



TEKNO ELEKTROMEKANİK MÜHENDİSLİK SAN. VE TİC.A.Ş.



HTL CONTAINMENT-BIOTECHNOLOGY SOLUTIONS



Application Areas:

- ⇒ High Level Biosafety Laboratories class BSL-3 / BSL-4
- ⇒ Recombinant DNA and Virus Laboratories
- ⇒ Biotechnology,
- ⇒ Biopharmaceutical Factories,
- ⇒ Decontamination, Fumigation Facilities,
- ⇒ Nuclear Facilities,
- ⇒ Highly Potent Chemical Facilities,
- ⇒ NBC Facilities
- ⇒ Dryrooms
- ⇒ Isolation Rooms, Special Operation Rooms in Hospitals

Main Productions :

- ⇒ Gas-tight Systems With Inflatable Pneumatic Gasket,
 - ⇒ Doors,
 - ⇒ Pass-boxes
 - ⇒ Dampers
- ⇒ Chemical Decontamination Shower
- ⇒ Vaporised Hydrogenperoxide Sterilisation Systems
 - ⇒ Peroxmin Mobile Sterilisation System With The Option Of
 - ⇒ Dehumidification,
 - ⇒ Deactivation
 - ⇒ Peroxsimplex Cabin Sterilisor
- ⇒ Vaporised Hydrogen Peroxide Generator Integrated Pass-paxes Pass throughs,
- ⇒ Vaporised Hydrogen Peroxide Generator Integrated Sterilisation Cabinets,

Gas-tight Doors

- ⇒ Pneumatic gasket produced as one part.
- ⇒ Outer frame produced as stainless steel and corners is rounded.
- ⇒ When pressure applied to the gasket gasket lip goes out and press to the surface and gives very good tightness.
- ⇒ All the operation and risks controlled and monitored through a PLC system like pressure loss in the line, gasket problem, etc.
- ⇒ All the units tested according to the DIN 25496.
- ⇒ It is ready for building management system.
- ⇒ The Door wing may be stainless steel or complete glass.
- ⇒ Tailor-made dimensions available.



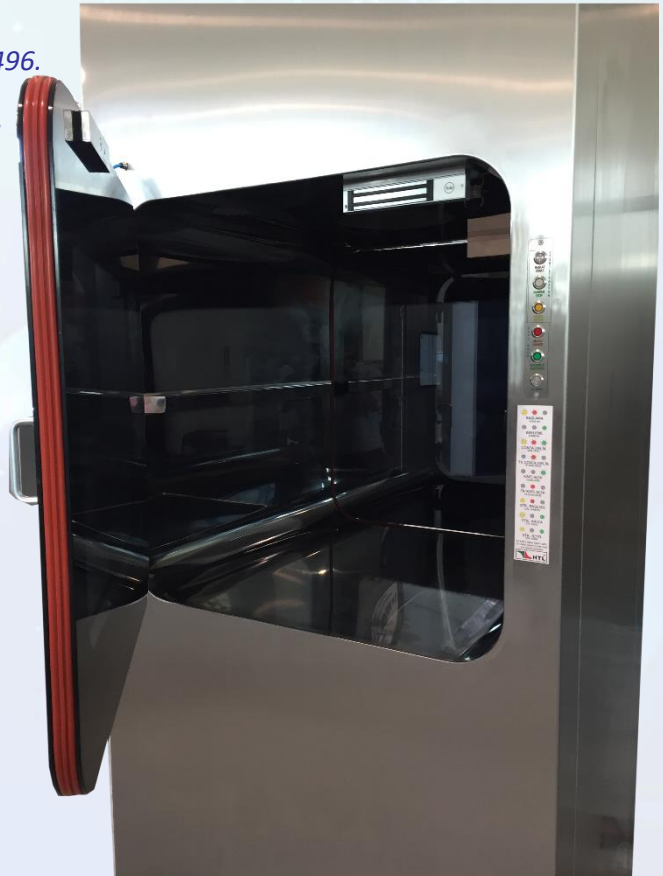
Gas tight dampers:

- ⇒ Pneumatic gasket produced as one part.
- ⇒ Outer frame and wing AISI 304 grade stainless steel,
- ⇒ When pressure applied to the gasket gasket lip goes out and press to the surface and gives very good thightness.
- ⇒ All the operation and risks controlled and monitored through a PLC system like pressure loss in the line, gasket problem, etc.
- ⇒ All the units tested in 2000 Pa according to the DIN 25496.
- ⇒ It is ready for building management system.
- ⇒ Tailormade dimensions possible.



