

DENIM TROUSER WOMENS (CHINO)

Reference item no. 35/157700 TRANSNET

Colour: Pre-washed Indigo blue denim 390 g/m² (11 ounce) 3/1 Z Twill

1. SCOPE

This specification covers the materials and make of denim trouser intended for personnel employed by Transnet.

NOTES :

1. The following requirements will be specified in tender invitations and in each order or contract:
 - a) The outer material, if other than as specified (see 4.1)
 - b) The item(s) required (see 4.3)
 - c) The size designation(s) required (see 4.4)
- 2.) Special conditions of tender (which cover the conditions of acceptance of the garments are given in Annex A.

2. NORMATIVE REFERENCES

The following standards contain provisions which, through reference in this text, constitute provisions of this specification. All the standards are subject to revision and, since any reference to a standard is deemed to be a reference to the latest edition of a standard, parties to agreements based on this specification are encourage to take steps to ensure the use of the most recent editions of the standards indicated below. Information on currently valid national and international standards may be obtained from the South African Bureau of Standards.

CSS 286.21, *Clothing -- LAB/1: Labelling -- PAC/1: Packing and marking.*

SANS 79, *Textiles – Mass per unit area of conditioned fabrics*

SANS 105-BO2, *Tests for colour fastness – Part Bo2: Colour fastness to artificial light: Xenon artificial lamp test.*

SANS 1309, *Printed labels for textiles.*

SANS 1360-1, *Size designation of clothes -- Part 1: Women's and girls' outerwear garments.*

SANS 1362, *Sewing threads*

SANS 1822, *Slide (zip) fasteners.*

SANS 5278 *Sewing stitches per unit length*

SANS 50471, *High-visibility warning clothing for professional use- test method and requirements*

SANS 7211-2, *Textiles-Woven fabrics – Construction – Method of analysis Part 2: Determination of number of threads per unit area.*

SANS 10076-6, *The assessment of defects in textile piece-goods and made-up articles-Part 6: Defects in woven Filament piece-goods (synthetics)*

SANS 10076 - 7, *The assessment of defects in textile piece-goods and made-up articles-Part 7: Defects in household articles*

SANS 13934 –1, *Textiles-Tensile properties of fabrics. Part 1. Determination of maximum force and elongation at maximum force using the strip method s Part 1*

SANS 10101, *Standard nomenclature for stitches, seams, and stitchings.*

SANS 10188, *Standard methods of garment measurements..*

SANS 100004, *Terms and definitions for textiles and textiles merchandise.*

SANS 10011, *Care-labelling of textiles piece goods, textiles articles and clothing.*

SANS 1387 *Woven cotton and similar apparel fabrics*

Part X : Pocketing

3. DEFINITIONS

For the purposes of this specification the following definitions shall apply:

3.1 ACCEPTABLE : Acceptable to the Executive Manager, Transnet.

3.2 NOMINAL : Subject to the tolerances normal to good manufacturing practice.

4. REQUIREMENTS**4.1 MATERIALS**

The outer material shall be cotton denim fabric that complies with the requirements of for type DEN 41 of SABS 1387 Part VI and of a Indigo Blue colour of CKS 129. Yarn sulphur dyed and natural yarn. The material shall be supplied and used by the manufacturer

4.1.1. GENERAL

The materials specified in 4.1.2 to 4.1.6 (inclusive), all of a colour that is an acceptable match to the outer material, shall be supplied and used by the manufacturer,

4.1.2 POCKETING

A pocketing complying with the requirements for type PT 56 of SABS 1387 : Part X, or a warp-knitted pocketing complying with the requirements of SABS 1008.

4.1.3 WAISTBAND LINING

The waistband lining shall be of the same colour and material as the jeans (self material)

4.1.4 SLIDE FASTENERS

Metallic (gilding type) ass one-way closed-end slide fasteners (figure 3a) that complies with the requirements of performance class B or C slide fasteners of SANS 1822. The slider & puller shall be a locking type

4.1.5 BUTTONS AND STUDS

- a) Brass stud button of an intrinsically corrosion resistant metal and having a smooth finish and a nominal width of 17mm.
- b) Brass nipple studs of an intrinsically corrosion resistant metal and having a nipple top and smooth finish and a nominal width of 9mm.

