

TRANSNET ENGINEERING

THE PURPOSE OF THIS SPECIFICATION IS TO SERVICE AND MAINTAIN PLANT COMPRESSORS, SEPARATORS, AIR RECEIVERS, SHOTLAST POTS TO ENSURE COMPLIANCE WITH PRESSURE VESSELS STANDARDS AND VESSELS UNDER PRESSURE FOR BLOEMFONTEIN PLANT.

1. PURPOSE

1. The purpose of this specification is to service and maintain plant compressors, separators, air receivers, shotblast pots to ensure compliance with pressure vessels standards and vessels under pressure.

2. SCOPE

This specification states the minimum requirements relating to the work and in no way absolves the contractor from responsibility for sound engineering practice. Any omissions or sub-standard requirements of this specification must be brought to the attention of Transnet Engineering at tender stage and optional prices for addressing such omissions must be provided.

3. REQUIREMENTS

ITEM	DESCRIPTION
	The purpose of this specification is to service and maintain plant compressors, separators, air receivers and shotblast pots to ensure compliance with pressure vessels standards and vessels under pressure.
	Note: Please refer to Annexure A for capacity and location of vessels.
1.	Pre inspection preparation (Document review and approval).
	The supplier must review previous test reports for correctness, equipment if it's still in statutory period detailing previous inspection date and if Risk-Based Inspection is in place.
	Safety, Vessel preparation, cleanliness and safety appurtenance.
	Supplier must ensure that the area is barricaded for the duration of the test and only personnel active are within the barricaded area.

2.	Virtual Inspections
2.1	Ensure external surface is painted; no flaking or leakages are noted and if all fittings are intact.
2.2.	Internal inspections to be done through a nozzle opening with a see snake and light source and no signs of deteriorating, erosion and corrosion are detected.
3.	Pressure Test
	All equipment must be tested in accordance with SANS 347 and applicable health and safety standards.
	Where hydrostatic pressure testing is deemed to be harmful or impractical, alternative test methods as permitted in the applicable health and Safety standard may be applied.
4.	Additional Tests
	The following Additional tests must be conducted on these two compressors: (28047712 and 28049530)
4.1.	Pressure Dew Point Difference.
4.2.	Humidity
5.	Documentation
5.1.	Supplier is required to provide a detailed report for each vessel that has been inspected and tested and provided recommendations.
6.	General Safety
5.1.	The appropriate PPE must be always worn (Safety shoes, Reflector jacket, etc).
5.2.	The contractor and its employees shall always adhere to Transnet Engineering security and safety procedures.
5.3.	After the contract is awarded, the service provider is required to provide a Safety, Health, and Environmental file, (SHE file) before any contractor shall be allowed to perform any work on Transnet premises. These files shall be approved by risk office of Transnet Engineering.

Annexure A

description	Quantity	Unit of measure
PV Vertical Air Receiver IA3016 Shop 1	6500	L
PV Vertical Air Receiver 4169 Shop 1 O/S	6500	L
PV Filter 2775920002 Shop7 Bay39 O/S Sou	176	L
PV Separator 2775950001 Shop7 B39 O/S So	330	L
PV Filter 2775920001 Shop 1 O/S B40 N	176	L
PV Separator 2775950002 Shop 1 O/S B40 N	330	L
PV Sand Blast Pot 10889 Bay 40	200	L
PV Pressure Vessel S/B Pot W4145 7694	200	L
PV Air Receiver No 1 14260 C/House	7500	L
PV Water trap & Cooler No.1 1348450006 C	526	L
PV Air Receiver No.2 21739 C/HOUSE	7500	L
PV Water trap & Cooler No.2 :001 C/HOUSE	52	L
PV Air Receiver No.3 19249 C/HOUSE	7500	L
PV Water trap & Cooler No.3 905510016 C/	52	L
PV Air Receiver No.4 800SRDH C/HOUSE	6500	L
PV Water trap & Cooler No.4 002 C/HOUSE	52	L
PV Air Receiver No.5 3603 C/HOUSE	6500	L
PV Air Receiver No.6 3002 C/HOUSE	6500	L
PV Air Receiver No.7 3601 C/HOUSE	6500	L
PV Air Receiver No.8 3600 C/HOUSE	6500	L
PV Air Receiver No.9 799SRDH C/HOUSE	6500	L
PV Water trap Comp no.9 18387 C/HOUSE	500	L
PV Small Air Receiver Comp. No.9 EE9349	700	L
PV Comp. Separator no.10 19217/001 C/HOU	200	L
PV Filter 3587636-01 C/HOUSE	40	L
PV Filter 3597662-02 C/HOUSE	40	L
PV Comp. Separator no.11 19217/004 C/HOU	220	L

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Service and maintain plant compressor, separator, air receivers, shotblast pots to ensure compliance with PV standards and vessels under pressure.

