



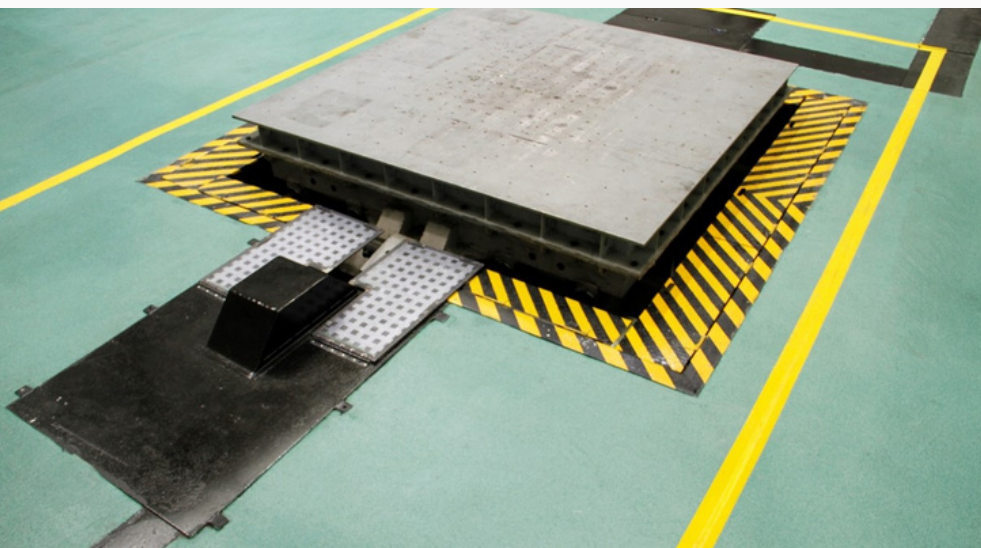
VIRLAB

VIRLAB is a seismic, vibration and shock testing laboratory accredited by ENAC in accordance with the UNE-EN ISO/IEC 17025 standard. It is the only national laboratory approved by the Spanish Nuclear Power Plant Owners Group to carry out seismic qualification tests.

Testing platforms

EDB250X250 Plateforme biaxiale oléohydraulique

Capable of testing equipment up to 6,000 kg and up to 4 m in length.



AREA OF USE: 2,500x2,500 mm
ACTUATORS: 2 cylinders 150 kN
AMPLITUDE: ± 125 mm
MAXIMUM SPEED: 800 mm/s
MAXIMUM ACCELERATION: 6 g (horizontal)
FREQUENCY RANGE: 0,1 to 200 Hz

TEST STANDARDS

IEC/IEEE 60980-344
Nuclear installations
Equipment important to safety
Seismic qualification

IEC 60068-3-3
Environmental testing -
Part 3-3: Supporting
documentation and guidance -
Seismic test methods for
equipment

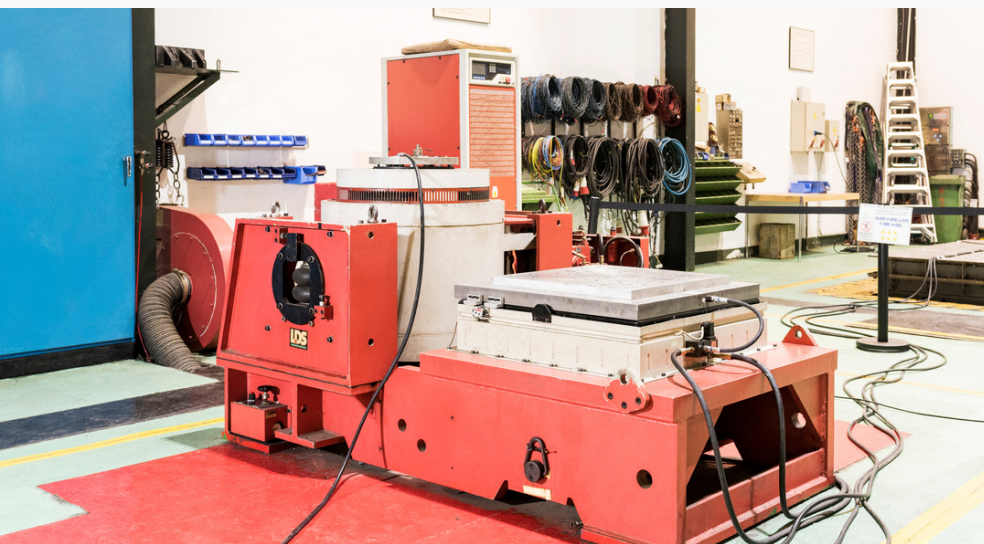
IEC/60068-2-6
Environmental testing- Part 2-6:
Tests- Test Fc: Vibration
(sinusoidal)

