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Data Sheet for samplers

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1. REGRIND CYCLONE OVERFLOW SAMPLER

No.	Description	Units	Value	Vendor data
1	General data			
1-1	Quantity	#	1 Operational & 1 Standby	
1-2	Tag No. / Location (indoors/ outdoors)	-	SA 3/4-33-0901-05,06/Indoor	
1-3	Application Description	-	REGRIND CYCLONE OVERFLOW SAMPLER	
1-4	Duty	-	Continuous	
Process / Operating Conditions				
2	Material Processed			
2-1	Material Handled	-	Copper slurry	
2-2	Flowrate (per sampler)	m ³ /h	1666.05	
2-3	Pipe Size/Launder Size	mm	500	
2-4	Line Velocity	m/s	VTS	
2-5	Line Pressure	kPa	VTS	
2-6	Slurry Density	t/m ³	1.16	
2-7	Solids Density	t/m ³	3	
2-8	F100	micron	150	
2-9	F80	micron	38	
2-10	Min Sample Volume Required (per sampler / per cut)	m ³ /h	3	
2-11	Max Sample Volume (per sampler / per cut)	m ³ /h	VTS	
2-12	Sample Frequency	No/h	VTS	
2-13	Final Sample Size (Per 12 Hour shift)	liters	VTS	
2-14	Stream Temperature	°C	5-60	
2-15	Stream pH	-	12.5	

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No.	Description	Units	Value	Vendor data
2-16	In line or Tank Mounted	-	In line	
mechanical information				
3	Technical specs			
3-1	Manufacturer	-	VTS	
3-2	Model	-	VTS	
3-3	Type	-	pipe	
3-4	Cutter gap	mm	VTS	
3-5	Number of Cutters	#	VTS	
3-6	Cutter speed	m/s	VTS	
4	Materials of Construction			
4-1	Support Brackets	-	VTS	
4-2	Cutter	-	VTS	
4-3	Cutter Blades	-	VTS	
4-4	Housing	-	VTS	
5	Masses			
5-1	Max Mass for Erection	kg	VTS	
5-2	Total Mass	kg	VTS	
6	Dimension			
6-1	Overall Height	mm	VTS	
6-2	Overall Width	mm	VTS	
6-3	Overall Length	mm	VTS	
6-4	Launder Width	mm	VTS	
6-5	Geared Unit Make	-	VTS	
6-6	Geared Unit Model	-	VTS	
6-7	Geared Unit Rating	-	VTS	

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No.	Description	Units	Value	Vendor data
Electrical and Instrumentation				
7	Electrical			
7-1	Supply voltage	V	VTs	
7-2	Frequency	Hz	VTs	
7-3	Motor type	-	VTs	
7-4	Installed motor power	kW	VTs	
7-5	Number of poles	-	VTs	
7-6	Motor speed	rpm	VTs	
7-7	Motor operation	-	VTs	
7-8	Rotation (CCW/CW)	-	VTs	

2. ROUGHER 1-12 TAILING SAMPLER

No.	Description	Units	Value	Vendor data
1	General data			
1-1	Quantity	#	1 Operational & 0 Standby	
1-2	Tag No. / Location (indoors/ outdoors)	-	SA 3-33-0901-01/Indoor	
1-3	Application Description	-	ROUGHER 1-12 TAILING SAMPLER	
1-4	Duty	-	Continuous	
Process / Operating Conditions				
2	Material Processed			
2-1	Material Handled	-	Copper slurry	
2-2	Flowrate (per sampler)	m ³ /h	5520.63	
2-3	Pipe Size/Launders Size	mm	800	
2-4	Line Velocity	m/s	-	

