

Esploidenti Sabino Srl

company profile

company profile



HISTORY

history

H I S T O R Y



Esploidenti Sabino Srl

- Fireworks Supply Company since beginning of 1900
- Production of black powder and cords
- Production of cartridge powder and other military pyrotechnics
- **Demil start-up in 1978 as Esploidenti Sabino S.r.l.**
- Demilitarization of conventional and non conventional ammunition with recovery of metallic scraps and non metallic, overhaul, repair, maintenance and modification of conventional and non conventional ammunitions and "cluster bomb" weapon systems, reformulation and manufacturing of industrial explosive, disposal of air-bags and safety belts.



SITE MAP

S I T E M A P



Esploidenti Sabino Srl

■ Aerial view















SITE MAP

S I T E M A P



Esploidenti Sabino Srl

■ Plant of Casalbordino

	DEMIL AREA
	EXPLOSIVE AREA FOR CIVILIAN USE
	SERVICES PERMISE / OFFICES
	DEPOTS
	ROTARY KILNS
	STATIC OVEN
	ARMOUR FOR DETONATING TEST
	LABORATORY
	AMMUNITION MAINTENANCE
	OUT OF SERVICE WORKSHOP
	LIMIT OF PROPERTY
	FENCE



ACTIVITIES



Esploidenti Sabino Srl

A C T I V I T I E S

THE ACTIVITIES OF ESPLODENTI SABINO ARE:

- Demilitarization of conventional and non conventional ammunition with recovery of metallic scraps and non metallic and disposal of explosives and propellants.
- Maintenance and modification of conventional and non conventional ammunition.
- Reformulation and packing of explosive for civilian use even from explosives coming from demilitarization activities.
- Disposal of safety devices (air-bags, safety belts and signal rockets).
- ADR transport of ammunition and explosives (Class 1)
- Design of Demilitarization plant & equipment & Civilian productions

COST EFFECTIVE PERFORMANCE



Esploidenti Sabino Srl

COST EFFECTIVE PERFORMANCE

Contract performance cost effectiveness is obtained through the following key elements:

- CAPABILITIES
- ORGANIZATION
- PERSONNEL
- FACILITIES
- LICENSES
- MANUFACTURING PROCEDURES
- EQUIPMENT
- TRANSPORT
- SECURITY
- STANAG 4107
- TRAINING

CAPABILITIES



Espodenti Sabino Srl

C A P A B I L I T I E S

■ KNOW-HOW

Related to the demilitarization activities, maintenance and modification of ammunition, clearing of depots, explosive manufacturing plants and other.

■ EDP SUPPORT TO THE DEMIL ACTIVITIES

Computerized planning, management and monitoring of the activities

ORGANIZATION

ORGANIZATION



Esploidenti Sabino Srl

- **UNI EN ISO 9001:2015**
Certification of Quality Management System.
- **UNI EN ISO 14001:2015**
Certification of Environmental Management System.
- **BS OHSAS 18001:2007**
Certification of Health & Safety Management System.
- **CERTIFICATE OF EXCELLENCE n°069**
Certificate herbing the standards about the Quality, Environmental and Health & Safety Management System which meets the requirements of UNI EN ISO 9001:2015, UNI EN ISO 14001:2015 and BS OHSAS 18001:2007.



PERSONNEL

PERSONNEL



Esploidenti Sabino Srl

P E R S O N N E L

<input type="checkbox"/>	MANAGEMENTS	President	1	
		Director of activities		2
<input type="checkbox"/>	SUPERVISORS	Staff	4	
<input type="checkbox"/>	PRODUCTION MAN POWER	Worker	68	
<input type="checkbox"/>	QUALITY MANAGEMENT SYSTEM	Employees		2
<input type="checkbox"/>	ENVIROMENTAL MANAGEMENT SYSTEM	Employees		2
<input type="checkbox"/>	HEALTH & SAFETY MANAGEMENT SYSTEM	Employees		2
<input type="checkbox"/>	ENGINEERING	Employees	3	
<input type="checkbox"/>	ADMINISTRATION	Employees	5	
<input type="checkbox"/>	CONSULTANT	Employees	3	
<input type="checkbox"/>	TECHNOLOGICAL LABORATORY	Specialist		1
		Assistant	1	

FACILITIES

F A C I L I T I E S



Esploidenti Sabino Srl

■ STORAGE DEPOTS

for ammunition and explosives:

400 Tons

Depot in Casalbordino - Italy.

