

The Institute of Materials Handling



Client logo

Data sheet Screw conveyor

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	Maximum temperature	°C
Ambient temperature maximum	°C	Rainfall	mm/y
Ambient temperature minimum	°C	Wind velocity	km/h
Barometric pressure	kPa		

Process

Material handled			
Capacity maximum	tph	Particle density	kg/m ³
Capacity normal	tph	Bulk density	kg/m ³
Temperature	°C	Particle shape	
Feed from static head		Moisture content (free)	%m/m
Feed type		Particle size maximum	mm
Covered		Particle size median	mm
No. of feed points		Particle size minimum	mm
Material characteristics			
Abrasive		Combustible	
Corrosive		Explosive	
Dusty		Flowability	
Friable		Toxic	
Hygroscopic			
Conveyor containment			
Dust tight		Enclosed	

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Mechanical

Design data			
Capacity maximum	tph	Conveyor length	mm
Temperature maximum	°C	Height of lift / fall	mm
Loading	%	Power absorbed	kW
Angle of inclination	degree		
Information to be supplied by the vendor			
Shaft/screw			
Screw speed	rpm	Shaft diameter	mm
Screw diameter	mm	Shaft length	mm
Screw pitch	mm	Shaft support end	
Power required at driven shaft	kW	Shaft support centre	
		Spacing between supports	mm
Bearings			
Bearings type		Model number	
Manufacturer			
Materials of construction			
	Material	Thickness	
Casing			mm
Casing cover			mm
Trough end			mm
Liner			mm
Supports			mm
Gaskets			mm
Screw			
Shaft			
Trough			
Casing diameter	mm	Feed location	
Casing length	mm	Discharge location	
Trough depth	mm	Feed/discharge centres	mm
Trough cover dust tight		Feed size	mm
Trough cover fasten method		Discharge size	mm
Chain drive data		V-belt data	
Casing dust tight		Antistatic	
No. of strands		Guards type	
No. of teeth drive sprocket		Overload protection	
Service factor		Pitch diameter	mm
Size	mm	Pitch drive pulley	mm
		Pitch driven pulley	mm
		Section	
		Service factor	



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Drive data			
Type			
Gear reducer data			
Manufacturer		Base type	
Output speed	rpm	Casing material	
Power rating	kW	Input/output ratio	
Size	mm	Service factor	
Type			
Coupling data			
Gearbox manufacturer			
Gearbox input		Gearbox output	
Fitted by		Fitted by	
Size	mm	Size	mm
Supplied by		Supplied by	
Type		Type	
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

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Data to be supplied by vendor			
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			
Inspection & testing			
Electrical			
Shop inspection required		Type test	
Routine test			
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		