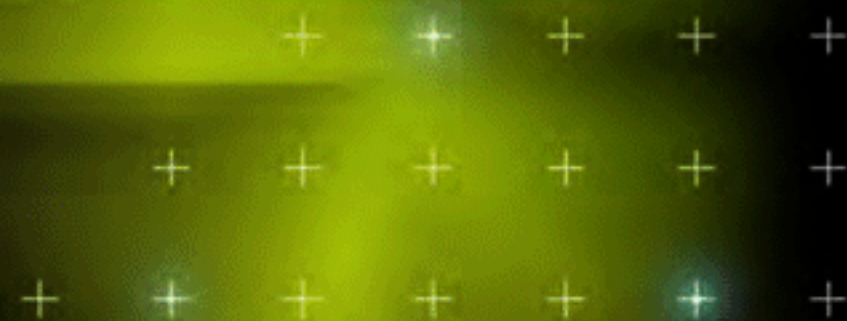




CLEANPROTECH
CLEAN | PROCESS | TECHNOLOGIES

**ONLINE
SLURRY
PARTICLE
DENSITY
METER**

PRODUCT BROCHURE



Innovative technologies for efficient
resource processing solutions

THE CLEANPROTECH ONLINE SLURRY PARTICLE DENSITY METER (OSPDM) IS USED TO DETECT THE AMOUNT OF SALEABLE COAL BEING LOST TO TAILINGS IN A CHPP.

THE OSPDM PROVIDES THE USER A REAL TIME VALUE OF SALEABLE COAL IN TAILINGS AND ALLOWS YOU TO TRACK CHANGES IN TAILINGS QUALITY. THIS GREATLY AIDS IN OPTIMISATION OF THE FLOTATION CIRCUIT AS CHANGES ARE MONITORED 'ONLINE'.
NO WAITING FOR LABORATORY ANALYSIS RESULTS!

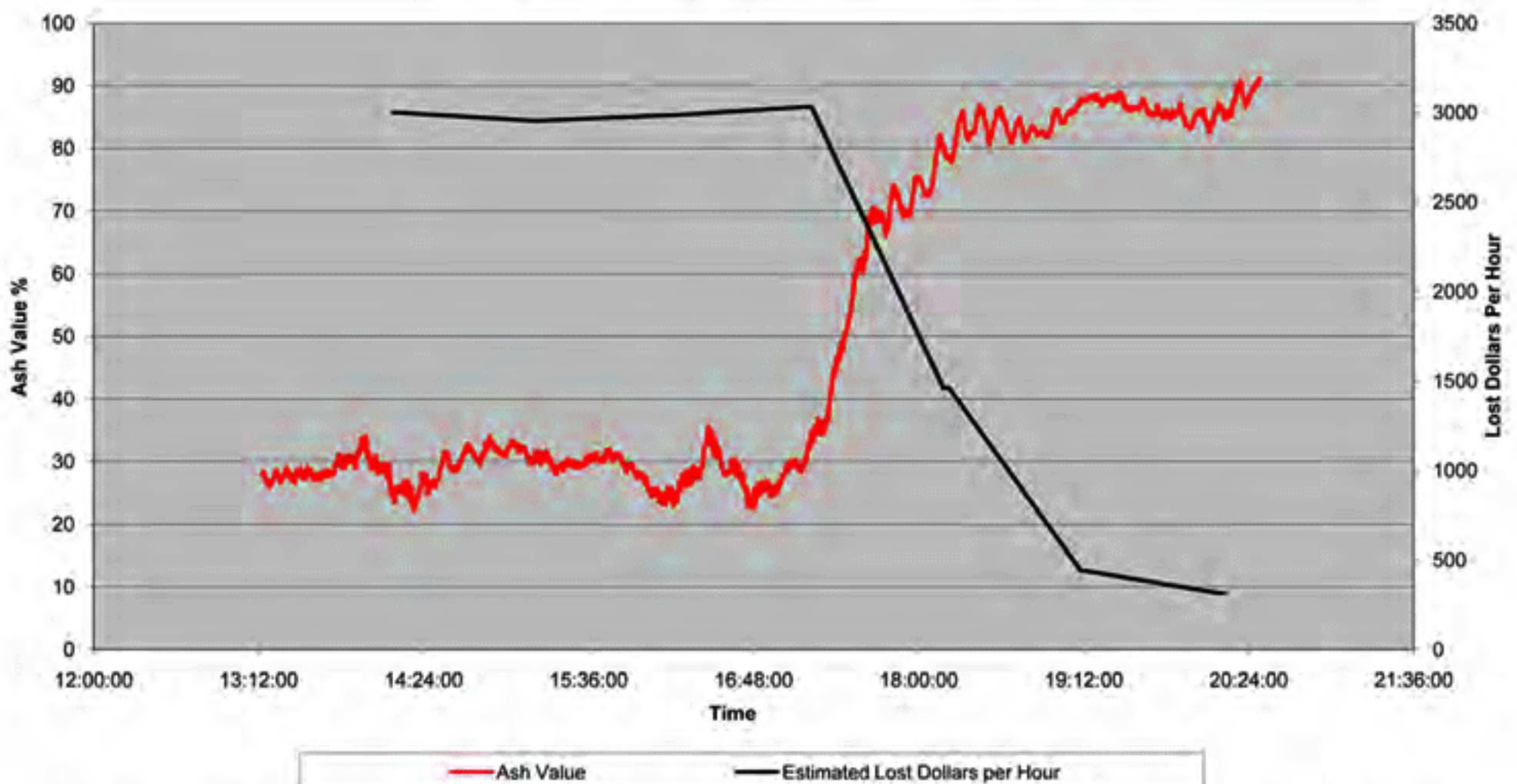
BY MONITORING IMPORTANT SLURRY PARAMETERS SUCH AS SOLIDS CONCENTRATION AND DENSITY, THE OSPDM IS ABLE TO ACCURATELY CALCULATE THE AVERAGE DENSITY OF THE PARTICLES FLOWING THROUGH THE UNIT.