286 Tons

Depot in S. Giovanni Rotondo – Italy.

■ DEMIL PLANT

Facilities in Casalbordino within an area of 18 hectares.

■ CUSTOMS BONDED DEPOT

Facilities in Casalbordino.



LICENSES

L I C E N S E S



Esploidenti Sabino Srl

■ DECRETO PREFETTIZIO

granted by the Prefettura di Chieti pertaining to the manufacture of industrial explosives, repair and demilitarization on all conventional ammunition.

■ AUTHORIZATION

granted by Regione Abruzzo for the thermo-disposal facility provided of a continuous monitoring system.

■ AUTHORIZATION

granted by Ministero delle Finanze for the Custom Private Depot "Type C"

MANUFACTURING PROCEDURES



Espodenti Sabino Srl

M A N U F A C T U R I N G

■ PROCESS

the demilitarization activities are performed i.a.w. working procedures, specific for each stage.

■ EQUIPMENT

the equipment are designed by the engineering office and manufactured by outside specialized workshop compliance with the safety procedures and regulations in force.

EQUIPMENT

E Q U I P M E N T



Espodenti Sabino Srl

■ EXPLOSIVE MELTING

to perform discharge of grenades, naval mines, warheads, others

■ GRINDING OF BURST EXPLOSIVES

for production of industrial explosives for civilian use

■ MIXING AND BAGGING

for production of civilian industrial explosives

■ CUTTING

to perform cutting of ammunition, etc.

■ DISASSEMBLING

to perform disassembling of ammunition, etc.

■ MAINTENANCE AND OVERHAUL

for the maintenance of ammunitions and weapon systems.

EQUIPMENT

E Q U I P M E N T



Esploidenti Sabino Srl

The following equipment are used for demilitarization

- **N°3 DIRECT ROTARY KILN APE 1236**

for small arms cartridge up to 20mm, detonator, primers, fuzes, etc.

- **N°1 STATIC OVEN**

for loading charges , composite propellants , illuminating, canister and explosives

- **N°2 CRYOGENIC EQUIPMENT**

for the cryofracture of the ammunition by means of rapid cooling with liquid nitrogen and crushing

TRANSPORT

T R A N S P O R T



Esploidenti Sabino Srl

For European transports Esploidenti Sabino, works with its 10 trucks EXIII Type Class 1 and its drivers, certified i.a.w. ADR in force and also provided of the German “competence certificate”.

In order to satisfy the different transportation requirements, sometimes very peculiar, a team of professional transport companies has been setup with responsibilities assigned in relation to their specific expertise

- **RIDGEWAY INT.L / SIMTEX**
for international transportation & shipment
- **DI LALLO TRASPORTI / HANDKE GmbH / ANTONISEN**
for European transportation



SECURITY

SECURITY



Espodenti Sabino Srl

The security of facilities is ensured by the following:

- **DAILY SURVEILLANCE**

during working hours (by our skilled sworn and armed guards) on the premises

- **NIGHTTIME SURVEILLANCE**

by our personnel, private agency and local police

- **PORTABLE RADIO SETS**

for internal communications

STANAG 4107

S T A N A G 4 1 0 7



Espodenti Sabino Srl

Espodenti Sabino's activities (demil, maintenance, overhaul, clearing) are surveilled by

- **GQAR (Government Quality Assurance Representative)**
personnel appointed by Ministero della Difesa on duty to the plant.
- **QAR (Quality Assurance Representative)**
personnel appointed by the customer.

TRAINING

T R A I N I N G



Esploidenti Sabino Srl

Esploidenti Sabino holds in its plant

- Training on job of our workers specific for each phase of Demil Activities.
- Planned course on “Environmental Quality & Safety Requirements” i.a.w. the Legislation, Standards and Regulations in force.
- “First Aid” and “Firefighting” Course.

