

Non-nuclear Dense Medium Controller (DMC)

Application

The function of the non-nuclear DMC is to measure and automatically control the Ferrosilicon and Magnetite circuit density in Dense Medium Separation Plants as utilised in coal, iron ore, chrome and diamonds.

Features and Specifications

- ◇ Continuous real-time density measurement and display, indicating set points and other parameters
- ◇ Non-nuclear density measurement device
- ◇ No moving parts
- ◇ Non-obtrusive to flow – no pressure drop
- ◇ Density measurement independent of flow rate
- ◇ Density range:
 - ◇ Magnetite slurry [S.G.] 1.000 to 2.200
 - ◇ Milled FeSi slurry [S.G.] 1.000 to 3.800
 - ◇ Atomised FeSi slurry [S.G.] 1.000 to 4.500
- ◇ Accuracy of ± 0.01 SG from setpoint
- ◇ 4 to 20mA, 0 to 20mA, 0 to 24mA or 0-10VDC output signal for remote density indication and recording
- ◇ Supports various intelligent fieldbus standards
- ◇ Fully automatic operation
- ◇ In-field, one point recalibration – no process adjustment or shutdown required.
- ◇ ON-OFF and PID output control to achieve desired density.
- ◇ The DMC Unit is currently available in 7 different transducer pipe sizes viz. 50mm, 75mm, 110mm, 160mm, 225mm, 315mm and 355mm outside diameters
- ◇ A 220V/50Hz power supply is required

