TRESTON®

WORKBENCHES

Designed for use in today's production and assembly environments, this definitive modular system, developed over more than twenty years, provides a high quality working environment. Customise your TPH-workstation to your own your requirements.

Workbench construction
Frames are of epoxy powder coated steel in dark grey RAL 7005. The worktops are of 26 mm ESD-laminate. Earth via protective 1 megohm resistor.

Workbench TP
Height adjustment with allen-key between 650...900 mm. Each standard TP-workbench may also be supplied as a line or angle ex-

Workbench with shelf TPH
Construction as TP. Workbench with upright profiles and an ESD-laminate shelf, depth 310 mm. Height adjustment between

Moveable bench SAP
Construction as TP. Height adjustment with allen key between 650..900 mm. Swivel castors Ø 100 mm of which two are conductive and

ESD protection

In ordinary movement a person creates static electricity. In these circumstances hand contact with a conductive material will discharge static from the body very rapidly. This is ESD = Electro Static Discharge. Static electricity has become a major problem in the electronics industry. Usually this passes unnoticed because our bodies do not feel discharges below 3000 volts. We may see ESD above 5000 volts as a spark. The most sensitive components may be damaged by a charge of just 30 volts, and many standard components are sensitive to charges of between 100...200 volts. The presence of inherent ESD is not easy to detect. Product damage may go undetected at the production stage, but lead to failure at a later date. Once the potential dangers of ESD damage are understood, effective methods of prevention can be put in place. All-inclusive protection from electrostatic discharges is a necessity whenever modern electronic devices are handled. An EPA (ESD Protected Area) should always use ESD protected materials to prevent component damage. Protection should systematically extend from goods inwards areas to final test and packaging. A systematic approach to controlling static in the workplace should include the following;

- ESD protected workstation, transport, storage systems
- ESD protected production tools and instruments
- ESD protected work clothes, shoes, wrist straps
- education of personnel, instructions, quality control
- cleanliness is important as dust acts as an isolator
- audits to ensure continuous ESD protection

This brochure will help you find answers to the electronics industry's problems of workstation and storage specification. If you would like to learn more about our other products, please ask for the following brochures:

TRESTON Industrial Furniture
TRESTON Storage Systems

TRESTON manufactures to ISO 9001 quality standard

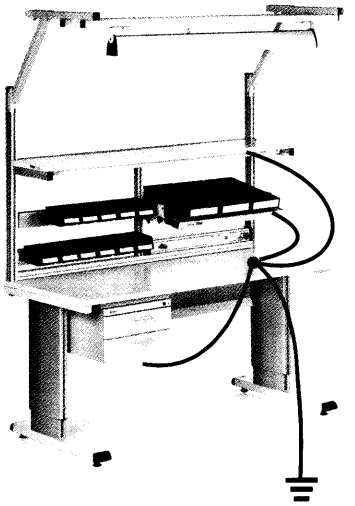
Treston is an ISO 9001 registered company. Certification includes the design, development, manufacture and marketing of the company's range of storage equipment and industrial furniture. Our industrial furniture also has the GS-quality approval (TÜV).
TRESTON ESD products and their materials are to IEC 61340-5-1 international standards. The ESD products meet with cleanroom requirements and are to the international standard EN ISO 14644-1 class 7. Equivalent Finnish standard is FS 209 E, where the number of particles is under 10 000 per cubic metre of air.

Colours

Colours reproduced here are as accurate as print techniques allow.

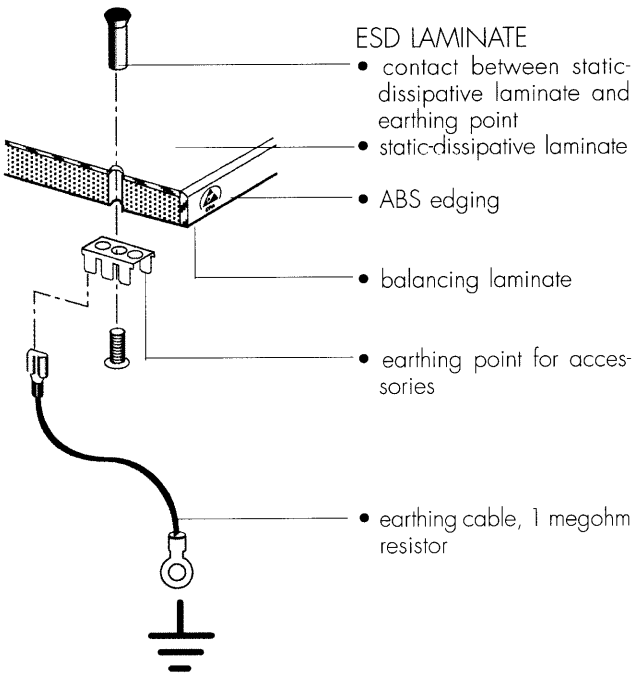
light grey RAL 7038

dark grey RAL 7005



ESD PROTECTED WORKBENCH

- worktops are 26 mm ESD-laminate
- contact between static-dissipative laminate and earthing point
- semiconductive accessories
- earthing cables of accessories are connected to workstations's earthing point
- earth via protective 1 megohm resistor



Properties of TRESTON ESD protective materials

WORKTOPS
Static dissipative high pressure laminate: (illustrated)

- resistance surface to ground 10^6 - 10^8 ohm
- surface to surface 10^6 - 10^9 ohm
- resistant to heat, solder flux, most chemicals and solvents

STEEL PARTS
Semiconductive epoxy powder coated steel

- surface resistivity 10^5 - 10^9 ohm

PLASTIC MATERIALS
Semiconductive polypropylene = PP

- surface resistivity 10^3...10^6 ohm/square
- volume resistivity 10^3...10^6 ohm x cm
- temperature tolerance -20...+70°C

Semiconductive polystyrene = PS

- surface resistivity 10^3...10^6 ohm/square
- volume resistivity 10^3...10^6 ohm x cm
- temperature tolerance -40...+ 65°C