TECHNOLOGICAL LABORATORY



Esploidenti Sabino Srl

C H E M I C A L T E S T

- HPLC analysis**
Performed on all organics explosives both pure and mixture explosives
- Spectrophotometric analysis**
to determine the presence of metals and metal organics compounds.
- Damp degree determination**
of explosive materials by Karl Fischer method
- Optical microscope surveying**
- Explosives stability determination**
by thermo analytical systems.
 - Physical characteristics determination**
of materials (gradation, viscosity, density, setting point, melting-point, etc.);
 - Classic chemical analysis**
(quantitative titration, qualitative research, etc.);



TECHNOLOGICAL LABORATORY



Esploidenti Sabino Srl

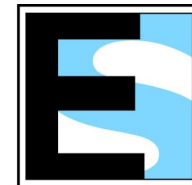
P H I S I C A L T E S T

Building (1)

- Timing and detonating velocity meter
- Shock wave pressure
- Traulz
- Thermic analysis explosives impact



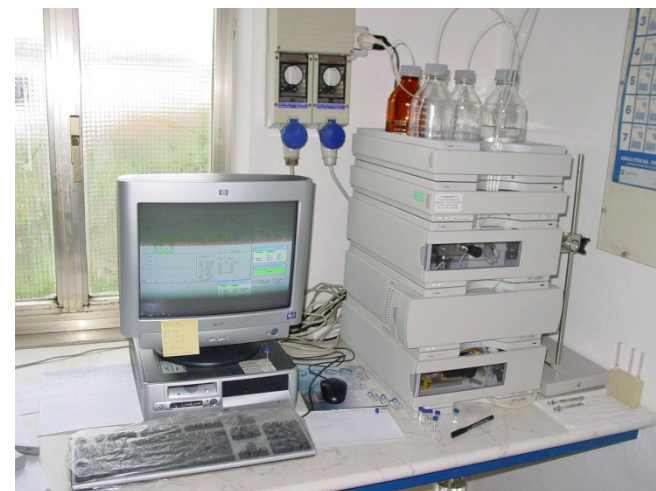
TECHNOLOGICAL LABORATORY



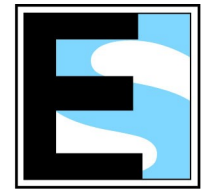
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E Q U I P M E N T

- Densimeter
- Kjeldahal device
- Ultra sound bath
- Thermostatic bath
- 0,1mg analytical balance
- Armour-plated aspirating cap
- Centrifuge
- Conductivity device
- Freezer
- Distilling apparatus
- Explosimeter
- Gas chromatography
- Grading sieve apparatus
- Waterbath
- Spectrometer (1)
- HPLC (High Performance liquid Chromatograph) (2)



TECHNOLOGICAL LABORATORY



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E Q U I P M E N T

- Microscope
- PHmetro
- Vacuums pump
- Reagent
- Refractometer
- Jar test
- Stereo-microscope
- Thermostat stove
- Magnetic thermo-stirrer
- Computerized/Digital Thermometer
- Thermostat
- Karl Fischer titrating device
- Laboratory glass-ware
- Viscosimeter
- Explomet-FO-2000 (1)
- Berta



EXAMPLE OF ACTIVITIES



Espodenti Sabino Srl

E X A M P L E S

CLEARING of

- FIRING RANGE
- STORAGE AMMO DEPOT
- OPEN YARDS
- WW THEATERS

through

video inspection
georadar equipment
metal detectors

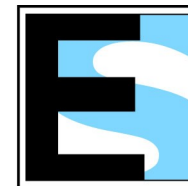
DISPOSAL to

- SMALL ARMS
- PRIMERS
- FUZES
- DETONATORS
- WARHEADS
- ROCKET MOTORS
- MISSILES
- TORPEDO
- MINES

through

Uncanning
Defuzing
Cutting
wash-out
burning

DISPOSAL OF S T A T I C O V E N



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Building (1)

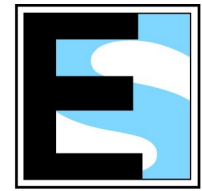
Equipment (2)

Demilitarization of:

