

# PDP

## Plant Design and Configuration

**Introduction** Having looked at the various individual components – crushers and crushing; feeders and screens; washing, dewatering, silt/slimes treatments; and conveyors – this PDP will assemble those components into a complete plant. This can never be a straightforward process, as any individual plant will be configured to cater for the type of material, market needs, funds available and the individual experiences of those responsible for the design and procurement process. These, and other issues, will be looked at in more detail as the PDP progresses through the plant design process.

**Duration** The program is delivered over 0.5 day

**Potential Participants** New comers to the industry and those progressing into plant and quarry management to understand the types of equipment they are likely to encounter, as well as how to optimize their use.

**CPD Points** 3 points

**Topics Covered** This PDP is delivered across 41 topics.  
Topics include:

- Plant Concept
- Mobile Plant
- Operational Parameters
- Market Analysis
- Plant Overview
- RoQ Grading Analysis
- Primary Gyratory Directed Feed
- Primary Gyratory Installation
- Primary Dump Hopper
- Plant Phase 1
- Jaw Configuration
- Plant Phase 2
- Primary Discharge
- Plant Phase 3



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Surge Pile  
Surge Pile Tunnel Recovery Feeders  
Chute Design  
Tunnel Recovery and Plant Feed Conveyors  
Plant Phase 4  
Secondary Crusher  
Controlling Top Feed Size  
Optimising Cone Production  
Cone Crusher Feed and Selections  
Avoidance of Waste  
VSI Tertiary Crusher  
Plant Phase 5  
Screen Considerations  
Plant Phase 6  
Chutes and Transfer Points  
Bins and Chute Liners  
Conveyor Considerations  
Product Storage  
Environmental  
Dust Control  
Dust Suppression  
Dust Collection  
Encapsulation and Enclosure  
Noise Abatement  
Visual Impact  
Water Conservation  
Community



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