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No.	Description	Units	Value	Vendor data
2-5	Line Pressure	kPa	-	
2-6	Slurry Density	t/m ³	1.27	
2-7	Solids Density	t/m ³	2.80	
2-8	F100	micron	300	
2-9	F80	micron	90	
2-10	Min Sample Volume Required (per sampler / per cut)	m ³ /h	VTS	
2-11	Max Sample Volume (per sampler / per cut)	m ³ /h	VTS	
2-12	Sample Frequency	No/h	VTS	
2-13	Final Sample Size (Per 12 Hour shift)	liters		
2-14	Stream Temperature	°C	5-60	
2-15	Stream pH	-	11.5	
2-16	In line or Tank Mounted	-	In line	
mechanical information				
3	Technical specs			
3-1	Manufacturer	-	VTS	
3-2	Model	-	VTS	
3-3	Type	#	PRIMARY CROSS CUT- SECONDARY VEZIN	
3-4	Cutter gap	#	VTS	
3-5	Number of Cutters	m ³	VTS	
3-6	Cutter speed	mm	VTS	
4	Materials of Construction			
4-1	Support Brackets	-	VTS	
4-2	Cutter	-	VTS	
4-3	Cutter Blades	-	VTS	

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No.	Description	Units	Value	Vendor data
4-4	Housing	-	VTs	
5	Masses			
5-1	Max Mass for Erection	kg	VTs	
5-2	Total Mass	kg	VTs	
6	Dimension			
6-1	Overall Height	mm	VTs	
6-2	Overall Width	mm	VTs	
6-3	Overall Length	mm	VTs	
6-4	Laundry Width	mm	VTs	
6-5	Geared Unit Make	-	VTs	
6-6	Geared Unit Model	-	VTs	
6-7	Geared Unit Rating	-	VTs	
Electrical and Instrumentation				
7	Electrical			
7-1	Supply voltage	V	VTs	
7-2	Frequency	Hz	VTs	
7-3	Motor type	-	VTs	
7-4	Installed motor power	kW	VTs	
7-5	Number of poles	-	VTs	
7-6	Motor speed	rpm	VTs	
7-7	Motor operation	-	VTs	
7-8	Rotation (CCW/CW)	-	VTs	

3. ROUGHER 1-12 CONCENTARTE TO REGRIND SAMPLER

No.	Description	Units	Value	Vendor data
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No.	Description	Units	Value	Vendor data
1	General data			
1-1	Quantity	#	1 Operational & 0 Standby	
1-2	Tag No. / Location (indoors/ outdoors)	-	SA 3-33-0901-03/Indoor	
1-3	Application Description	-	ROUGHER 1-12 CONCENTRATE TO REGRIND SAMPLER	
1-4	Duty	-	continuous	
Process / Operating Conditions				
2	Material Processed			
2-1	Material Handled	-	Copper slurry	
2-2	Flowrate (per sampler)	m ³ /h	1272.81	
2-3	Pipe Size/Laundry Size	mm	150	
2-4	Line Velocity	m/s	-	
2-5	Line Pressure	kPa	-	
2-6	Slurry Density	t/m ³	1.19	
2-7	Solids Density	t/m ³	2.8	
2-8	F100	micron	300	
2-9	F80	micron	90	
2-10	Min Sample Volume Required (per sampler / per cut)	m ³ /h	VTS	
2-11	Max Sample Volume (per sampler / per cut)	m ³ /h	VTS	
2-12	Sample Frequency	No/h	VTS	
2-13	Final Sample Size (Per 12 Hour shift)	liters	VTS	
2-14	Stream Temperature	°C	5-60	
2-15	Stream pH	-	11.5	
2-16	In line or Tank Mounted	-	In line	

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No.	Description	Units	Value	Vendor data
mechanical information				
3	Technical specs			
3-1	Manufacturer	-	VTS	
3-2	Model	-	VTS	
3-3	Type	#	PRIMARY CROSS CUT- SECONDARY VEZIN	
3-4	Cutter gap	#	VTS	
3-5	Number of Cutters	m³	VTS	
3-6	Cutter speed	mm	VTS	
4	Materials of Construction			
4-1	Support Brackets	-	VTS	
4-2	Cutter	-	VTS	
4-3	Cutter Blades	-	VTS	
4-4	Housing	-	VTS	
5	Masses			
5-1	Max Mass for Erection	kg	VTS	
5-2	Total Mass	kg	VTS	
6	Dimension			
6-1	Overall Height	mm	VTS	
6-2	Overall Width	mm	VTS	
6-3	Overall Length	mm	VTS	
6-4	Laundry Width	mm	VTS	
6-5	Geared Unit Make	-	VTS	
6-6	Geared Unit Model	-	VTS	
6-7	Geared Unit Rating	-	VTS	
Electrical and Instrumentation				