- Loading charges
- Propellants (3)
- Illuminatings
- Canisters (4)
- Explosives



DISPOSAL OF DIRECT ROTARY KILN APE 1236



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Building (1)

Equipment (2)

Demilitarization of:

Small arms (3)

Boosters (4)

Fuzes (5)

Tracers



DISPOSAL OF CRYOGENIC EQUIPMENT



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Building (1)

Equipment (2)

Demilitarization of:

- Sub-ammunition M42 and M46 (3, 4)**
from Projectile 155mm
- Sub-ammunition M77**
from MLRS missile



DISPOSAL OF EXPLOSIVE MELTING



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Building (1)



Equipment (2)

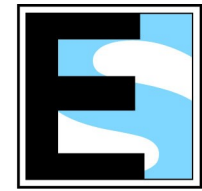


Wash out of:

- Naval mine MK16 (3)**
- Bomb 120mm HE (4)**
- SH-55 MINE (5)**



DISPOSAL OF GRINDING



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Building (1)

Equipment (2,3,4)



Grinding of:

Detonating explosive



DISPOSAL OF MIXING AND BAGGING



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Building (1)



Equipment (2,3)



Production of:

Civilian explosive (4)



DISPOSAL OF

BOOSTER FOR EXPLOSIVE TO CIVILIAN USE



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1

Building (1)



2

Equipment (2)



4

Booster (3)



Building (4)



3

Equipment (5)



5

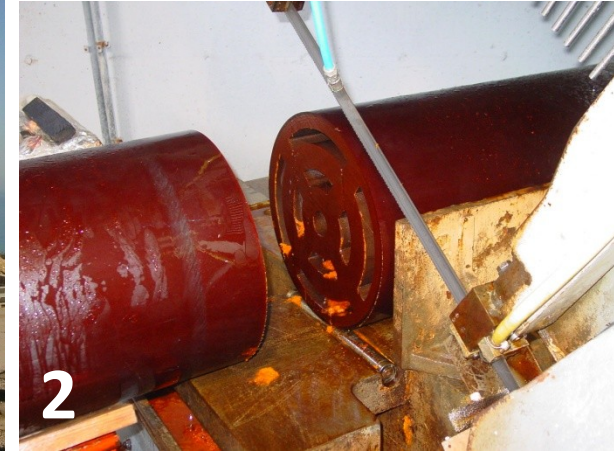
Booster (6)

DISPOSAL OF C U T T I N G



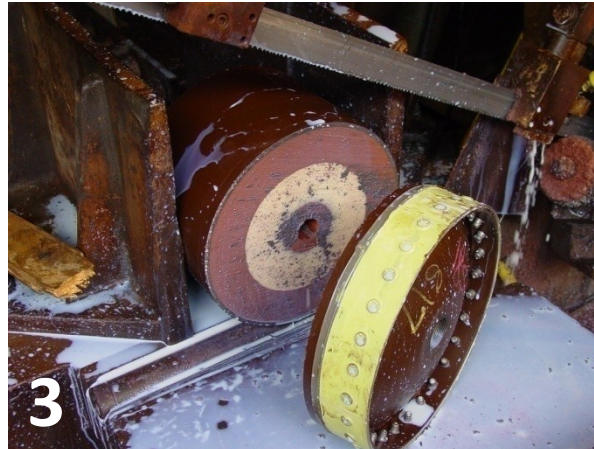
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Building (1)



Cutting of:

- Rocket motor Nike (2)
- Rocket motor MLRS (3)
- Projectile 8" (4)



DISPOSAL OF

DISASSEMBLY



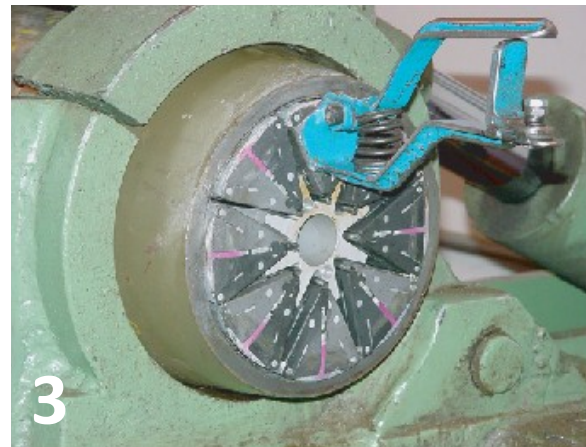
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Building (1)