4.1.6 THREADS

Threads shall comply with the relevant requirements of SANS 1362, and shall be as follows:

- 1) Needle, bobbin and looper threads shall have a breaking strength of at least 12 N
Colour used is an acceptable match.
- 2) Overlocking threads shall have a breaking strength of at least 8 N.
Colour used is an acceptable match.

4.1.7 REFLECTIVE TAPE

- 40 mm
- Standard type ref.: 8910

4.2 WORKMANSHIP

The garments shall be cut and made with first-class workmanship throughout and shall be free from defects that effect their appearance or may affect their serviceability (or both), and from marks, spots and stains incurred in the making-up. All seams shall be smooth and all stitching shall be uniform. Seams and stitching shall be free from twists, pleats and puckers and shall be extensible enough to obviate seam cracking and undue shrinkage in use. All seams shall be saddle stitched in bronze colour thread. All ends of sewing that are not secured in the seams or in other sewing shall be adequately bar-tacked. All ends of sewing shall have been trimmed and loose threads removed. The garment shall be of uniform and acceptable make, colour and finish, and the matching of the shades of the component parts of a garment shall be such as to be acceptable.

4.3 STYLE

The denim trouser (see figure 1 and 2) shall have a plain waistband with belt loops and slide-fastening fly. They shall have two slanted side pockets, one back pocket. The outer material of the denim jeans shall be sulphur dyed Indigo Blue denim.

4.4 SIZES

The Denim trousers shall be supplied in one (or more) of the size designations given in table 1, as specified in the order or contract.

- a) When required, the Denim jeans shall be made to special measurements, furnished by Transnet.

*Sealed samples are held by, and may be viewed at, the Transnet Freight rail Clothing division.

4.5 MAKE SIZE RANGE

Size chart

1	3	4	5	6	7
Size designation (inch)	Nominal Finished garment Measurements, cm				
	Waist	Hip / Seat	Out/leg	Inside Leg	Bottom
26	55	90	106	80	42
28	60	95	107	80	42
30	65	100	107	80	42
32	70	105	108	80	42
34	75	110	108	80	42
36	80	115	109	80	42
38	85	120	109	80	42
40	90	125	109	80	44
42	95	130	110	80	44
44	100	135	110	80	44
46	105	140	111	80	44
48	110	145	111	80	44
50	115	150	112	80	44
52	120	155	112	80	46
54	125	160	113	80	46
56	130	165	113	80	46
58	135	170	113	80	46
60	140	175	114	80	46
62	145	180	114	80	46
64	150	185	114	80	46

1) Size based on **WAIST** measurement

4.5.1 DENIM TROUSER

4.5.1.1 FRONTS

Each front (see figure 1) shall have two slanted side pockets and two pleats, the first pleat shall be in line with the front crease line and second pleat 35 mm behind the first pleat.

4.5.1.2 BACKS

Each back (see figure 2) shall have dart of finished length 80 mm positioned approximately midway between the seat seam and the side seam. The right back shall have a jetted pocket

4.5.1.3 FLY

The fly shall be lined with the outer material and shall be fitted with a slide fastener. The fly shall be of finished width 30mm and shall be stitched down 30mm from the edge, and the bottom of the fly shall be securely tacked. (See 4.1.4).

4.5.1.4 FLY CATCH

The fly catch shall be of outer material (see 4.1) and shall be of finished width of 40mm. The catch shall be the same width throughout with a 15mm piece of tape along the seam. The bottom shall have a fold of 3cm which is bar-tacked. The catch shall be secured to the fly with bar-tacks.

4.5.1.5 WAISTBAND

The waistband shall be plain and shall be of finished width 40mm. It shall be of self-material.

4.5.1.6 BELT LOOPS

Each pair of Denim Trouser of size designation have seven belt loops on the waistband shall be positioned as follows:

- a) One on front pleat one on side seam, one on back dart and one on the centre back seam

4.5.1.7 POCKETS

All pocket bags shall be of pocketing (see 4.1.2), shall be double stitched or bound, and the top ends of each size pocket bag shall be secured in the waistband. The ends of the pocket mouths shall be securely bar-tacked and secured with studs (see 4.1.5) The jettied back pocket mouth shall be securely bar -tacked. All the pockets shall be as follows:

- a) Side pocket: The side shall have a slanted pocket. The finished width of the pocket shall be approximately 15 cm, and each mouth shall have a facing of the outer material of 17 cm width at the part and curving round in the shape of the pocket mouth. The finished pocket bags shall be of with and depth 18 cm and 26 cm respectively measured from the inside of the jeans.
- c) **Back hip pocket:** the pocket shall be double-jetted with button fastening. The pocket mouth shall be of finished width 13 cm and depth of 18 cm with an outer material facing of 55 mm.