THIS AVERAGE PARTICLE DENSITY VALUE WHICH IS USED TO ESTIMATE THE AMOUNT OF SALEABLE COAL PRESENT IN THE STREAM.

THE UNIT CAN ALSO BE TAILORED TO OUTPUT '% ASH' VALUE IF REQUIRED*.

(*CALCULATION OF ASH VALUE USES ASSUMPTIONS RELATING TO REJECT PARTICLE DENSITY WHICH MAY NOT BE CONSTANT IN ALL CASES.)

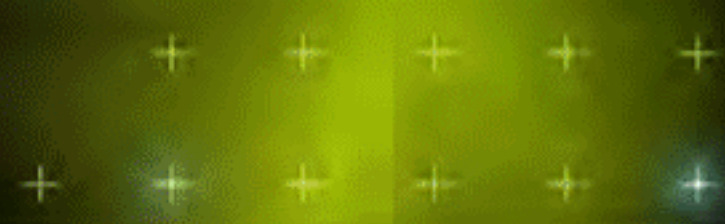
Tailings Ash Value vs Lost Dollars in Saleable Coal



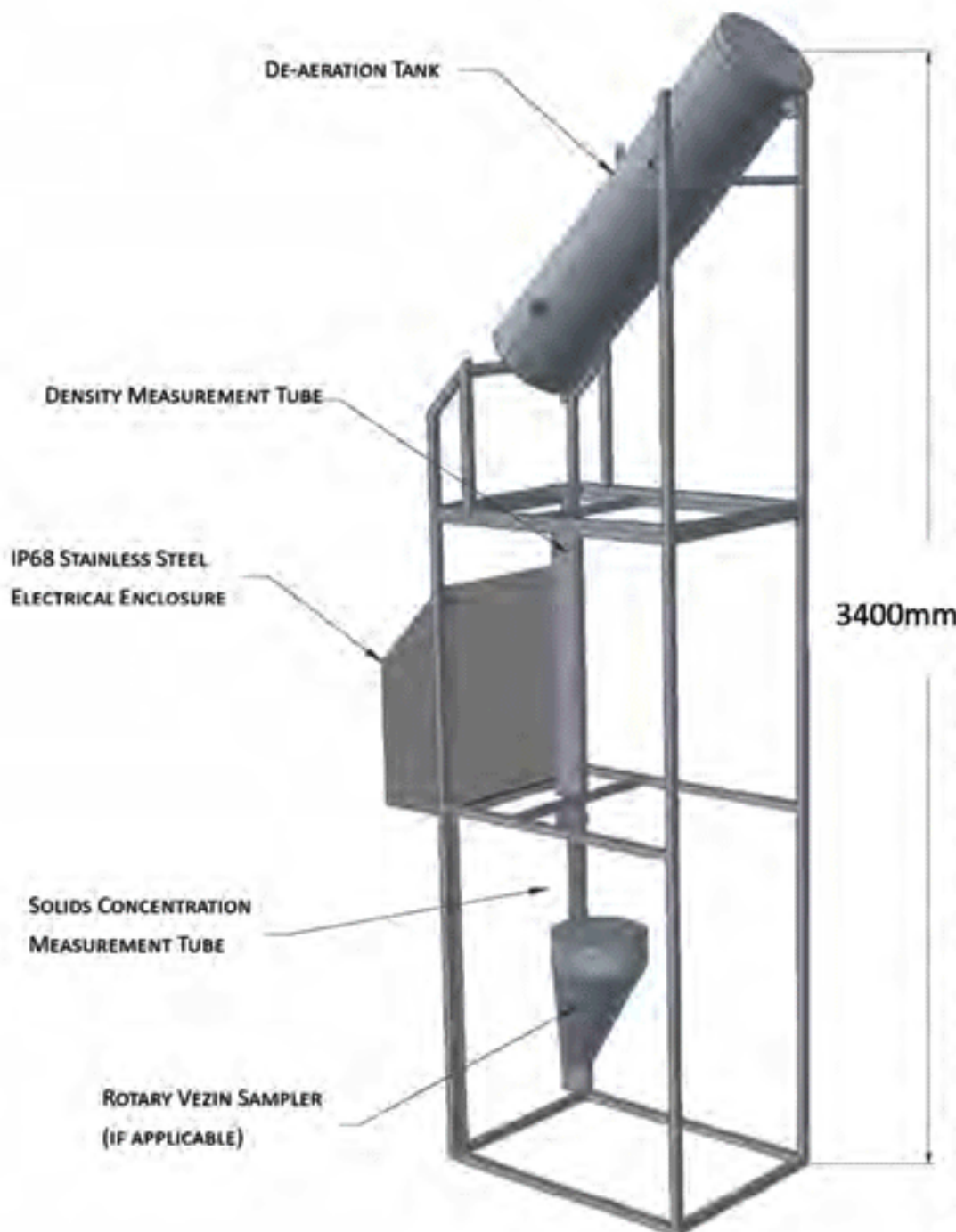
USERS WILL BE ABLE TO SET PARTICLE DENSITY TARGETS FOR OPERATORS TO MAINTAIN FOR VARIOUS SEAMS AND COAL TYPES.