Disassembling of:

- Cartridge 90mm (2)
- Projectile 8" with sub-ammunitions (3)
- Projectile 8" with bomblets (4)



DISPOSAL OF

DISASSEMBLY



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Building (1)



1



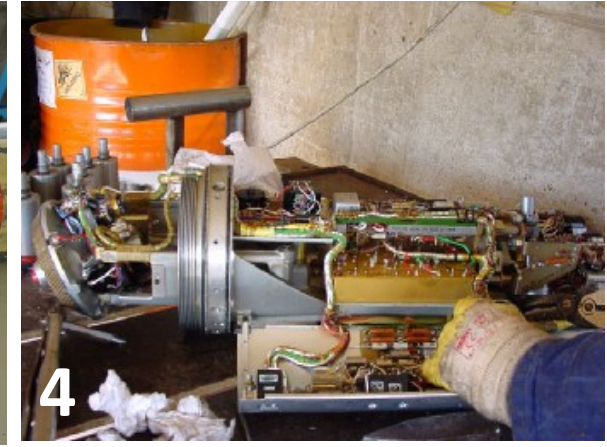
2

Disassembling of:

- Sparrow missile (2)
- MLRS warhead (3)
- Guidance system for AIM-7 (4)



3



4

DISPOSAL OF CLUSTER BOMB



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Warhead MLRS



M77 sub-ammunition



DISPOSAL OF CLUSTER BOMB

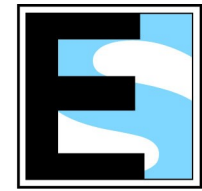


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Cluster Bomb MK20 Mod. 3

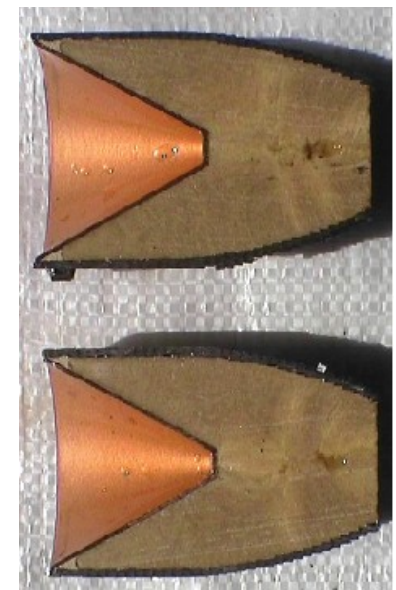
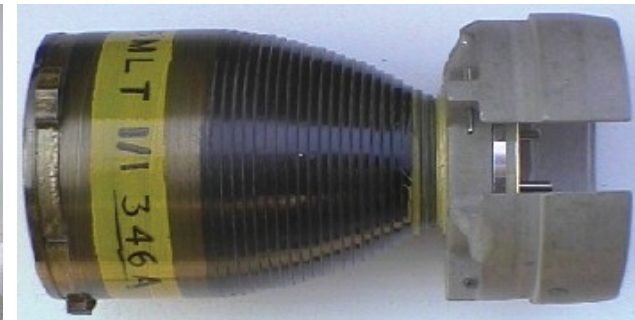


DISPOSAL OF CLUSTER BOMB



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**Cluster Bomb
No. 1A MK 2
(BL755 and RBL755)**