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No.	Description	Units	Value	Vendor data
7	Electrical			
7-1	Supply voltage	V	VTs	
7-2	Frequency	Hz	VTs	
7-3	Motor type	-	VTs	
7-4	Installed motor power	kW	VTs	
7-5	Number of poles	-	VTs	
7-6	Motor speed	rpm	VTs	
7-7	Motor operation	-	VTs	
7-8	Rotation (CCW/CW)	-	VTs	

4. COMBINED ROUGHER FLOTATION TAILINGS SAMPLER

No.	Description	Units	Value	Vendor data
1	General data			
1-1	Quantity	#	1 Operational & 0 Standby	
1-2	Tag No. / Location (indoors/ outdoors)	-	SA 3-33-0901-02/Indoor	
1-3	Application Description	-	COMBINED ROUGHER FLOTATION TAILINGS SAMPLER	
1-4	Duty	-	continuous	
Process / Operating Conditions				
2	Material Processed			
2-1	Material Handled	-	Copper slurry	
2-2	Flowrate (per sampler)	m ³ /h	5520.63	
2-3	Pipe Size/Laundry Size	mm	800	
2-4	Line Velocity	m/s	VTs	

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No.	Description	Units	Value	Vendor data
2-5	Line Pressure	kPa	VTs	
2-6	Slurry Density	t/m³	1.27	
2-7	Solids Density	t/m³	2.8	
2-8	F100	micron	300	
2-9	F80	micron	90	
2-10	Min Sample Volume Required (per sampler / per cut)	m³/h	VTs	
2-11	Max Sample Volume (per sampler / per cut)	m³/h	VTs	
2-12	Sample Frequency	No/h	VTs	
2-13	Final Sample Size (Per 12 Hour shift)	liters	VTs	
2-14	Stream Temperature	°C	5-60	
2-15	Stream pH	-	12	
2-16	In line or Tank Mounted	-	In line	
mechanical information				
3	Technical specs			
3-1	Manufacturer	-	VTs	
3-2	Model	-	VTs	
3-3	Type	#	pipe	
3-4	Cutter gap	#	VTs	
3-5	Number of Cutters	m³	VTs	
3-6	Cutter speed	mm	VTs	
4	Materials of Construction			
4-1	Support Brackets	-	VTs	
4-2	Cutter	-	VTs	
4-3	Cutter Blades	-	VTs	

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No.	Description	Units	Value	Vendor data
4-4	Housing	-	VTs	
5	Masses			
5-1	Max Mass for Erection	kg	VTs	
5-2	Total Mass	kg	VTs	
6	Dimension			
6-1	Overall Height	mm	VTs	
6-2	Overall Width	mm	VTs	
6-3	Overall Length	mm	VTs	
6-4	Laundry Width	mm	VTs	
6-5	Geared Unit Make	-	VTs	
6-6	Geared Unit Model	-	VTs	
6-7	Geared Unit Rating	-	VTs	
Electrical and Instrumentation				
7	Electrical			
7-1	Supply voltage	V	VTs	
7-2	Frequency	Hz	VTs	
7-3	Motor type	-	VTs	
7-4	Installed motor power	kW	VTs	
7-5	Number of poles	-	VTs	
7-6	Motor speed	rpm	VTs	
7-7	Motor operation	-	VTs	
7-8	Rotation (CCW/CW)	-	VTs	

