

# Chapter 8

## Digital and Analog Interfacing Methods

# Lesson 14 Part a

## MCU based Instruments – Metal Position Proximity Sensors

# Position Proximity Sensors

- Motion detection (i) for a moving wind cup in a wind-velocity instrument or (ii) for finding the motor rpm
- Counting the capped bottles passed in proximity by checking the metallic cap on a bottle in a bottling plant

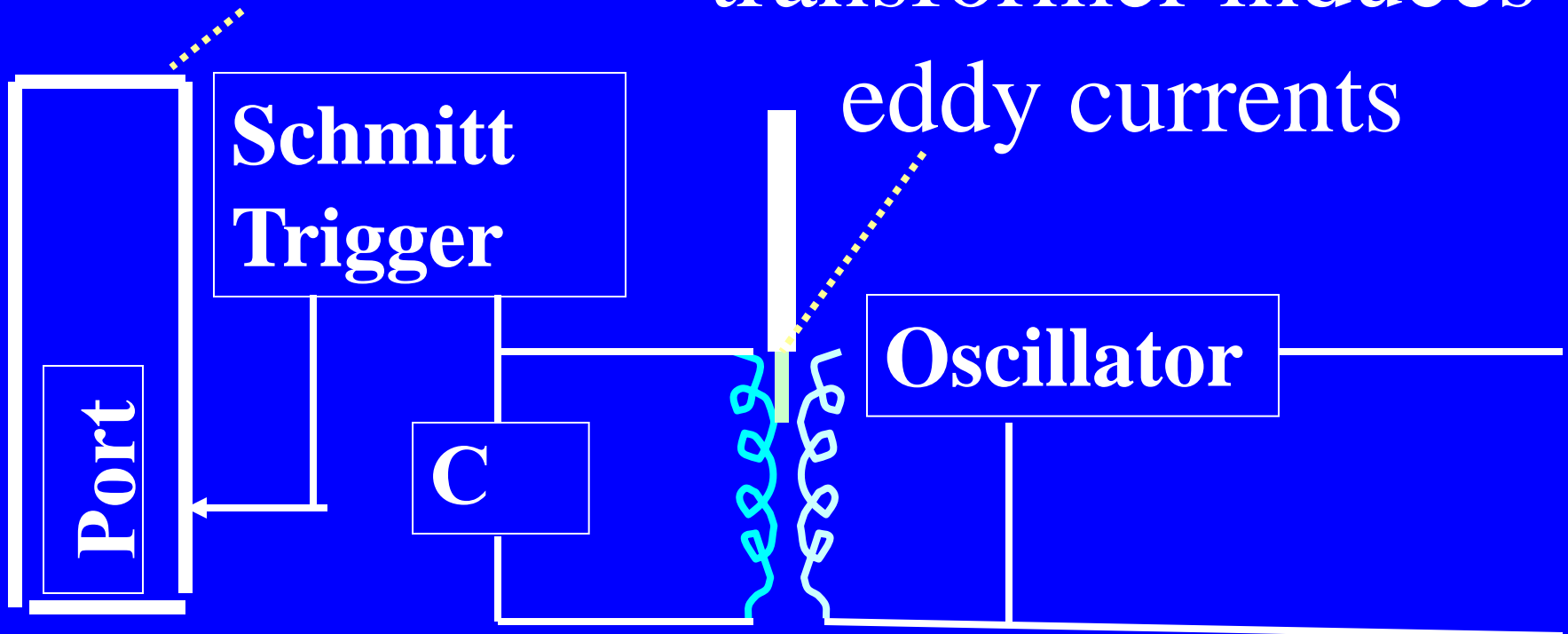
# Position Proximity Sensors

- Counting the coins
- Broken part detection
- Position index sensing

# Metal Object Proximity Sensor

# Metal Object near a transformer induces

MCU



# Summary

# We learnt

- Metal sensor senses eddy currents change when near a transformer



# **End of Lesson 14 Part a**

## **MCU based Metal Proximity Sensor**