

BATEMAN

DATA SHEET NO M7348-M620-201-D-14-AGDM-01/02/03
Revision No. 1

PROJECT NAME: TREKKOPJE MAXI				NUMBER: M7348	
DATA SHEET AGGLOMERATION DRUMS			EQUIPMENT NO 14-AGDM-01/02/03		REV NO
			SHEET NO 1 OF 2		
TOTAL NUMBER	3	WORKING NUMBER	3	STANDBY NUMBER	0
AREA	D - AGGLOMERATION				2
MANUFACTURER	SUPPLIER		SIZE/TYPE		3
SERVICE			SPEC NO		4
PROCESS DATA					5
SERVICE	Intermediate/continuous		Continuous		6
LOCATION			Outdoors		7
AVAILABILITY			>90%		8
MATERIAL PROCESSED					9
TYPE OF ORE			Uranium rich calccrete conglomerate with < 10% quartz pebbles		10
ABRASIVITY			Abrasive		11
BULK DENSITY	l/m^3		1.63		12
SOLIDS SG	l/m^3		2.03 - 2.41 (Design 2.33)		13
MOISTURE CONTENT IN FEED	%		1 - 3		14
TOTAL DRY SOLIDS TONNAGE (NOMINAL)	tph		5,336		15
TOTAL DRY SOLIDS TONNAGE (DESIGN)	tph		6,500		16
MAXIMUM PARTICLE SIZE IN FEED	mm		38		17
AGGLOMERATION FEED PSD (PREDICTED)					18
	Size		Cum % Passing		19
	mm				20
	38		100		21
	32		95		22
	25		90		23
	19		83		24
	13		70		25
	6		55		26
	4		45		27
	1		20		28
					29
					30
REQUIRED NATURE OF AGGLOMERATED PRODUCT			All sub 1 mm particles to be agglomerated to > 6 mm		31
ESTIMATED PRODUCT MOISTURE RANGE	%		6 - 10		32
MAKE UP WATER					33
MAKE-UP WATER RANGE	litres/ton ore feed		30 - 90		34
DRUM DESIGN					35
NUMBER OF FEED STREAMS	-		3		36
NUMBER OF DRUMS	-		3		37
SOLIDS FEED / DRUM (NOMINAL)	tph		1777		38
SOLIDS FEED / DRUM (DESIGN)	tph		2167		39
RETENTION TIME (DESIGN)	sec		90		40
					41
					42
BINDING SOLUTION			Desalinated water		43
BINDER			None		44
					45
					46
					47
NOTES:					48
1. Vendor to specify the design peak premium on the throughput design tonnage					49
2. Longitudinal adjustable angle to be between 2 and 8 degrees					<1>
3. Vendor to supply provisional P&IDs and functional specification					50
4. % Moisture defined as: $100 \times \frac{\text{water}}{\text{dry solids}}$					51
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REFERENCE DOCUMENT: M7348-M620-201-D-14-AGDM-N_Rev F_AGGLOMERATION DRUMS - ISSUED FOR ENQUIRY						
REV NO	DATE	REVISION	PREP BY	PROCESS ENG	PROJECT ENG	CLIENT
0	2009/09/14	ISSUED FOR PROCUREMENT	CM	IC	PS	BATEMAN PROJ NO M7348 PROJEC TREKKOPJE MAXI
1	2010/08/30	Updated with angle concession	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	

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DATA SHEET NO M7348-M620-201-D-14
AGDM-01/02/03
Revision No. 0