5. ROUGHER 1-2 BY-PASS CONCENTRATE SAMPLER

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No.	Description	Units	Value	Vendor data
1	General data			
1-1	Quantity	#	1 Operational & 0 Standby	
1-2	Tag No. / Location (indoors/ outdoors)	-	SA 3-33-0901-04/Indoor	
1-3	Application Description	-	ROUGHER 1-2 BY-PASS CONCENTRATE SAMPLER	
1-4	Duty	-	continuous	
Process / Operating Conditions				
2	Material Processed			
2-1	Material Handled	-	Copper slurry	
2-2	Flowrate (per sampler)	m ³ /h	909.15	
2-3	Pipe Size/Laundry Size	mm	150	
2-4	Line Velocity	m/s	VTS	
2-5	Line Pressure	kPa	VTS	
2-6	Slurry Density	t/m ³	1.27	
2-7	Solids Density	t/m ³	2.8	
2-8	F100	micron	300	
2-9	F80	micron	90	
2-10	Min Sample Volume Required (per sampler / per cut)	m ³ /h	VTS	
2-11	Max Sample Volume (per sampler / per cut)	m ³ /h	VTS	
2-12	Sample Frequency	No/h	VTS	
2-13	Final Sample Size (Per 12 Hour shift)	liters	VTS	
2-14	Stream Temperature	°C	5-60	
2-15	Stream pH	-	11.5	
2-16	In line or Tank Mounted	-	In line	
mechanical information				

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No.	Description	Units	Value	Vendor data
3	Technical specs			
3-1	Manufacturer	-	VTS	
3-2	Model	-	VTS	
3-3	Type	#	Shark fin	
3-4	Cutter gap	#	VTS	
3-5	Number of Cutters	m ³	VTS	
3-6	Cutter speed	mm	VTS	
4	Materials of Construction			
4-1	Support Brackets	-	VTS	
4-2	Cutter	-	VTS	
4-3	Cutter Blades	-	VTS	
4-4	Housing	-	VTS	
5	Masses			
5-1	Max Mass for Erection	kg	VTS	
5-2	Total Mass	kg	VTS	
6	Dimension			
6-1	Overall Height	mm	VTS	
6-2	Overall Width	mm	VTS	
6-3	Overall Length	mm	VTS	
6-4	Laundry Width	mm	VTS	
6-5	Geared Unit Make	-	VTS	
6-6	Geared Unit Model	-	VTS	
6-7	Geared Unit Rating	-	VTS	
Electrical and Instrumentation				
7	Electrical			

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No.	Description	Units	Value	Vendor data
7-1	Supply voltage	V	VTs	
7-2	Frequency	Hz	VTs	
7-3	Motor type	-	VTs	
7-4	Installed motor power	kW	VTs	
7-5	Number of poles	-	VTs	
7-6	Motor speed	rpm	VTs	
7-7	Motor operation	-	VTs	
7-8	Rotation (CCW/CW)	-	VTs	

6. CLEANER SCAVENGER TAILING SAMPLER

No.	Description	Units	Value	Vendor data
1	General data			
1-1	Quantity	#	1 Operational & 0 Standby	
1-2	Tag No. / Location (indoors/ outdoors)	-	SA 3-33-0901-07/Indoor	
1-3	Application Description	-	CLEANER SCAVENGER TAILING SAMPLER	
Process / Operating Conditions				
2	Material Processed			
2-1	Material Handled	-	Copper slurry	
2-2	Flowrate (per sampler)	m ³ /h	1550.7	
2-3	Pipe Size/Laundry Size	mm	630	
2-4	Line Velocity	m/s	VTs	
2-5	Line Pressure	kPa	VTs	
2-6	Slurry Density	t/m ³	1.14	
2-7	Solids Density	t/m ³	2.8	

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No.	Description	Units	Value	Vendor data
2-8	F100	micron	150	
2-9	F80	micron	38	
2-10	Min Sample Volume Required (per sampler / per cut)	m ³ /h	VTS	
2-11	Max Sample Volume (per sampler / per cut)	m ³ /h	VTS	
2-12	Sample Frequency	No/h	VTS	
2-13	Final Sample Size (Per 12 Hour shift)	liters	VTS	
2-14	Stream Temperature	°C	5-60	
2-15	Stream pH	-	12.5	
2-16	In line or Tank Mounted	-	In line	
mechanical information				
3	Technical specs			
3-1	Manufacturer	-	VTS	
3-2	Model	-	VTS	
3-3	Type	#	pipe	
3-4	Cutter gap	#	VTS	
3-5	Number of Cutters	m ³	VTS	
3-6	Cutter speed	mm	VTS	
4	Materials of Construction			
4-1	Support Brackets	-	VTS	
4-2	Cutter	-	VTS	
4-3	Cutter Blades	-	VTS	
4-4	Housing	-	VTS	
5	Masses			
5-1	Max Mass for Erection	kg	VTS	

