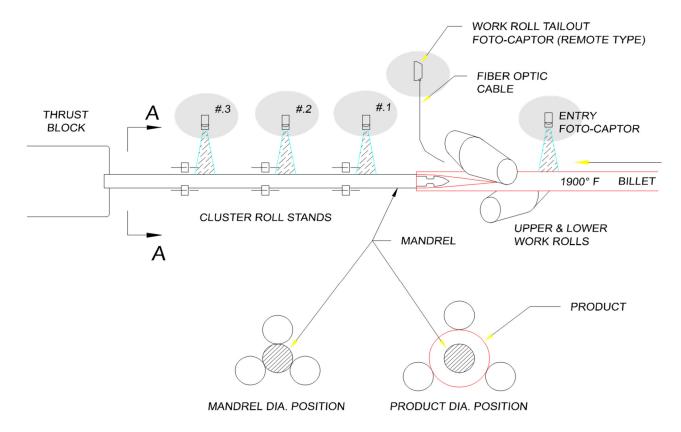


INTRODUCTION

The environmental conditions in the steel industry are a challenge for any type of control equipment.

High temperatures, vibration, excessive dust and contamination are setting the limits for standard equipment.

Foto-captors and proxi-captors have been designed and carefully built to meet the specific demands of the steel industry.



PROBLEM:

When manufacturing seamless tubing, material tracking must be enforced for smooth automated manufacturing operation.

SOLUTION:

Installation of foto-captors at specific locations to signal control equipment and track product through the manufacturing process. (1) The entry foto-captor signifies the entry of the tubular billet into the rollers and the start of the process. (2) As it travels between the rollers and exits, it is picked up by the tailout foto-captor to signify the start of engagement of the mandrel with stock material. (3) The billet is rolled over the mandrel by the angle and direction of rotation of the rollers. As the material is formed it travels down the mandrel into a set of rollers for more forming, billet length of travel is signified by foto-captors 1,2 or 3.

BENEFIT: The foto-captors are an essential and integral part of the reliable automation system.