IEC 60068-2-57
Environmental testing - Part
2-57: Tests - Test Ff: Vibration
- Time-history and sine-beat
method



LDS824LS Uniaxial electrodynamic platform

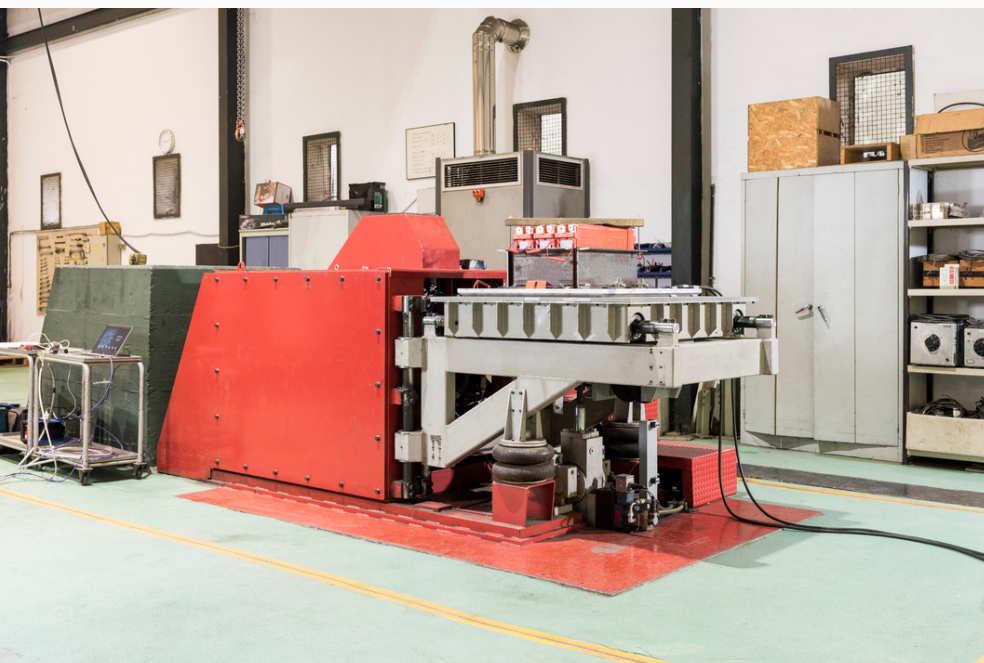
It can test equipment weighing up to 450 kg and has an extendable surface area of 1,000 mm x 1,000 mm.



AREA OF USE: 750x750 mm
ACTUATOR: Generator of 27 kN
AMPLITUDE: ± 19 mm
MAXIMUM SPEED: 1.500 mm/s
1.780 mm/s (shock)
MAXIMUM ACCELERATION: 60 g
FREQUENCY RANGE: 1 to 3,200 Hz

EDB120 Oil-hydraulic biaxial platform

Ability to test equipment weighing up to 450 kg



AREA OF USE: 1,200x1,200 mm
ACTUATORS: 2 cylinders 100 kN
AMPLITUDE: ± 125 mm
MAXIMUM SPEED: 1.000 mm/s
MAXIMUM ACCELERATION: 10 g
FREQUENCY RANGE: 0.1 to 150 Hz

TESTED EQUIPMENTS

Electrical components: Relays, contactors, switches, fuses, converters, connectors, terminals...

Electrical panels:
Engine Control Centers, Relay Panels, Desks & Control Panels, Ripples, Battery Chargers, MV Cabs, LV Frames...