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No.	Description	Units	Value	Vendor data
5-2	Total Mass	kg	VTS	
6	Dimension			
6-1	Overall Height	mm	VTS	
6-2	Overall Width	mm	VTS	
6-3	Overall Length	mm	VTS	
6-4	Laundry Width	mm	VTS	
6-5	Geared Unit Make	-	VTS	
6-6	Geared Unit Model	-	VTS	
6-7	Geared Unit Rating	-	VTS	
Electrical and Instrumentation				
7	Electrical			
7-1	Supply voltage	V	VTS	
7-2	Frequency	Hz	VTS	
7-3	Motor type	-	VTS	
7-4	Installed motor power	kW	VTS	
7-5	Number of poles	-	VTS	
7-6	Motor speed	rpm	VTS	
7-7	Motor operation	-	VTS	
7-8	Rotation (CCW/CW)	-	VTS	

7. CLEANER SCAVENGER CONCENTARATE SAMPELER

No.	Description	Units	Value	Vendor data
1	General data			
1-1	Quantity	#	1 Operational & 0 Standby	

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No.	Description	Units	Value	Vendor data
1-2	Tag No. / Location (indoors/ outdoors)	-	SA 3-33-0901-08/Indoor	
1-3	Application Description	-	CLEANER SCAVENGER CONCENTRATE SAMPLER	
1-4	Duty	-	continuous	
Process / Operating Conditions				
2	Material Processed			
2-1	Material Handled	-	Copper slurry	
2-2	Flowrate (per sampler)	m ³ /h	119.7	
2-3	Pipe Size/Laundry Size	mm	VTS	
2-4	Line Velocity	m/s	VTS	
2-5	Line Pressure	kPa	VTS	
2-6	Slurry Density	t/m ³	1.16	
2-7	Solids Density	t/m ³	3.1	
2-8	F100	micron	150	
2-9	F80	micron	38	
2-10	Min Sample Volume Required (per sampler / per cut)	m ³ /h	VTS	
2-11	Max Sample Volume (per sampler / per cut)	m ³ /h	VTS	
2-12	Sample Frequency	No/h	VTS	
2-13	Final Sample Size (Per 12 Hour shift)	liters	VTS	
2-14	Stream Temperature	°C	5-60	
2-15	Stream pH	-	12.5	
2-16	In line or Tank Mounted	-	In line	
mechanical information				
3	Technical specs			

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No.	Description	Units	Value	Vendor data
3-1	Manufacturer	-	VTs	
3-2	Model	-	VTs	
3-3	Type	#	pipe	
3-4	Cutter gap	#	VTs	
3-5	Number of Cutters	m³	VTs	
3-6	Cutter speed	mm	VTs	
4	Materials of Construction			
4-1	Support Brackets	-	VTs	
4-2	Cutter	-	VTs	
4-3	Cutter Blades	-	VTs	
4-4	Housing	-	VTs	
5	Masses			
5-1	Max Mass for Erection	kg	VTs	
5-2	Total Mass	kg	VTs	
6	Dimension			
6-1	Overall Height	mm	VTs	
6-2	Overall Width	mm	VTs	
6-3	Overall Length	mm	VTs	
6-4	Laundry Width	mm	VTs	
6-5	Geared Unit Make	-	VTs	
6-6	Geared Unit Model	-	VTs	
6-7	Geared Unit Rating	-	VTs	
Electrical and Instrumentation				
7	Electrical			
7-1	Supply voltage	V	VTs	