DISPOSAL OF CLUSTER BOMB

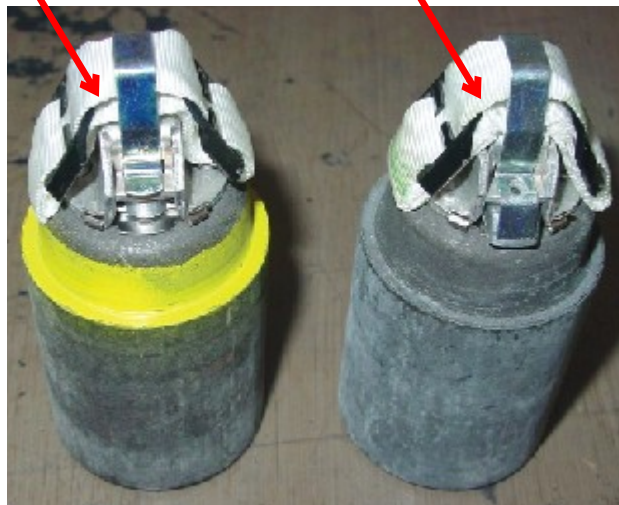


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Projectile 155mm M483A1



M46 sub-ammunition M42 sub-ammunition



Projectile 155mm HLSprKpr

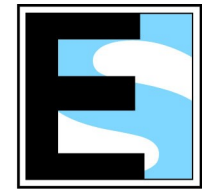


M185 sub-ammunition



WATER JET

W A T E R J E T



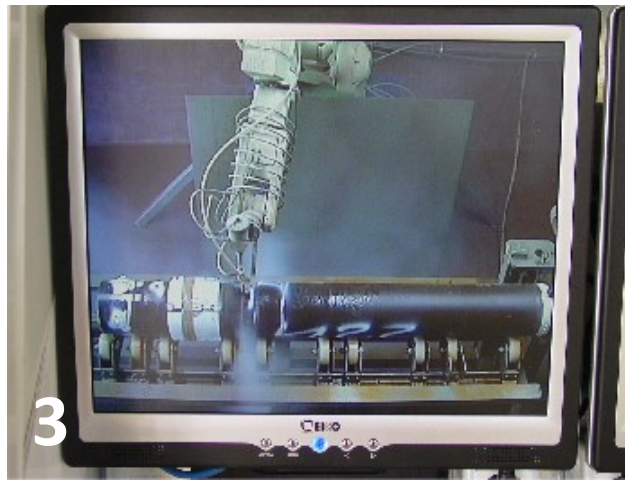
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Building (1)



Cutting of:

- Rocket Motor MLRS (2,3,4)



MAINTENANCE/OVERHAUL



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M A I N T E N A N C E

Building (1)

Certification (2)



Maintenance and
overhaul of:

**Parachute for Bomb
MK83 (3,4)**



DESIGN DIVISION

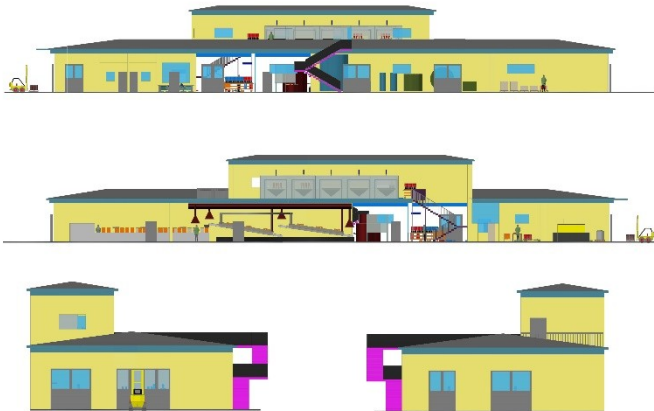


Esploidenti Sabino Srl

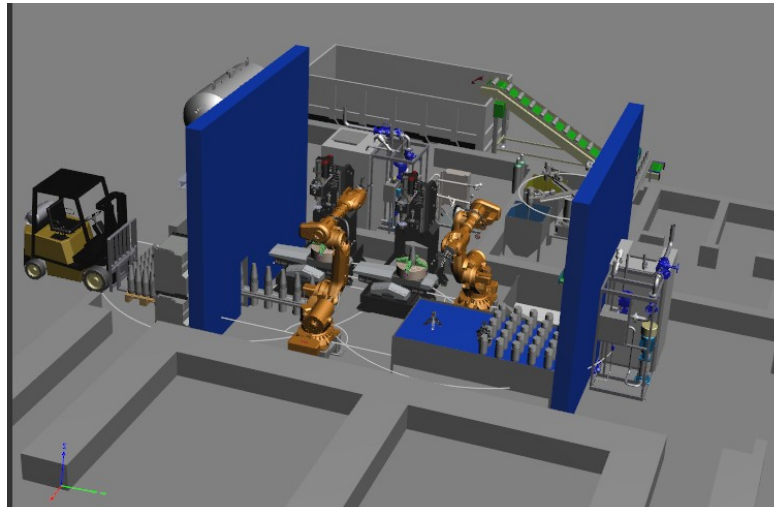
D E S I G N D I V I S I O N

ES plans for its own activities and on behalf of other plants to demilitarize plants for the ammunition demilitarization, civilian production and thermo-destruction of explosives and propellants.