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PV Filter 3597663-09 C/HOUSE	40	L
PV Filter 3669253-01 C/HOUSE	40	L
PV Air Receiver ILS2891 C/HOUSE Out side	9350	L
PV Air Receiver ILS2892 C/HOUSE Out side	9350	L
PV Filter 2771900001 C/HOUSE O/S North	432	L
PV Separator 2771900002 C/HOUSE O/S North	432	L
PV Filter 2771900001 C/HOUSE O/S North	2150	L
PV Filter 2771770001 C/HOUSE O/S North	200	L
PV Receiver 2771477001 C/HOUSE	1256	L
PV Receiver 2771473001 C/HOUSE	135	L
PV Dryer 2771472001 C/HOUSE	3395	L
PV Cooler P0414090/01 C/HOUSE	1473	L
PV Air Receiver 48 Coach shop O/S East	6500	L
PV Air Receiver W6093 Paint shop RFR O/S	6500	L
PV Air Receiver 652 S/East from put wink	6500	L
PV Air Receiver 753 Shop 12 O/S North/E	6501	L
PV Filter 2775990001 Shop16 O/S South East	176	L
PV Separator 2775980002 Shop16 O/S S/East	330	L
PV Filter 2775990002 Bay38 O/S Nor RSE	176	L
PV Separator 2775980001 Bay38 O/S RSE	330	L
PV Separator 2783890001 Shop12 BAY9 O/S	176	L
PV Separator 2775960001 Shop12 BAY9 O/S	330	L
PV Filter 2775930002 Coach shop B18 O/S	176	L
PV Separator 2775940001 Coach shop B18	330	L
PV Filter 2817330001 Paint shop RFR O/S	176	L
PV Separator 2775940002 Paint Shop RFR	330	L
PV Compressor 6497 Bay 11 South	500	L
PV Compressor 3643 BAY 10 South	500	L
PV Compressor ILS2739 Bay 13 South	500	L
PV Compressor Bay 10 North CAI828313	500	L
PV Compressor 139930 Bay 13A Removed	500	L
PV Compressor 3964 Bay 13A	500	L
PV Compressor 8525 Bay 11 North Removed	500	L
PV Sand Blast Pot 3835 P/shop South	200	L
PV Sand Blast Pot 3836 P/shop South	200	L

PV Sand Blast Pot 3837 P/shop South	200	L
PV Sand Blast Pot 3838 P/shop South	200	L
PV Sand Blast Pot 4026 Paint shop South	200	L
PV Sand Blast Pot 7956 Paint shop South	200	L
PV Sand Blast Pot 5525 Paint shop South	200	L
PV Sand Blast Pot 5527 Paint shop South	200	L
PV Sand Blast Pot 28015238 P/Shop South	200	L
PV Sand Blast Pot 17140 Paint shop South	200	L
PV Sand Blast Pot 17142 Paint shop South	200	L
PV Sand Blast Pot 17144 Paint shop South	200	L
PV Sand Blast Pot 17145 Paint shop South	200	L
PV Sand Blast Pot 17148 Paint shop South	200	L
PV Sand Blast Pot 17147 Paint shop South	200	L
PV Profile Cutter A14050207 Bay34 RSE	1000	L
PV Profile Cutter A14050208 Bay 27 RSE	1000	L
PV Amada Laser Cutter 558150 Bay 29 RSE	500	L
PV Kaeser 108020 Bay 27 RSE	270	L
PV Profile Cutter 11785 Bay 38 RSE	900	L
PV Pressure Vessel 2211983 Bay 31 RSE	900	L
PV Compressor No 1 ILS3055 Bay 29 RSE	500	L
PV Compressor No 2 ILS1143 Bay 29 RSE	500	L
PV Compressor No 3 ILS2247 Bay 29 RSE	500	L
PV Sandblast Pot 6750 Bay 39 RSE	200	L
PV Sandblast Pot 10831 Bay 39 RSE	200	L
PV Sandblast Pot 28014947 Bay 39 RSE	200	L
PV Horizontal A/Receiver 27174 B 49 RSE	1000	L
PV Horizontal A/Receiver 27175 B 49 RSE	300	L
PV Horizontal A/Receiver 27176 B 49 RSE	300	L
PV Pressure Vessel 42090 B10 South RFR	500	L
PV Pressure Vessel 17542 B10 South RFR	500	L
PV Pressure Vessel 45229 B10 North	500	L
PV Pressure Vessel 20731 B10 North	500	L
PV Pressure Vessel 149/89/11 Paint Sec	500	L
PV Pressure Vessel 152/89/11 Paint Sec	200	L
PV Sandblast Pot 14667 S/B Pots	200	L
PV Pressure Vessel 50111 RSE	900	L

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Service and maintain plant compressor, separator, air receivers, shotblast pots to ensure compliance with PV standards and vessels under pressure.

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PV Pressure Vessel 4005SEP W/Build	500	L
PV Pressure Vessel 6907 W/Build	500	L
PV Sand Blast 1012 RFR	200	L
PV Pressure Vessel IK911709 BFX Wagons	500	L
PV Pressure Vessel Receiver 28034898	6500	L
PV Sand Blast Pot W3836 Spray Painting	200	L
PV Air Receiver 536 Bay 3 O/S South	6502	L
PV Air receiver (Disa no.1) 28036750	510	L
PV Air receiver (Disa no.2) 214005 BAY1	510	L
PV Air receiver (Core shooter) 22908	240	L
PV Air receiver (Core shooter) 22909	240	L
PV Air receiver (Core shooter) 22872	240	L
PV Sand feeder 22885 Bay3 North	70	L
PV Sand feeder EK5557 Sand plant South	200	L
PV Coal dust conveyor EK5524 Sand plant	200	L
PV Bentonite conveyor EK5523 Sand plant	200	L
PV Water trap 3718 Sand plant South	20	L
PV Compressor 28046751 Bay 2 of in store	500	L
PV Compressor ILS8444 Training	500	L
28047712 Compressor, also test pressure Dew Point difference and humidity	500	L
28049530 Compressor, also test pressure Dew Point difference and Humidity	500	L