Motor pumps and fans

Valves:
Thermostatic, ball, diaphragm, gate, anti-return...

Gates:
Firewall, dimming, grids...

Instrumentation: Pressure switches, thermostats, level indicators, humidity detectors, voltmeters, frequencymeters...

REFERENCES

ORANO

EIFPAGE EES

AXIMA NUCLEAIRE

BOUYGUES CONSTRUCTION

CAMFIL

SOCOMEK

TECNATOM

BERNARD CONTROLS

DAHER

SPIE

VULCANIC

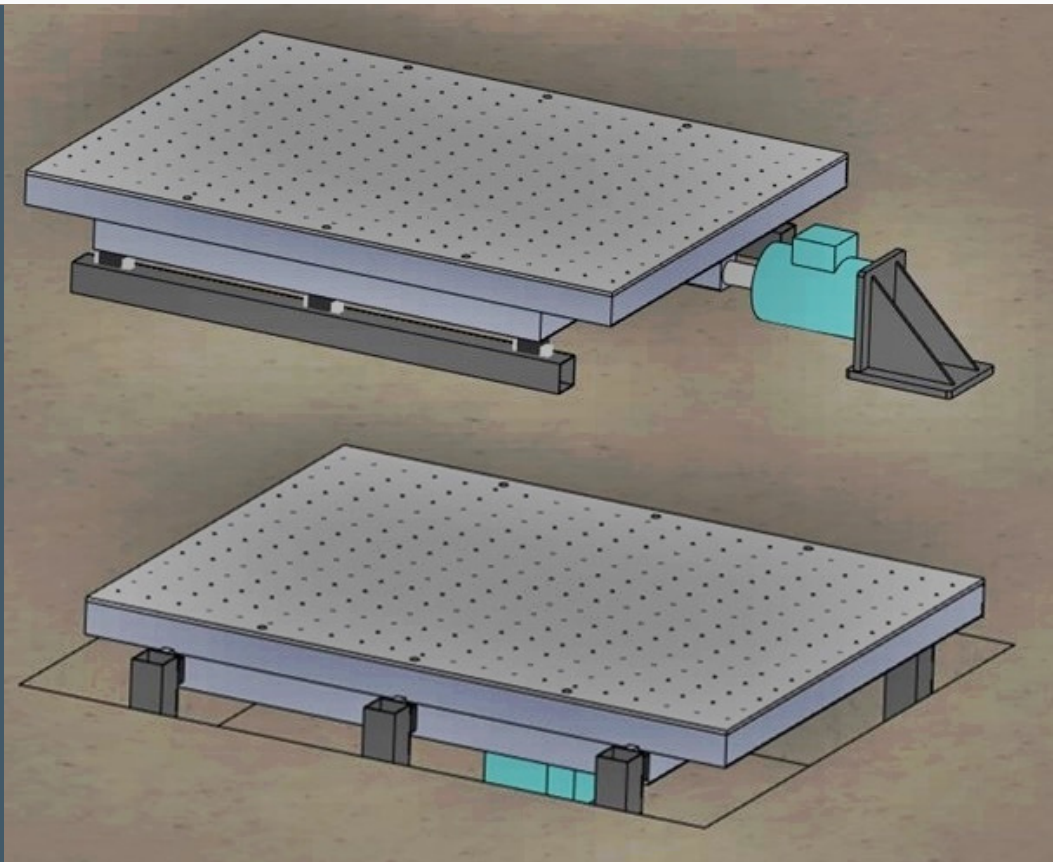
SNEF

SPANISH NUCLEAR PLANTS

NEW 4X3 meter PLATFORMS in 2024

Capable of testing equipment weighing up to 10,000 kg
and up to 6 m in length

Large capacity
Double platform
Quick change system



AREA OF USE: 4000 x 3000mm
ACTUATORS: 2 cylinders 910 kN
AMPLITUDE: ± 25 mm
MAXIMUM SPEED: 1200 mm/s
MAXIMUM ACCELERATION: 11 g (empty)
8g(with 3,000 kg equipment)
FREQUENCY RANGE: 0.1 to 200 Hz