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No.	Description	Units	Value	Vendor data
7-2	Frequency	Hz	VTs	
7-3	Motor type	-	VTs	
7-4	Installed motor power	kW	VTs	
7-5	Number of poles	-	VTs	
7-6	Motor speed	rpm	VTs	
7-7	Motor operation	-	VTs	
7-8	Rotation (CCW/CW)	-	VTs	

8. RE CLEANER TAILING SAMPLER

No.	Description	Units	Value	Vendor data
1	General data			
1-1	Quantity	#	1 Operational & 0 Standby	
1-2	Tag No. / Location (indoors/ outdoors)	-	SA 3-33-0901-10/Indoor	
1-3	Application Description	-	RE CLEANER TAILING SAMPLER	
1-4	Duty	-	continuous	
Process / Operating Conditions				
2	Material Processed			
2-1	Material Handled	-	Copper slurry	
2-2	Flowrate (per sampler)	m ³ /h	279.85	
2-3	Pipe Size/Laundry Size	mm	200	
2-4	Line Velocity	m/s	VTs	
2-5	Line Pressure	kPa	VTs	
2-6	Slurry Density	t/m ³	1.07	
2-7	Solids Density	t/m ³	3.1	

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No.	Description	Units	Value	Vendor data
2-8	F100	micron	150	
2-9	F80	micron	38	
2-10	Min Sample Volume Required (per sampler / per cut)	m ³ /h	VTS	
2-11	Max Sample Volume (per sampler / per cut)	m ³ /h	VTS	
2-12	Sample Frequency	No/h	VTS	
2-13	Final Sample Size (Per 12 Hour shift)	liters	VTS	
2-14	Stream Temperature	°C	5-60	
2-15	Stream pH	-	12.5	
2-16	In line or Tank Mounted	-	In line	
mechanical information				
3	Technical specs			
3-1	Manufacturer	-	VTS	
3-2	Model	-	VTS	
3-3	Type	-	TYPE: PRIMARY CROSS CUT-SECONDARY VEZIN	
3-4	Cutter gap	#	VTS	
3-5	Number of Cutters	m ³	VTS	
3-6	Cutter speed	mm	VTS	
4	Materials of Construction			
4-1	Support Brackets	-	VTS	
4-2	Cutter	-	VTS	
4-3	Cutter Blades	-	VTS	
4-4	Housing	-	VTS	
5	Masses			
5-1	Max Mass for Erection	kg	VTS	

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No.	Description	Units	Value	Vendor data
5-2	Total Mass	kg	VTS	
6	Dimension			
6-1	Overall Height	mm	VTS	
6-2	Overall Width	mm	VTS	
6-3	Overall Length	mm	VTS	
6-4	Laundry Width	mm	VTS	
6-5	Geared Unit Make	-	VTS	
6-6	Geared Unit Model	-	VTS	
6-7	Geared Unit Rating	-	VTS	
Electrical and Instrumentation				
7	Electrical			
7-1	Supply voltage	V	VTS	
7-2	Frequency	Hz	VTS	
7-3	Motor type	-	VTS	
7-4	Installed motor power	kW	VTS	
7-5	Number of poles	-	VTS	
7-6	Motor speed	rpm	VTS	
7-7	Motor operation	-	VTS	
7-8	Rotation (CCW/CW)	-	VTS	

9. RE CLEANER COMCENTRATE SAMPLER

No.	Description	Units	Value	Vendor data
1	General data			
1-1	Quantity	#	1 Operational & 0 Standby	

