

Title	A26 Emergency Cooling Water System (Mechanical BOQ)
Doc. No.	ENS-MES-BOM-0002
Revision	1

APPROVAL & DISTRIBUTION


	NAME	SIGNATURE & DATE
PREPARED	MST NTEO MECHANICAL ENGINEER	
CHECKED	MB MSANE MECHANICAL ENGINEER	
CHECKED	M MOKGOHLOA MECHANICAL ENGINEER	
APPROVED	SR MNGOMA CHIEF MECHANICAL ENGINEER	
ACCEPTED	M RAMOTLOU TECHNICAL LEAD	

**Bill Of Quantities for A26-Emergency Cooling water System (Mechanical)**

Document No.:	ENS-MES-BOM-0002
Revision No.:	1,0

SCOPE of BOQ: Mechanical work for the supply, delivery, installation, testing, commissioning and hand-over at A-26 Smelter.

ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
PIPING						
1		SCHEDULE 40 CARBON STEEL, ASTM A53-A, TYPE F, T&C, GALV	40NB	25m	R	R
PIPING SUPPORTS						
2		PIPE MOUNTING SUPPORT (WALL - A)		3,0		
		40NB U-BOLT, M10 WITH 2x NUT AND F/WASHER, CARBON STEEL, ZINC PLATED	M10	3,0	R	R
		50X50X5 ANGLE, CARBON STEEL, EN 100525, S355JR	-	3,15m	R	R
		HSA EXPANSION ANCHOR, HILTI OR EQUIVALENT, CARBON STEEL, ZINC PLATED	M12X65 LONG	6,0	R	R
		50X50X2 THICK, TEFLON STRIP	-	3,0	R	R
3		PIPE MOUNTING SUPPORT (WALL - B)		1,0		
		40NB U-BOLT, M10 WITH 2x NUT AND F/WASHER, CARBON STEEL, ZINC PLATED	M10	1,0	R	R
		50X50X5 ANGLE, CARBON STEEL, EN 100525, S355JR	-	1,35m	R	R
		HSA EXPANSION ANCHOR, HILTI OR EQUIVALENT, CARBON STEEL, ZINC PLATED	M12X65 LONG	2,0	R	R
		50X50X2 THICK, TEFLON STRIP	-	1,0	R	R
4		PIPE MOUNTING SUPPORT (BASE - A)		5,0	R	R
		40NB U-BOLT, M10 WITH 2x NUT AND F/WASHER, CARBON STEEL, ZINC PLATED	M10	5,0	R	R
		50X50X5 ANGLE, CARBON STEEL, EN 100525, S355JR	-	2,25m	R	R
		38X38X3.5 THICK, SQ.TUBE, CARBON STEEL, EN 100525, S355JR	-	5,4m	R	R
		HSA EXPANSION ANCHOR, HILTI OR EQUIVALENT, CARBON STEEL, ZINC PLATED	M12X65 LONG	20,0	R	R
		50X50X2 THICK, TEFLON STRIP	-	5,0	R	R
5		PIPE MOUNTING SUPPORT (BASE - B)		1,0	R	R
		40NB U-BOLT, M10 WITH 2x NUT AND F/WASHER, CARBON STEEL, ZINC PLATED	M10	1,0	R	R
		50X50X5 ANGLE, CARBON STEEL, EN 100525, S355JR	-	0,45m	R	R
		38X38X3.5 THICK, SQ.TUBE, CARBON STEEL, EN 100525, S355JR	-	2,58m	R	R
		HSA EXPANSION ANCHOR, HILTI OR EQUIVALENT, CARBON STEEL, ZINC PLATED	M12X65 LONG	4,0	R	R
		50X50X2 THICK, TEFLON STRIP	-	1,0	R	R
HOSE						
6		50 NB FLEXIBLE HOSE. CONNECTED WITH FEMALE STAINLESS STEEL DRY BREAK COUPLINGS ON BOTH ENDS. AS PER ENS-MES-SPE-0042	-	7m	R	R
VALVES						
7		THRD BALL VALVE, BRONZE BODY W/PTFE ST, SCH/RAT SCH. WOG 400 BA04BT000	40NB	4,0	R	R
8		THRD BALL VALVE, BRONZE BODY W/PTFE ST, SCH/RAT SCH. WOG 400 BA04BT000	1/2NB	1,0	R	R
9		THRD SWING CHECK VALVE, SCHEDULE 40 BRONZE BODY W/BRONZE TRIM CS02BT000	40NB	1,0	R	R
10		THRD STRAINER VALVE, GALV CARBON STEEL, AS PER ENS-MES-SPE-0027	40NB	1,0	R	R
11		THRD FLOAT VALVE, BRONZE BODY, COPPER FLOAT AS PER ENS-MES-SPE-0024	40NB	1,0	R	R
FITTINGS						
12		THRD TEE, CLASS 300, GALV MALLEABLE IRON, ASTM A197, ASME B16.3	40NB	1,0	R	R
13		THRD TEE (REDUCER), CLASS 300, GALV MALLEABLE IRON, ASTM A197, ASME B16.3	40NB MAIN FLOW TO 1/2 BRANCH FLOW	1,0	R	R
14		THRD 90° ELBOLET LONG RADIUS, CLASS 300, GALV MALLEABLE IRON, ASTM A197, ASME B16.3	40NB	17,0	R	R
15		THRD COUPLING, CLASS 300 GALV MALLEABLE IRON, ASTM A197, ASME B16.3	40NB	2,0	R	R
16		THRD COUPLING (REDUCER), CLASS 300 MALE THRD, GALV MALLEABLE IRON, ASTM A197, ASME B16.3	40NB TO 50NB	1,0	R	R
17		MALE DRY BREAK COUPLING, FEMALE TREAD, BRASS AS PER ENS-MES-SPE-0043	50NB	1,0	R	R
FLANGES						
18		THRD FLANGE, RF, SCHEDULE 40 CLASS 150 CARBON STEEL, ASTM A105, ASME B16.5, STD FIN, GALV	40NB	5,0	R	R
GASKETS						
19		1/16 " THICK, SELF-CENTERING RING, ASME B16.21, CLASS 125	40NB	6,0	R	R

