

The Institute of Materials Handling



Client logo

Data sheet Screen

Project name
Project no.
Tag no.
Tag description

Document no.
Revision no.
P&ID no.
Status

	Originator	Date	Checked by	Date
Process				
Mechanical				
Electrical				
Approved by		Date	Professional registration no.	
Client (if applicable)				
Lead engineer				

General information

Corrosion protection	Reference drawing no.
Engineering specifications	Service
Installation	
Remarks	

Site

Altitude(AMSL)	m	Location	
Ambient temperature maximum	°C	Rainfall	mm/y
Ambient temperature minimum	°C	Wind velocity	km/h
Barometric pressure	kPa	Humidity	%
Underground atmospheric classification		Class	Division

Process

Feed material data			
General description of application			
Material handled		Angle of repose	degree
Capacity minimum	t/h	Angle of surcharge	degree
Capacity normal	t/h	Moisture content (free)	%
Capacity maximum	t/h	Operating days per annum	days
Temperature	°C	Operating hours per day	hours
Particle size maximum	mm	Feed from static head	
Top deck cut size	mm	Drop height	mm
Bottom deck cut size	mm	Feed type	continuous/intermittent
No. of screen decks		Screening	wet/dry
Material characteristics			
Abrasive	yes/no	Erosive	yes/no
Combustible	yes/no	Flowability	free/poor/sticky
Corrosive	yes/no	Friable	yes/no
Dusty	yes/no	Hygroscopic	yes/no
Explosive	yes/no	Toxic	yes/no



Data sheet Screen

Project name
 Project no.
 Tag no.
 Tag description

Document no.
 Revision no.
 P&ID no.
 Status

Feed stream particle size distribution data			
Component	Size	Cumulative % passing	
Size 1	mm		%
Size 2	mm		%
Size 3	mm		%
Size 4	mm		%
Size 5	mm		%
Size 6	mm		%
Size 7	mm		%
Size 8	mm		%
Size 9	mm		%
Size 10	mm		%
Size 11	mm		%
Size 12	mm		%
Distribution d ₅₀	mm	Maximum agglomerated size	mm
Maximum size	mm		
Product material data			
	Oversize	Undersize	Intermediate
Size minimum	mm	mm	mm
Size maximum	mm	mm	mm
Discharge rate normal	t/h	t/h	t/h
Discharge rate maximum	t/h	t/h	t/h
Discharge rate minimum	t/h	t/h	t/h
Screening efficiency	%	%	%
Product stream particle size distribution data			
Component	Size	Cumulative % passing	
Size 1	mm		%
Size 2	mm		%
Size 3	mm		%
Size 4	mm		%
Size 5	mm		%
Size 6	mm		%
Size 7	mm		%
Size 8	mm		%
Size 9	mm		%
Size 10	mm		%
Size 11	mm		%
Size 12	mm		%
Distribution d ₅₀	mm	Maximum agglomerated size	mm
Maximum size	mm		



Data sheet Screen

Project name
 Project no.
 Tag no.
 Tag description

Document no.
 Revision no.
 P&ID no.
 Status

Mechanical

Design data			
Design capacity	t/h	Screen overall length	mm
Capacity minimum	t/h	Screen overall width	mm
Maximum head above feed	m	Screen overall height	mm
Inclination maximum	degree	Trough length	mm
Inclination minimum	degree	Trough width	mm
Type of deck motion		Trough height	mm
Supports front	yes/no	Supports rear	yes/no
Screen panels aperture	mm	Screen water drainage rate	m ³ /hm ²
Screen panels open area	%	Screen medium drainage rate	m ³ /hm ²
Screen blinding	%	Screen wash water	m ³ /h
Sound intensity actual @ 1m	db		

	Static		Dynamic normal		Dynamic maximum		kN
	Front	Rear	Front	Rear	Front	Rear	
Vertical							
Horizontal							

Information to be supplied by vendor

Screen requirements			
	Top	Intermediate	Lower
Total area			m ²
Bland feed length			m
Screening length			m
Bland discharge length			m
Total screen area			m ²
Free screen area			m ²
Aperture size			mm
Perforation shape			
Deck section area			m ²
Deck section width			m
Deck section fasten			
Inclination of deck			degree
Number of spray bars required			
Spray water flow			m ³ /h
Spray water pressure			kPa(g)

Materials of construction

	Material	Thickness
Screening surface		mm
Trough base		mm
Trough frame		mm
Trough liner		mm
Trough sides		mm



Data sheet Screen

Project name
 Project no.
 Tag no.
 Tag description

Document no.
 Revision no.
 P&ID no.
 Status

Drive information			
Manufacturer		Full load torque at start	N
Type		Full load torque running	N
Vibrating frequency	Hz	Amplitude	mm
Electrical			
System information			
Supply voltage	V	Type of system earthing	
Voltage variations	V	Area classification (SABS 0108)	
Maximum voltage unbalance	%	Hazardous gas/dust	
Total voltage harmonic content	%	Cable size	mm ²
Supply frequency	Hz	Cable type	
Temperature classification of gas/dust			
Data to be supplied by vendor			
Manufacturer		Equivalent circuit	
Frame size		Winding connection	
Year of manufacture		Insulation class	
Serial number		Insulation type	
Rating	kW	Method of cooling (IC Code)	
Full load current	A	Method of mounting (IM Code)	
Class of rating (IEC 60034-1 class 4 2)		Lubricant type/grade	
Enclosure classification IP code		Type of explosion protection	
Power factor at 100% load		Efficiency at 100% load	%
Power factor at 75% load		Efficiency at 75% load	%
Power factor at 50% load		Efficiency at 50% load	%
Temperature rise	°C	Break away torque	Nm
Locked rotor current	A	Pull out torque	Nm
Locked rotor power factor		Pull up torque	Nm
Locked rotor withstand time cold	s	Full load torque	Nm
Locked rotor withstand time warm	s	Moment of inertia of load (MIL)	kg/m ²
Allowable no. of starts per hour cold		Moment of inertia of motor rotor	kg/m ²
Allowable no. of starts per hour warm		MIL referred to motor shaft	kg/m ²
Maximum thrust continuous (down)		Temperature rating	
Maximum thrust momentary (down)		Sound intensity	db
Type of bearing non-drive end		Type of bearing drive end	
Direction of rotation viewed from non-drive end			
Terminal box position viewed from non-drive end			
Speed vs. torque curve at full volts required			
Speed vs. torque curve at 85% full volts required			
Speed vs. current curve at full volts required			
Speed vs. current curve at 85% full volts required			
Speed vs. power curve at full volts required			
Speed vs. power curve at 85% full volts required			

The Institute of Materials Handling



Client logo

Data sheet Screen

Project name
Project no.
Tag no.
Tag description

Document no.
Revision no.
P&ID no.
Status

Inspection & testing			
Mechanical		Electrical	
Motion amplitude		Shop inspection required	
Shipping & installation			
Information to be supplied by vendor			
Heaviest lift	kg	Overall height	mm
Heaviest maintenance lift	kg	Overall length	mm
Weight driver	kg	Overall width	mm
Maximum foundation loading	kg	Total shipping weight	kg
Net weight	kg	Total shipping volume	m ³
Operating weight	kg		
Underground dimensions			
Underground applicable		Cage length	mm
Headroom available	mm	Cage width	mm