Gas tight pass-boxes , cabinets, pass-throughs

- ⇒ Pneumatic gasket produced as one part.
- ⇒ When pressure applied to the gasket gasket lip goes out and press to the surface and gives very good thightness.
- ⇒ Electrically interlocked,
- ⇒ Inner surface mirror polished AISI 316 grade stainless steell Outer surface painted steell or AISI 304 grade stainless steell,
- ⇒ H14 filter in supply line ,
- ⇒ 2*6 mm tempered glass doors, with aluminium inner frame,
- ⇒ PLC controlled,
- ⇒ Optionally :
 - ⇒ Gas-tight valves for supply and suction lines,
 - ⇒ UVGI surface sterilizator,
 - ⇒ H₂O₂ connection for sterilisation, or built in H₂O₂ sterilisator
 - ⇒ frame produced as stainless steell and corners is rounded.
- ⇒ All the operation and risks controlled and monitored through a PLC system like pressure loss in the line, gasket problem, etc.
- ⇒ All the units tested according to the DIN 25496.
- ⇒ It is ready for building management system.



Gas tight pass-boxes , cabinets, pass-throughs



Gas tight chemical decontamination shower

- ⇒ Doors pneumatic gasket produced as one part.
- ⇒ When pressure applied to the gasket gasket lip goes out and press to the surface and gives very good thightness.
- ⇒ Electrically interlocked,
- ⇒ Inner surface AISI 316 grade stainless steell Outer surface AISI 304 grade stainless steell,
- ⇒ Two tanks for chemical and water
- ⇒ 17 nozzles for efficient cleaning,
- ⇒ 2*6 mm tempered glass doors, with aluminium inner frame,
- ⇒ PLC controlled,
- ⇒ Optionally :
 - ⇒ Breathe air connection for positive pressured gownings
 - ⇒ H₂O₂ connection for sterilisation, or built in H₂O₂ sterilisator
 - ⇒ frame produced as stainless steell and corners is rounded.
- ⇒ All the operation and risks controlled and monitored through a PLC system like pressure loss in the line, gasket problem, etc.
- ⇒ It is ready for building management system.



Gas tight chemical decontamination shower



⇒ *In the cleanroom, biocontainment system or cleanrooms air cleanliness obtained by Hepa filters in the HVAC system and differential pressures, but surfaces couldn't be cleaned by HVAC system or standard cleaning procedures. So, surfaces should be decontaminated -disinfected or sterilised by gaseous media like hydrogen peroxide or similar gases.*

Peroxmin Mobile Vaporised Hydrogen peroxide room/cabinet sterilisator

⇒ *Can be used for sterilisation for :*

⇒ *Room,*

⇒ *Complete Lab/department via HVAC system,*

⇒ *Cabinet*

⇒ *Simple to use, it is possible to use standard setup or easily programmable,*

⇒ *Connection is simple with quick connect clamps,*

⇒ *Worked with 35% H_2O_2 solution sold readily with different brandnames.*

⇒ *You could use cGMP compliant paper printout or flash memory.*

⇒ *It has dehumidifying and deactivation system optionally.*

⇒ *It can pass through the narrow doors*

⇒ *It is possible to make modification for tailor-made solutions.*

⇒ *Could be used up to 200 m³ rooms with standard version and up to 600 m³ rooms with increased capacity.*

⇒ *Very economic to operate. For example total H_2O_2 cost for 30 m³ room is less than 1 Euro.*

⇒ *It is easy and fast to validate with special bacterial sport strips.*

⇒ *Sterility level is log6 .*



Peroxmin Mobile Vaporised Hydrogen peroxide room/cabinet sterilisator



Peroxsimplex mini room/cabinet sterilisator

⇒ Can be used for :

⇒ Room,

⇒ Cabinet

⇒ Simple to use, only to timer adjustment,

⇒ it is possible to use directly in room or in cabinet, or could be connected via a hose.

⇒ Worked with 35% H_2O_2 solution sold readily with different brandnames.

⇒ Could be used up to 100 m3 rooms

⇒ Very economic to operate. For exaple total H_2O_2 cost for 30 m3 room is less than 1 Euro.

⇒ It is easy and fast to validate with special bacterial sport strips.

⇒ Sterility level is log6 .



Our other activities:

- Engineering,
- Manufacturing
- Contracting

for:

- Cleanroom
- Containment Facilities
- Dryrooms

in

- Pharmaceutical/chemical
- High biosafety applications (BSL-2/3/4)
- Electronic/nanotechnology
- Defence
- R&D

Our other productions:

- Cleanroom panelling systems in 3 different series; including Wall panel, walkable&non-walkable ceiling, doors, windows, coving, etc.
 - HPL PharmaClean series
 - Metallic NanoClean series
 - Metallic Purclean series
- Air-showers/Air tunnels
- Laminar air flow units, dispensing/sampling hoods



TEKNO ELEKTROMEKANİK MÜHENDİSLİK SANAYİ VE TİCARET A.Ş.