

**EMERGENCY DIESEL GENERATOR ADDITIONAL
DIRECT AIR INJECTION STARTING SYSTEM**

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5. PART C – Procurement Specification

No	DESCRIPTION	TRIGRAMME	QTY	UMC	SAP No	CLASS	SPEC No.	SUPPLIER	ESTIMATED UNIT COST	TOTAL COST
1	Rotary air distributor (Complete kit) for SEMT PIELSTICK MODEL 18 PA6 V 280)	082 VA	5	ea		LS/1/Q2/NEV 0006/11C	DSG-312-035	MAN Diesel France		
2	Starting air manifold (Complete kit) for Bank A of SEMT PIELSTICK Model 18 PA6 V 280		5	ea		LS/1/Q2/NEV 0006/11C	DSG-312-035	MAN Diesel France		
3	Pilot air tubing (Complete with all fasteners) to interfacing items 1 with the starting valves on SEMT PIELSTICK model 18 PA6 V 280		30	m		LS/1/Q2/NEV 0006/11C	DSG-312-035	MAN Diesel France		
4	Safety valve to interface with item 2 on the SEMT PIELSTICK	078 VA	10	ea		3/1A/Q2/NEV 0007/11C	DSG-312-113	MAN Diesel France		
5	Valve piloted by solenoid valve Make: JOUVENEL & CORDIER Type: AD2405 TA DIA.G1	35 VA	10	ea		3/1A/Q2/NEV 0007/11C	DSG-312-113			
6	Solenoid valve Make: JOUVENEL & CORDIER Type: MB 301-01 Voltage: 48 V	002 EL	10	ea		3/1A/Q2/NEV 0007/11C	DSG-312-113			
7	¼" pipe, ANSI B36.19 – ASTM A 312 TP304L, Seamless, Sch.10S		10	m		3/1/Q2/NEV 0006/13C*	DSG-310-003			
8	1" pipe, ANSI B36.19 – ASTM A 312 TP304L, Seamless, Sch.10S		5	m		3/1/Q2/NEV 0006/13C*	DSG-310-003			
9	1 ½ " pipe, ANSI B36.19 – ASTM A 312 TP304L, Seamless, Sch.10S		5	m		3/1/Q2/NEV 0006/13C*	DSG-310-003			

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10	2" pipe, ANSI B36.19 – ASTM A 312 TP304L, Seamless, Sch.10S		20	m		3/1/Q2/NEV 0006/13C*	DSG-310-003			
11	¼" Elbow, 90° SW Class 3000 lb ANSI B16.11 – ASTM A 182 F304L,		20	ea		3/1/Q2/NEV 0255/86Q	DSG-310-043			
12	2" Elbow, 90° SW ; ANSI B16.11 – ASTM A 182 F304L, Class 3000 lb		15	ea		3/1/Q2/NEV 0255/86Q	DSG-310-043			
13	2" x 1" Reducer , BW, ANSI B16.9 – ASTM A 403 Grade 304L, Sch 10S		5	ea		3/1/Q2/NEV 0255/86Q	DSG-310-043			
14	1 ½" x 1" Reducer , BW, ANSI B16.9 – ASTM A 403 Grade 304L, Sch 10S		5	ea		3/1/Q2/NEV 0255/86Q	DSG-310-043			
15	2" x 1 ¼" Reducer , BW, ANSI B16.9 – ASTM A 403 Grade 304L, Sch 10S		5	ea		3/1/Q2/NEV 0255/86Q	DSG-310-043			
16	1" Flange, (DN25) ANSI B16.5 – ASTM A 182 F304L, Weld Neck, Class 150		10	ea		LS/1/Q3/NEV 0020/88Q	DSG-314-305			
17	1 ¼" Flange, (DN32) ANSI B16.5 – ASTM A 182 F304L, Weld Neck, Class 150		5	ea		3/1/Q2/NEV 0255/86Q	DSG-310-043			
18	M16 x 85 Machine Bolts Grade A2-70		60	ea		LS/1/Q3/NEV 0020/88Q	DSG-314-305			
19	M16 Nut Grade A2-70		60	ea		LS/1/Q3/NEV 0020/88Q	DSG-314-305			
20	Laminated Graphite gasket for a 1" flange raised face (class 300, ANSI B16.5). ID = 25mm, OD=50 mm, thickness 4mm		10	ea		NSF/NC/Q3/ NEV 0029/99Q	DSG-317-094			