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BOLTING						
20		ASTM A307 GR B BOLTS, GALV w/ASTM A563 GR A HEAVY HEX NUTS, GALV	-	20,0	R	R
EQUIPMENT						
21		SELF-PRIMING CENTRIFUGAL PUMP P2103, AS PER ENS-MES-SPE-0033	-	1,0	R	R
22		HOLDING TANK T2101, AS PER ENS-MES-SPEC-0023	-	1,0	R	R
23		WALL MOUNTED HOSE HOLDER	-	1,0	R	R
24		PRESSURE INDICATOR PI2101A	-	1,0	R	R
25		LEVEL INDICATOR PI2103A, VEGEPULS 11 TWO-WIRE 4, 20mA (<i>SUPPLIED BY NECSA</i>)	-	1,0	R0.00	R0.00
ITEMS NOT IN DRAWINGS						
26		FEMALE HOSE DRY BREAK COUPLING, 50 MM DUST PLUG, STAINLESS STEEL, (SEAL - FPM).	-	2,0	R	R
27		MALE DRY BREAK COUPLING, 50 MM DUST PLUG, COMPOSITE, (SEAL - FPM).	-	1,0	R	R
28		PIPE LABLING (SHEQ COLUR CODE STICKERS)	-	8,0	R	R
		TOTAL COST FOR NEW ITEMS			R	R

SUMMARY OF SCHEDULE OF QUANTITIES		
SECTION A	SITE ESTABLISHMENT	R
SECTION B	GENERAL ADMINISTRATION	R
SECTION C	SUPPLY OF EQUIPMENT / MATERIAL	R
SECTION D	INSTALLATION OF EQUIPMENT / MATERIAL	R
SECTION E	TESTING AND COMMISSIONING OF EQUIPMENT / MATERIAL	R
TOTAL OF SCHEDULE OF QUANTITIES		R

CALCULATION OF TENDER SUM

TOTAL OF SCHEDULE OF QUANTITIES	R
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SUBTOTAL	R
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VALUE-ADDED TAX (VAT)		
The tenderer shall add 14% of the subtotal for value-added tax	R
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TENDER SUM CARRIED TO FORM OF TENDER	R