

EQUIPMENT ITEMS TO BE TRANSFERRED

The following equipment items are required to be transferred from their current site in Gqeberha to Pretoria, and require safe and appropriate packaging for the purposes of this transfer. The equipment were identified as follows:

- 38 various equipment
- 2 washing machines – one of them specially made for Woolworth testing
- 2 sewing machines
- 2 ovens dedicated for color fastness test lab
- 3 weighing balances
- 1 hot plate
- 1 iron press

The pictures of equipment and their descriptions are presented below.

List of instruments from PE laboratories – Identified for relocation

Relocation Priority 1



Q-Sun Xenon Test Chamber –
with water system

Application: UV exposure for
colour fastness to light

Relocation Lab: Bld 19A, Room
A131



Humidity Chamber

Application: This chamber only
start at 23 °C upwards.

Relocation Lab: Bld 19A, Room
A131



Instron Dynatup 9250HV
(Height of about 4 meters)

Application: Impact tester

Relocation Lab: Bld 14C, Room
C10



Vertical (white) and Horizontal
(brown) flammability testers.

Require methane gas line. **To be
housed together in a fire testing
laboratory. Relocation Lab:** Bld
19C, Open Area



Horizontal flammability tester. **To be housed together in a fire testing laboratory.**

Relocation Lab: Bld 19C, Open Area



Bundusman – Water Repellency Tester.

Very important! Custom made equipment. Height of about 3 meters. Needs water supply.

Application: used on coated materials mostly army uniform, and for PPEs

Relocation Lab: Bld 19A, Room A143



Electrolux Wascator – Washing machine for Woolworths Testing.

Very important (need water supply)

Relocation Lab: Bld 19A, Room A143



Instron 3345

Application: tensile strength properties for fabrics)

Relocation Lab: Bld 19A, Room A147



New– UV-Vis instrument
(not installed yet pending the
relocation decision)

Relocation Lab: Bld 19A, Room
A017 (Optical lab)



2 MARTINDALE Abrasion
machines

Application: used for testing
woven and knitted fabric how long
it takes to wear out.

Relocation Lab: Bld 19A, Room
A143



MARTINDALE Abrasion machine
Application: used for testing
woven and knitted fabric how long
it takes to wear out.

Relocation Lab: Bld 19A, Room
A143



Taber Abrasion Testers
(require conditioned room)

Application: used for abrasing
carpets for automotive

Relocation Lab: Bld 19A, Room
A143



Spray Rating Tester
(New)

Application: test spray rating on fabric

Relocation Lab: Bld 19A, Room A147



Gyrowash
(washing for colorfastness)

Relocation Lab: Bld 19A, Room A143



Crockmeter – Rubing fastness tester

Very important

Custom made by CSIR

We can buy a new one!

Relocation Lab: Bld 19A, Room A143



Spectra-Light

Determine the rating of color fastness

Application: used for evaluating colour change

Relocation Lab: Bld 19C, Room C40



VeriVide

Viewing the peeling tests

Relocation Lab: Bld 19C, Room
C40



ICI Viewing Cabinet

Application: used to view pilling
ratings

Relocation Lab: Bld 19C, Room
C40



Marks & Spencer Holoscope

Very Important

Application: for rating pilling test

Relocation Lab: Bld 19C, Room
C40



Air permeability – Textest

Instruments

FX 3300 LabAir

Relocation Lab: Bld 19C, Room
C40



Sewing Machine

Application: used for stitching samples before testing.

Relocation Lab: Bld 19A, Room A147



Overlocker Machine

Application: used for stitching samples before testing

Relocation Lab: Bld 19A, Room A147



Spectrophotometer

Application: used for colour matching

Relocation Lab: Bld 19A, Room A147



Ironing Press

Relocation Lab: Bld 19A, Room A147

Relocation Priority 2



Pill Tester

Application: pilling testes on knits fabrics

Relocation Lab: Bld 19A, Room A143



GC-MS (Clarus 500 Gas Chromatography)

NB: Good machine for business – for testing pesticides and other chemical tests

Relocation Lab: Bld 19A, Room A113



Acoustic Tester

Waiting for battery replacement

Application: used for sound absorption of non-woven materials.

Relocation Lab: Bld 19A, Room A143



Tear Strength – Textest Instruments

Application: testing tear strength of a fabric

Relocation Lab: Bld 19A, Room A143



Olympus Optical Microscope

Application: fiber identification

Relocation Lab: Bld 19A, Room
A147



TruBurst – Bursting Strength
Tester

Application: testing strength on
knitted fabric

Relocation Lab: Bld 19A, Room
A147



LEICA RM 2125 – Rotary
microtome

Relocation Lab: Bld 19A, Room
A014 (Basement)



Titan Strength Tester

Very important but require R48k
to repair the power supply

Relocation Lab: Bld 19A, Room
A147



Elastocon

Application: thickness gauge

Relocation Lab: Bld 19A, Room
A147



James Heal

Mass Cutter

Relocation Lab: Bld 19A, Room
A147

Relocation Priority 3



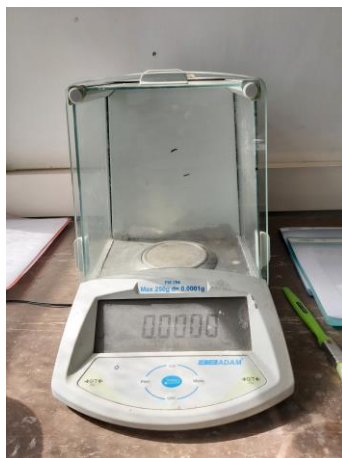
AND GX-600

Weighing balance

Max 610g & Min 0.02g

D=0.001g

Relocation Lab: Bld 19A, Room
A147



ADAM PW 254

Weighing balance

Max 250g

d=0.0001g

Relocation Lab: Bld 19A, Room
A147



Precisca 800M

Weighing balance

Relocation Lab: Bld 19A, Room
A147



MK Lab Hot Plate

Relocation Lab: Bld 19A, Room
A147



Optical Microscopes

Relocation Lab: Bld 19A, Room
A014 (Basement)



Optical Microscopes

Relocation Lab: Bld 19A, Room
A014 (Basement)



Optical Microscopes

Relocation Lab: Bld 19A, Room
A014 (Basement)



GE-TE-FLO Permeater

(require compute upgrade)

Application: used for testing
water absorption on PPEs and
army materials

Relocation Lab: Bld 19A, Room
A147



Twist Tester

Rarely used

Application: used for testing twist and T/M of the yarn.

Relocation Lab: Bld 19A, Room A147



Two Oven

(All needed in the color fastness lab)

Relocation Lab: Bld 19A, Room A131



Apollo Light Fastness tester –
Currently down! Solar sensor is longer in the market

Application: Light fastness mostly for apparel.

Relocation for this is not finally decided!



Snag Tester

(no longer found in the market)

Application: used for pilling and snagging testing on materials

Relocation Lab: Bld 19A, Room A147