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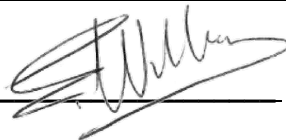
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21	Laminated Graphite gasket for a 1 ¼" flange raised face (class 300, ANSI B16.5). ID = 35mm, OD=55 mm thickness 4mm		5	ea		NSF/NC/Q3/ NEV 0029/99Q	DSG-317-094			
22	Flanged Flexible hose - SAE 100 R1 Type AT (KBA1215G011001) to interface the flange 1 ¼" ANSI B16.5		5	ea		1E/1/Q3/0 0200/87Q	DSG-310-153			
23	Mild Steel metal sheet 1850x925mm, 3mm thick		5	ea		0041/89Q	DSG-314-052			
24	M12 Nut Grade 8		15	ea		0256/86Q	DSG-314-305			
25	M12x22 Bolt Grade 8.8		15	ea		0256/86Q	DSG-314-305			
26	M12 Washer Flat		15	ea		0256/86Q	DSG-314-305			
									TOTAL	

Classification and Specification numbers added by:  E Williams

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No	DESCRIPTION	TRIGRAMME	QTY	UMC	SAP No	CLASS	SPEC No.	SUPPLIER	ESTIMATED UNIT COST	TOTAL COST
1	UH card with latching relay (F482)	LHj 102 UH	5	Each		1E/1A/Q3/0014/00Q	See Appendix C2	Stock item		
2	UH card with latching relay (F482)	LHj 103 UH	5	each		1E/1A/Q3/0014/00Q	See Appendix C2	Stock item		
3	Grey panel wire 1mm ²	N/A	300	m		1E/NC/Q3/0076/93Q	DSG-315-200	Koebec		R14 500
4	Red panel wire 1mm ²	N/A	300	m		1E/NC/Q3/0076/93Q	DSG-315-200	Koebec		R14 500
5	Push-on lugs for 1mm ²	N/A	250	each		NSF/NC/Q4/0090/94Q	KBA0022D01006	Koebec		R3 000
6	Wire marker	N/A	250	each		NSF/NC/Q4/0090/94Q	KBA0022D01006	Koebec		R1 000
7	SVEM module: Ref. 19025/3 for Engine PA 6 – See Appendix C1	LHj 005AR	5	each		1E/1A/Q1/0013/00Q	KBA022D02204	MAN Diesel France	R140 000	R700 000
8	AFSEM module: Ref. 19026 See Appendix C1 Notes: Unit to have 4 Speed Thresholds with Pre-set Values 110, 260, 450, 450 rpm for Thresholds 1 – 4 respectively	LHj 005AR	5	each		1E/1A/Q1/0013/00Q	KBA022D02204	MAN Diesel France	R70 000	R350 000

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9	SVEM Pre-amplifier: Ref. 19025/2 See Appendix C1	LHj 005AR	5	each		1E/1A/Q1/0013/00Q	KBA022D02204	MAN Diesel France	R35 500	R177 500
10	Speed Sensor: Ref. 19025/1 See Appendix C1	LHj 005 AR	5	each		1E/1A/Q1/0013/00Q	KBA022D02204	MAN Diesel France	R10 000	R50 000
TOTAL										

Classification and Specification numbers added by:  X. Mnyanda

(The designer is responsible for assignation of the correct classification and specification numbers.)

NOTES:

1. When requesting cost estimates from suppliers ask for budget prices only.
2. Let the project supervisor estimate the labour portion of the project.
3. Exact prices of small items are not significant if your total is within about 5%. Usually, getting quotes for the expensive items and estimating the consumables prices is probably sufficient.
4. If you have pages of items all with the same classification and specification numbers it is probably wrong.
5. New component types must be supplied with a BOM by the manufacturer, preferably with a General Arrangement drawing (this is for the hardware breakdown structure). This BOM must include part numbers.

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Part C Procurement Specification Appendix list

C.1 AFSEM, SVEM and Pre-amplifier

C.2 LEACH RELAY

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