



TRANSNET ENGINEERING

PRODUCT DEVELOPMENT WAGONS

SAFETY RELIEF VALVE WITH PCD 158.75MM

PRODUCTS: LPG AND AMMONIA (NH₃)

Revision 00

Date of Release:

22 June 2022

PD_PEW_NAT_SPEC_102

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SUMMARY OF REVISION

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The following revisions have been made in this revision:

Rev	Change	Description

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INTRODUCTION

1.1 Scope of Specification

1.1.1 The purpose of this specification is to specify the technical requirements for the purchase of safety relief valve with Pitch Circle Diameter (PCD) 158.75mm, for a bigger PCD 203mm refer PD_PEW_NAT_SPEC_1202. The safety relief valve is for pressurized rail tank cars with a variety of liquified gasses including but not limited to butane butadiene, propane, LPG and anhydrous ammonia operating at 1930 kPa.

1.1.2 The following drawing number W221_M002/Latest should accompany this specification for supplier's attention to design mounting interface for compliance purposes for the procurement of item 768012544. The safety relief valve should be similar to Midland A-1284 and must meet all the requirements in the table 1 below.

Table 1: SAFETY VALVE DATA SHEET

CONNECTION TYPE:	BOLTED
PRESSURE RANGE:	1930 KPA
MEDIA FOR WHICH DESIGNED:	LIQUID PETROLEUM GAS AND AMMONIA WAGONS
START TO LEAK:	1910 KPA TO 1990 KPA
SEALS:	BUNA-N
EACH VALVE SHOULD BE LABELLED:	i.e., COMPANY NAME, DATE OF MANUFACTURE, PRESSURE RATINGS etc.
TEST CERTIFICATE TO BE SUPPLIED:	FOR EACH VALVE
THE VALVES SHOULD COMPLY TO:	THE "AAR MANUAL OF STANDARDS AND RECOMMENDED PRACTICES SPECIFICATIONS FOR TANK CARS,
PACKING:	THE VALVE SHOULD BE PACKED IN A CLEAR PLASTIC BAG WITH A TEST CERTIFICATE INCLUDED.
MATERIAL:	TO BE SUITABLE FOR ANHYDROUS AMMONIA AND LIQUID PETROLEUM GAS. (ALL MATERIALS TO BE SPECIFIED. i.e., STAINLESS STEEL, BRASS AND ALUMINIUM) .
TEMPERATURE RANGE:	-42.8 TO 73.9 °C
DISCHARGE RATE:	THE MINIMUM REQUIRED RATE OF DISCHARGE IS 3695 SCFM (105 M3/MIN) AIR
VALVE PCD:	158.75MM
HOLE SIZE:	4 HOLES x M22
SPRING COATING:	NON-CORROSIVE EPOXY COATING
HOUSING SIZE:	MAXIMUM 185 MM X 185 MM

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Date:

Document Name: Safety Relief Valve Ammonia with PCD 158.75mm

DOC. No: PD_PEW_NAT_SPEC_102

Classification: Specification

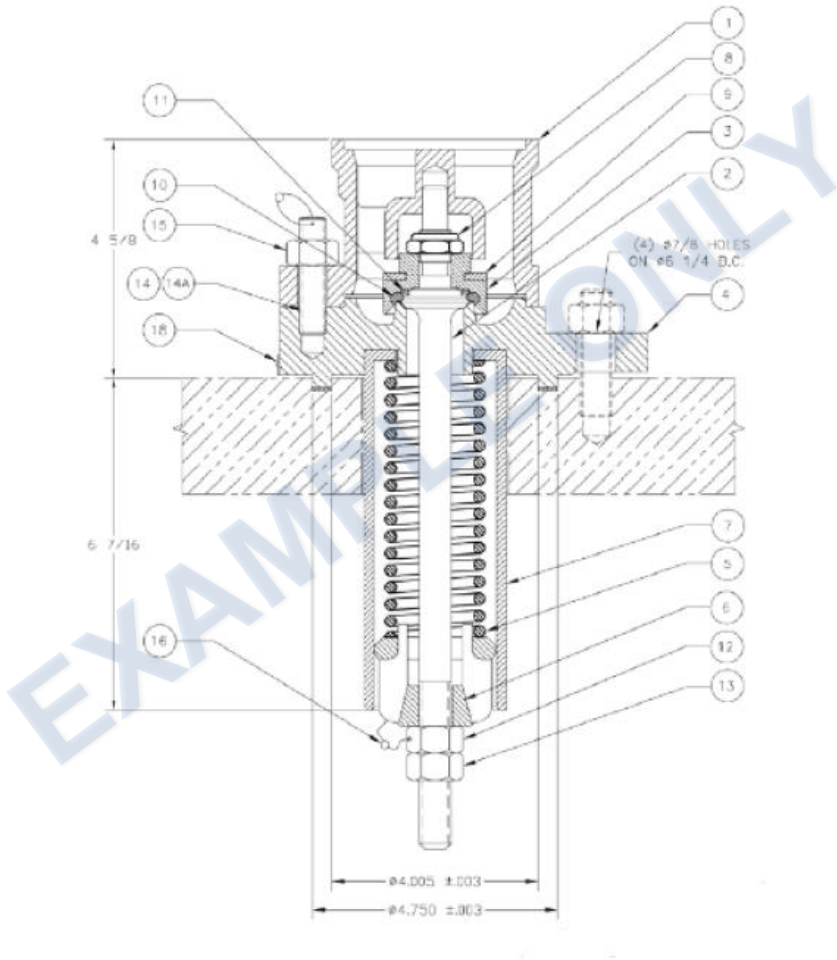
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APPENDIX

