

Full body examination

Sweat Analysis Software

Diagnostic Features with Accuracy and Precision



SCNT

Sweat Computerized Nerve Tester

TST-100



TST-100

# SCNT

Sweat Computerized Nerve Tester

SCNT(Sweat Computerized Nerve Tester) is a kind of sweat testing device to screen whole body (Front, Back side) nervous system at once by using TST(Thermoregulatory sweat testing) method that is started at Mayo Clinic of U.S since 1990. SCNT is a first device using a metachromatic cloths instead of indicator dye, and also can analysis sweat production by their own software.

SCNT accurately measures and analyzes the degree and distribution of sweat production to identify abnormalities and disease in the patient's nervous system through dedicated software algorithm.



※ Outline design of device could be a little different with upper image.

## Test Environments

Temperature in Chamber	keep 30°C ~ 40°C
RELATIVE HUMIDITY in Chamber	keep 50~60% RH
Patient's Temperature	Skin temperature keep 38.5°C~39.5°C Oral/Armpit temperature not to be over 1°C form start or around 38.5°C
Chamber Size	W 2,230 X H 2,100 X D 1500 (mm)



# About SCNT

## Full body examination

Different with other device that can be examined with a part of patient's body.

Using a metachromatic clothes that can indicate about the degree and distribution of sweat production

No need to shower to remove indicator dye and can keep patient's privacy.

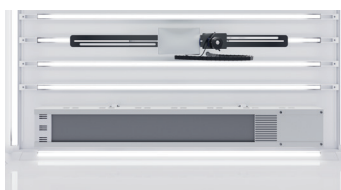
Providing early diagnosis by analyzing sweat production with software

Application : Central and peripheral nervous system disease patients  
(Primary autonomic nervous system disorders, CRPS etc.)



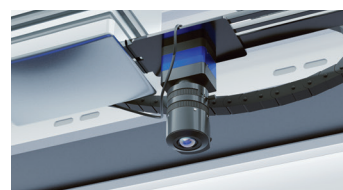
### Chamber

Producing for patients' convenience during long time examination(40min ~ max 60min)



### Heating equipment

Raising for the core body temperature  
Keep 35°C ~ 40°C during the examination



### Camera

Taking pictures for analysis of sweat production  
10min each before 30min  
5min each after 30min



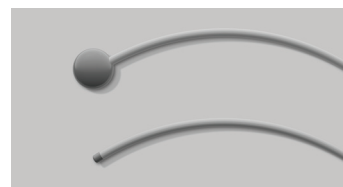
### Metachromatic clothes

Designed only for SCNT instead of the indicator dye



### Check equipment

Checking for temperature and relative humidity in inside of chamber

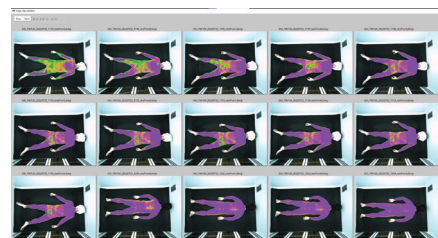


### Sensor

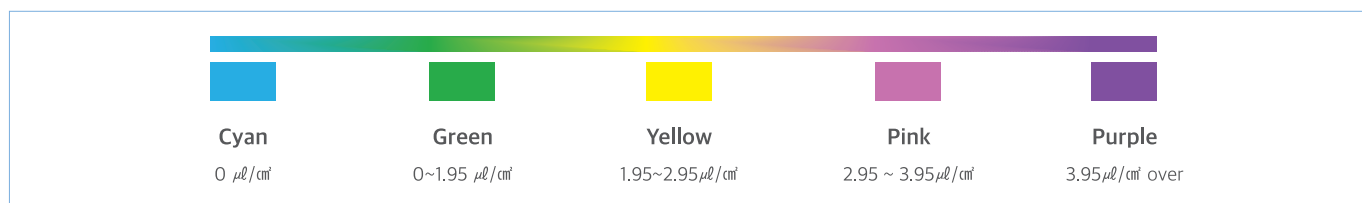
Measuring body surface and core temperature components  
: for body 3ea, for core 1ea

## Sweat analysis software

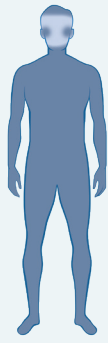
SCNT has their own software that analysis sweat production and distribution.  
It is visualized by 5 colors like below (Over 1.95  $\mu\text{L}/\text{cm}^2$  is standard of normal)



Sweat Standard : 1.95  $\mu\text{L}/\text{cm}^2$  over



# Sweating Pattern



Normal (1)



Normal (2)



Diabetes (1)



Myelopathy at T9 (1)



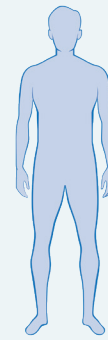
Right T10 radiculopathy  
Left lateral femoral  
cutaneous neuropathy (1)



Partial sympathetic  
nervous system abnormalities (2)



Global anhidrosis (3)



Anhidrosis (1)

## Reference

- (1) Sweat testing to evaluate autonomic function. Ben M.W. Illigens et al. 2009
- (2) Thermoregulatory Sweating Abnormalities in Diabetes Mellitus. ROBERT D et al. 1989
- (3) Thermoregulatory Sweat Testing in Patients With Erythromelalgia. Mark D. P. et al 2006

# Patents and Certifications



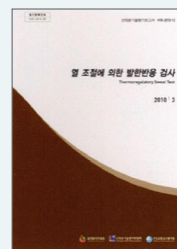
Patent No. 10-2173387

Discoloration Clothing Technology



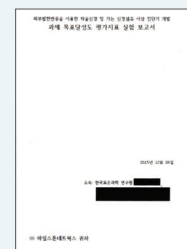
Patent No. 10-1479415

Dissolution Reagent Method



New Medical Technology Approval

Korea Government (Ministry of Health and Welfare)



Metachromatic Clothes Test Report

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