PROJECT NAME: TREKKOPJE MAXI				NUMBER : M7348			
DATA SHEET				EQUIPMENT NO 14-AGDM-01/02/03		REV NO	
AGGLOMERATION DRUMS				SHEET NO 2 OF 2			
TOTAL NUMBER	3	WORKING NUMBER	3	STANDBY NUMBER	0	1	
AREA D - AGGLOMERATION						2	
MANUFACTURER		SUPPLIER		SIZE/TYPE		3	
SERVICE				SPEC NO		4	
MECHANICAL							
DRUM							
DRUM SPEED (Suggested operating)		rpm		6 rpm (Vendor to Confirm)		6	
% OF CRITICAL SPEED		%		30.5% (Vendor to Confirm)		7	
DRUM SPEED maximum		rpm		6.5 rpm (Vendor to Confirm)		8	
DRUM SPEED minimum		rpm		3 rpm (Vendor to Confirm)		9	
REPLACEABLE BOLTED LINERS				Rubber bolted system (Vendor to Confirm)		10	
DRUM DIMENSIONS		Dia / L		4.6m / 14m (Vendor to Confirm)		11	
MASS OF DRUM		kg		92 000 kg (Vendor to Confirm)		12	
TOTAL MASS		kg		200 000 kg (Vendor to Confirm)		13	
% DRUM FILLING		%		16% (Vendor to Confirm)		14	
SHELL THICKNESS		mm		25mm and 50mm (FEA & Vendor to Confirm)		15	
BARRING GEAR		Yes		included (Vendor to Confirm)		16	
FIXED OPERATING ANGLE		°		5°		17 <1>	
MAXIMUM THROUGHPUT DESIGN		t/h		Vendor to confirm		18	
DRIVE MOTOR						19	
NUMBER OF DRIVES				1		20	
MAKE / TYPE / FRAME SIZE				WEG (Vendor to Confirm) SUITABLE FOR VFD		21	
SPEED				1450 (Vendor to Confirm)		22	
ABSORBED POWER		kW		460kW (Vendor to Confirm)		23	
INSTALLED POWER		kW		600kW (Vendor to Confirm)		24	
BARRING DRIVE MOTOR						25	
FRAME SIZE				WEG (Vendor to Confirm)		26	
INSTALLED POWER		kW		25kW (Vendor to Confirm)		27	
MAKE / TYPE				Vendor to Confirm		28	
HS COUPLING						29	
TYPE				Vendor to Confirm		30	
MAKE				Vendor to Confirm		31	
MODEL No				Vendor to Confirm		32	
GEARBOX						33	
SPEED REDUCER TYPE						34	
MAKE				FALK (Vendor to Confirm)		35	
MODEL No				Vendor to Confirm		36	
REDUCTION RATIO				Vendor to Confirm		37	
GEARBOX OUTPUT SPEED		rpm		Vendor to Confirm		38	
LS COUPLING TYPE						39	
TYPE				Vendor to Confirm		40	
MAKE				Vendor to Confirm		41	
MODEL No				Vendor to Confirm		42	
PINION						43	
TYPE				Vendor to Confirm		44	
MATERIAL				Vendor to Confirm		45	
FACE WIDTH		mm		Vendor to Confirm		46	
No OF TEETH				Vendor to Confirm		47	
GIRTH GEAR						48	
TYPE				2 piece Machined Forging (Vendor to Confirm)		49	
MATERIAL				Vendor to Confirm		50	
FACE WIDTH				Vendor to Confirm		51	
No OF TEETH		mm		Vendor to Confirm		52	
BEARINGS						53	
NUMBER / TYPE / MODEL				SKF Plumber Block (Vendor to Confirm)		54	
SUPPORT WHEELS						55	
NUMBER / DIAMETER / WIDTH & MATERIAL				AISI4140 Forged Steel 230-270 BHN & AISI 4340 (Vendor to Confirm)		56	
BEARINGS NUMBER / TYPE / MODEL				8 SKF-SDAF 23252KA/9-1/2 (Vendor to Confirm)		57	
INSPECTION AND TEST WITNESSED						58	
MECHANICAL PERFORMANCE, VIBRATION.		Yes		Included		59	
NOTES:							
1. FEA required.							
2. Details of Control and or monitoring system.							
3. Details required of the Lubrication system.							
4. Details of Sealing arrangement Girth & Pinion Gear).							
5. Hydraulic System for angle adjustment (interchangeable between the 3 drums).							
6. Lined Feed chutes from Inline 1500mm conveyor required.							
7. Lined Discharge chutes at 90° to 1800mm wide conveyor required .							
8. Spray bars complete with supports and nozzles for water addition included.							
9. Access platform to Drive and bearings included.							
ELECTRICAL							
POWER		V/Ph/Hz		525±10% / 3 / 50±2%		60	
Motor suitable for VSD		yes/no		TEFC Yes (Complete with external motor cooling)		61	
REV NO	DATE	REVISION	PREP BY	MECHANICAL ENG	PROJECT ENG	CLIENT	BATEMAN PROJ NO M7348 PROJECT TREKKOPJE MAXI
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1	2010/08/30	Updated with angle concession			PS.		