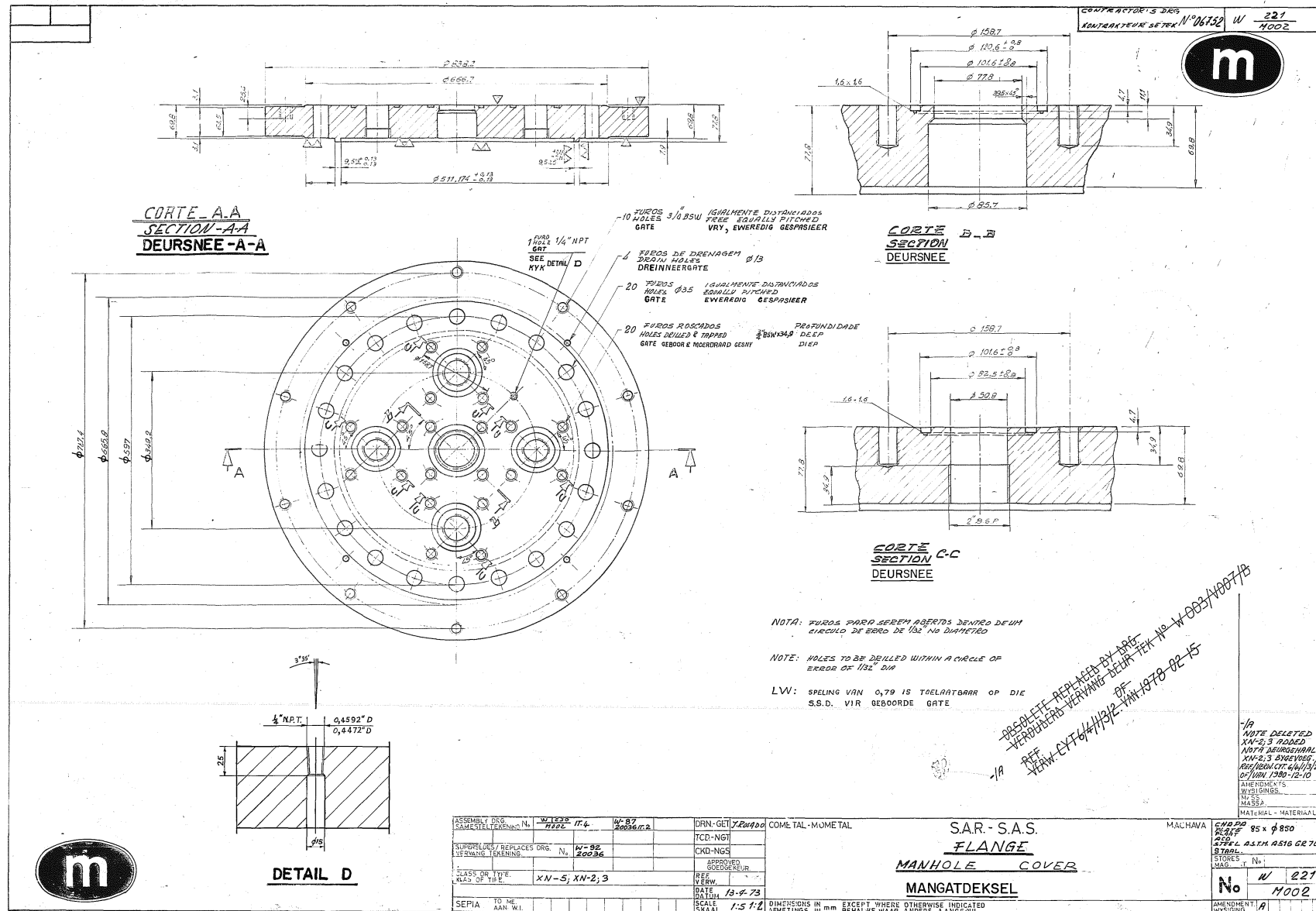
Appendix A – Safety Relief Valve (Example Only)



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Appendix B – Drawing W221M002



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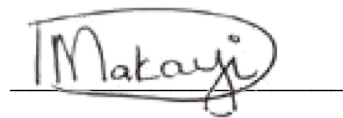
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DOCUMENT AUTHORITIES

Complier

Phozisa Makayi

Signature



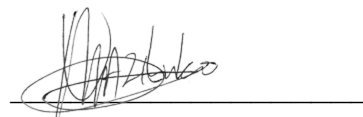
Designation

Product Technicians (Wagons)

Reviewer

Vusumuzi Mazibuko

Signature



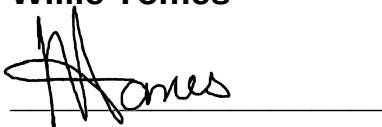
Designation

Product Engineer (Wagons)

Approver

Willie Tones

Signature



Designation

Senior Technologist (Wagons)

Bidders signature:

Date:

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