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No.	Description	Units	Value	Vendor data
1-2	Tag No. / Location (indoors/ outdoors)	-	SA 3-33-0901-11/Indoor	
1-3	Application Description	-	RE CLEANER COMCENTRATE SAMPLER	
1-4	Duty	-	continuous	
Process / Operating Conditions				
2	Material Processed			
2-1	Material Handled	-	Copper slurry	
2-2	Flowrate (per sampler)	m ³ /h	303.23	
2-3	Pipe Size/Laundry Size	mm	200	
2-4	Line Velocity	m/s	VTS	
2-5	Line Pressure	kPa	VTS	
2-6	Slurry Density	t/m ³	1.15	
2-7	Solids Density	t/m ³	3.85	
2-8	F100	micron	150	
2-9	F80	micron	38	
2-10	Min Sample Volume Required (per sampler / per cut)	m ³ /h	VTS	
2-11	Max Sample Volume (per sampler / per cut)	m ³ /h	VTS	
2-12	Sample Frequency	No/h	VTS	
2-13	Final Sample Size (Per 12 Hour shift)	liters	VTS	
2-14	Stream Temperature	°C	5-60	
2-15	Stream pH	-	12.5	
2-16	In line or Tank Mounted	-	In line	
mechanical information				
3	Technical specs			

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No.	Description	Units	Value	Vendor data
3-1	Manufacturer	-	VTs	
3-2	Model	-	VTs	
3-3	Type	#	SHARK FIN	
3-4	Cutter gap	#	VTs	
3-5	Number of Cutters	m³	VTs	
3-6	Cutter speed	mm	VTs	
4	Materials of Construction			
4-1	Support Brackets	-	VTs	
4-2	Cutter	-	VTs	
4-3	Cutter Blades	-	VTs	
4-4	Housing	-	VTs	
5	Masses			
5-1	Max Mass for Erection	kg	VTs	
5-2	Total Mass	kg	VTs	
6	Dimension			
6-1	Overall Height	mm	VTs	
6-2	Overall Width	mm	VTs	
6-3	Overall Length	mm	VTs	
6-4	Laundry Width	mm	VTs	
6-5	Geared Unit Make	-	VTs	
6-6	Geared Unit Model	-	VTs	
6-7	Geared Unit Rating	-	VTs	
Electrical and Instrumentation				
7	Electrical			
7-1	Supply voltage	V	VTs	

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No.	Description	Units	Value	Vendor data
7-2	Frequency	Hz	VTs	
7-3	Motor type	-	VTs	
7-4	Installed motor power	kW	VTs	
7-5	Number of poles	-	VTs	
7-6	Motor speed	rpm	VTs	
7-7	Motor operation	-	VTs	
7-8	Rotation (CCW/CW)	-	VTs	

10. RE-RE-CLEANER CONCENTRATE TO THICKENER

No.	Description	Units	Value	Vendor data
1	General data			
1-1	Quantity	#	1 Operational & 0 Standby	
1-2	Tag No. / Location (indoors/ outdoors)	-	SA 3-33-0901-12/Indoor	
1-3	Application Description	-	RE-RE-CLEANER CONCENTRATE TO THICKENER	
Process / Operating Conditions				
2	Material Processed			
2-1	Material Handled	-	Copper slurry	
2-2	Flowrate (per sampler)	m ³ /h	199.83	
2-3	Pipe Size/Laundry Size	mm	200	
2-4	Line Velocity	m/s	VTs	
2-5	Line Pressure	kPa	VTs	
2-6	Slurry Density	t/m ³	1.18	
2-7	Solids Density	t/m ³	4	

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No.	Description	Units	Value	Vendor data
2-8	F100	micron	150	
2-9	F80	micron	38	
2-10	Min Sample Volume Required (per sampler / per cut)	m ³ /h	VTs	
2-11	Max Sample Volume (per sampler / per cut)	m ³ /h	VTs	
2-12	Sample Frequency	No/h	VTs	
2-13	Final Sample Size (Per 12 Hour shift)	liters	VTs	
2-14	Stream Temperature	°C	5-60	
2-15	Stream pH	-	12.5	
2-16	In line or Tank Mounted	-	In line	
mechanical information				
3	Technical specs			
3-1	Manufacturer	-	VTs	
3-2	Model	-	VTs	
3-3	Type	#	pipe	
3-4	Cutter gap	#	VTs	
3-5	Number of Cutters	m ³	VTs	
3-6	Cutter speed	mm	VTs	
4	Materials of Construction			
4-1	Support Brackets	-	VTs	
4-2	Cutter	-	VTs	
4-3	Cutter Blades	-	VTs	
4-4	Housing	-	VTs	
5	Masses			
5-1	Max Mass for Erection	kg	VTs	