4.5.1.8 BOTTONHOLES

The waistband shall have a buttonhole with a rounded face and ending in a secured point (fish-eye). It shall measure 30 mm in length.

4.5.9 BUTTONS AND STUDS

There shall be one button on the waistband. Nipple studs shall secure the ends of the two front and the hip pocket.

4.5.10 BOTTOMS

The bottoms shall be plain, folded up and topstitched down to from a finished hem of 20 mm.

4.5.11 REFLECTIVE STRIPS

The 40 mm silver reflective tape to be positioned below the knee on the circumference of the leg.
Tape to be stitched 3.5- 4 mm from the edge.

4.6 STICED, SEAMS AND STITCHINGS

4.6.1 GENERAL

All sewing shall be in accordance with SABS 0101.

4.6.2 STITCHES

- a) Main seaming Stitch type 401.

- | | | |
|----|--------------|----------------------|
| b) | Overlocking | Stitch type 502-505. |
| c) | Other sewing | Stitch type 301. |

4.6.3 SEAMS

Seams shall be least 10 mm wide. They shall be as follows:

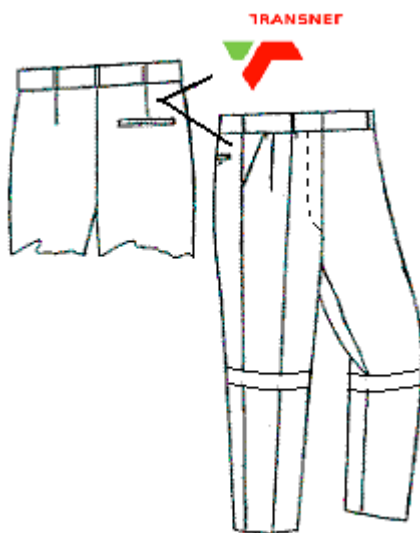
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|----|-----------------------|------------------------|
| a) | Main and pocket seams | Seam type Ssa-2, Lsc-3 |
|----|-----------------------|------------------------|

4.6.4 STITCHING

- | | | |
|----|-------------------|-----------------------|
| a) | Overlocking edges | Stitching type Efd-1. |
| b) | Hems | Stitching type Efb-1. |

4.6.5 NUMBER OF STITCHES

- | | | |
|----|--------------------------|----------------------|
| a) | Seaming and topstitching | - 40 +- 4 per 10 cm. |
| b) | Overlocking | - 32 +- 2 per 10 cm. |
| c) | Buttonholes | - 12 +- 1 per 1 cm. |
| d) | Bar tacks | - 18 min per 1 cm. |
| e) | Buttons | - 18 min per button. |



45 mm
TRANSNET



Annex A
(Normative)

Special conditions of tender

A-1 Unless otherwise stated, the Executive Manager, (Transnet) (or an officer or organization deputed by him), shall be the inspecting authority.

A-2 Three pre-production samples of trousers, shall have been inspected, tested and approved by the inspecting authority before bulk production is commenced, and these samples shall each be accompanied by a trim chart containing a sample of each component material (as given in 4.1.2 to 4.1.14). It shall be the duty of the manufacturer to give adequate notice to the inspecting authority of the availability of these samples.

A-3 The trousers shall be subject to inspection during the course of manufacture. The inspector shall, during normal working hours, be given all reasonable facilities for carrying out his duties and shall have the right of entry into the contractor's factory and the factory or works of any subcontractor where work on garments supplied to this specification may be in progress.

A-4 The contractor shall inspect the finished trousers for compliance with the specification before submitting them to the inspecting authority for final inspection.

A-5 Before acceptance, the trousers shall have been inspected and tested by the inspecting authority and found to comply with the requirements of the specification.

REVISION HISTORY SHEET		
Document	Quality Assurance	Effective date
Subject	ADMINISTRATION, PREPARATION, MAINTENANCE AND DISTRIBUTION	
Controlling Officer: R. Steynberg		
Approving Officer: C.J.V. du Plooy		
Rev/No	Date approved	Nature of revision
1	October 2009	1) Remove metric sizing from size chart
2	April 2010	1) Add reflective strips