A UNIQUE HYDRAULIC VALVE IS USED TO CONTROL SLURRY FLOWRATE THROUGH THE OSPDM. THIS REMOVES ANY POTENTIAL FOR BLOCKAGES THAT WILL OCCUR IF CONVENTIONAL, MECHANICAL VALVES OR ORIFICES ARE USED.

THE OSPDM ALSO INCORPORATES AN AUTO BACK-FLUSH SYSTEM THAT ACTIVATES WHEN A 'NO FLOW' SITUATION IS PRESENT.



ALL MEASUREMENT DEVICES ARE SUPPORTED WITHIN A FREE STANDING SUPPORT FRAME WHICH MEASURES 600 mm (w) x 1200 mm (d) x 3500 mm (h).
ALL ELECTRONICS ARE HOUSED WITHIN AN IP68 316 STAINLESS STEEL ENCLOSURE, WHICH IS ATTACHED TO THE FRONT OF THE FRAME.



POWER REQUIREMENTS:

THE OSPDM REQUIRES 24 VDC AT 5 AMPS.

COMMUNICATIONS REQUIREMENTS

THE OSPDM CAN BE TAILORED TO PROVIDE OUTPUTS FOR THE FOLLOWING:-

- AVERAGE SOLIDS PARTICLE DENSITY
- SLURRY DENSITY
- TOTAL SOLIDS
- SUSPENDED SOLID
- DISSOLVED SOLIDS
- ASH VALUE (%)*
- SLURRY CONDUCTIVITY
- SLURRY TEMPERATURE
- POWER FAIL ALARM
- FLOW ALARM / BACK FLUSH ALARM

THESE PARAMETERS CAN BE SENT VIA THE FOLLOWING COMMUNICATION PROTOCOLS;

- 4-20 mA ANALOGUE SIGNAL
- ETHERNET
- MODBUS

SLURRY IS REQUIRED AT A RATE OF 20 L/min.
CLARIFIED WATER IS REQUIRED AT A RATE OF 80 L/min

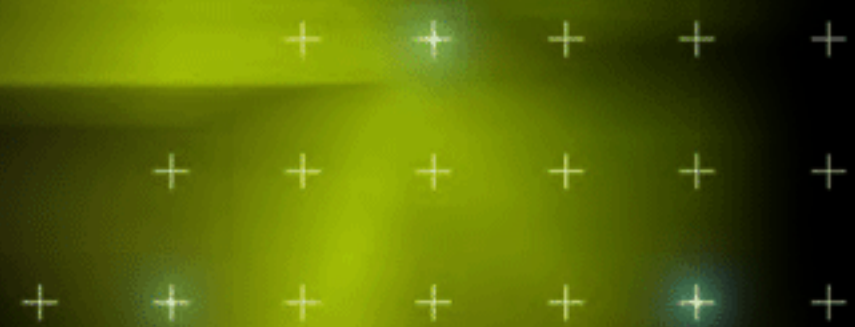
IDEALLY THE OSPDM REQUIRES A NON-AERATED FEED, ALTHOUGH WITH THE INCORPORATION OF A DE-AERATION TANK, THE UNIT CAN BE TAILORED TO SUIT MOST FEED TYPES.

THE SAMPLE POINT SHOULD BE CHOSEN CAREFULLY, TO GIVE THE BEST REPRESENTATION OF THE SLURRY STREAM BEING MONITORED. CLEANPROTECH CAN ADVISE ON THE BEST METHOD FOR OBTAINING A SLURRY SAMPLE.

FOR ANY FURTHER PRODUCT INFORMATION CONTACT

CLEAN PROCESS TECHNOLOGIES

02 6574 7081 OR info@cleanprotech.com.au



700 Standen Drive
Lower Belford
NSW Australia

Tel +61 2 6574 7081
Fax +61 2 6574 7302

www.cleanprotech.com.au