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No.	Description	Units	Value	Vendor data
5-2	Total Mass	kg	VTS	
6	Dimension			
6-1	Overall Height	mm	VTS	
6-2	Overall Width	mm	VTS	
6-3	Overall Length	mm	VTS	
6-4	Laundry Width	mm	VTS	
6-5	Geared Unit Make	-	VTS	
6-6	Geared Unit Model	-	VTS	
6-7	Geared Unit Rating	-	VTS	
Electrical and Instrumentation				
7	Electrical			
7-1	Supply voltage	V	VTS	
7-2	Frequency	Hz	VTS	
7-3	Motor type	-	VTS	
7-4	Installed motor power	kW	VTS	
7-5	Number of poles	-	VTS	
7-6	Motor speed	rpm	VTS	
7-7	Motor operation	-	VTS	
7-8	Rotation (CCW/CW)	-	VTS	

11. CLEANER CONCENTARTE SAMPELER

No.	Description	Units	Value	Vendor data
1	General data			
1-1	Quantity	#	1 Operational & 0 Standby	

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No.	Description	Units	Value	Vendor data
1-2	Tag No. / Location (indoors/ outdoors)	-	SA 3-33-0901-09/Indoor	
1-3	Application Description	-	CLEANER CONCENTARTE SAMPELER	
1-4	Duty	-	continuous	
Process / Operating Conditions				
2	Material Processed			
2-1	Material Handled	-	Copper slurry	
2-2	Flowrate (per sampler)	m ³ /h	389.15	
2-3	Pipe Size/Laundry Size	mm	250	
2-4	Line Velocity	m/s	VTS	
2-5	Line Pressure	kPa	VTS	
2-6	Slurry Density	t/m ³	1.14	
2-7	Solids Density	t/m ³	3.7	
2-8	F100	micron	150	
2-9	F80	micron	38	
2-10	Min Sample Volume Required (per sampler / per cut)	m ³ /h	VTS	
2-11	Max Sample Volume (per sampler / per cut)	m ³ /h	VTS	
2-12	Sample Frequency	No/h	VTS	
2-13	Final Sample Size (Per 12 Hour shift)	liters	VTS	
2-14	Stream Temperature	°C	5-60	
2-15	Stream pH	-	12.5	
2-16	In line or Tank Mounted	-	In line	
mechanical information				
3	Technical specs			
3-1	Manufacturer	-	VTS	

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No.	Description	Units	Value	Vendor data
3-2	Model	-	VTs	
3-3	Type	#	pipe	
3-4	Cutter gap	#	VTs	
3-5	Number of Cutters	m ³	VTs	
3-6	Cutter speed	mm	VTs	
4	Materials of Construction			
4-1	Support Brackets	-	VTs	
4-2	Cutter	-	VTs	
4-3	Cutter Blades	-	VTs	
4-4	Housing	-	VTs	
5	Masses			
5-1	Max Mass for Erection	kg	VTs	
5-2	Total Mass	kg	VTs	
6	Dimension			
6-1	Overall Height	mm	VTs	
6-2	Overall Width	mm	VTs	
6-3	Overall Length	mm	VTs	
6-4	Launder Width	mm	VTs	
6-5	Geared Unit Make	-	VTs	
6-6	Geared Unit Model	-	VTs	
6-7	Geared Unit Rating	-	VTs	
Electrical and Instrumentation				
7	Electrical			
7-1	Supply voltage	V	VTs	
7-2	Frequency	Hz	VTs	

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No.	Description	Units	Value	Vendor data
7-3	Motor type	-	VTs	
7-4	Installed motor power	kW	VTs	
7-5	Number of poles	-	VTs	
7-6	Motor speed	rpm	VTs	
7-7	Motor operation	-	VTs	
7-8	Rotation (CCW/CW)	-	VTs	

NOTES:

- 1. VTs: Vendor to Specify
- 2. VTC: Vendor to Confirm