All customer requests are analyzed and translated into ad-hoc solutions

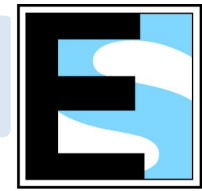


Unloading plant by wash-out



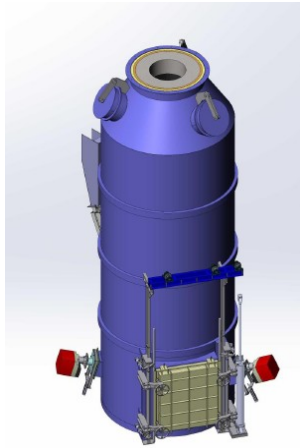
White Phosphorous Unloading & recovering plant

DESIGN DIVISION



Esploidenti Sabino Srl

D E S I G N D I V I S I O N

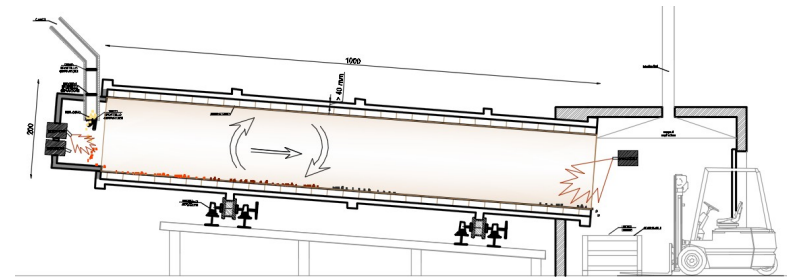


STATIC OVEN

For bulk Explosive and Propellant distruction

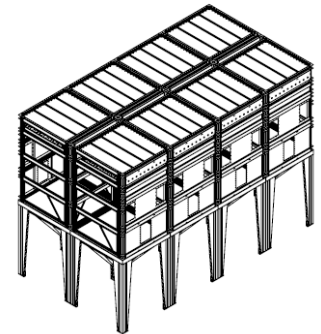
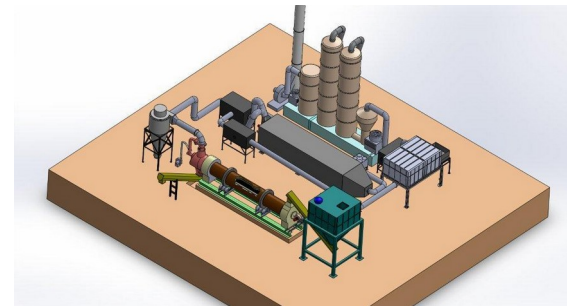
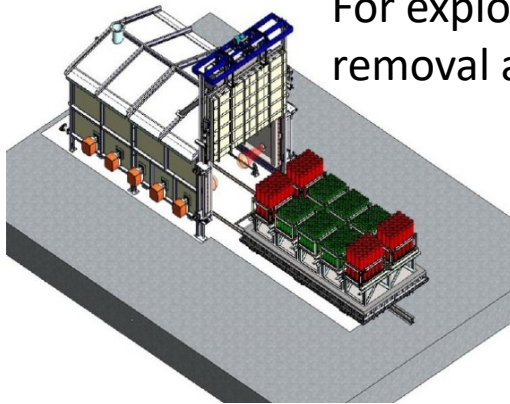
ROTARY KILN

For small ammunitions demilitarization



FLASHING FURNACE

For explosive residual removal after unloading



THERMAL OXIDIZER AND POLLUTION ABATHMENT SYSTEM

For chemical loaded ammunition destruction

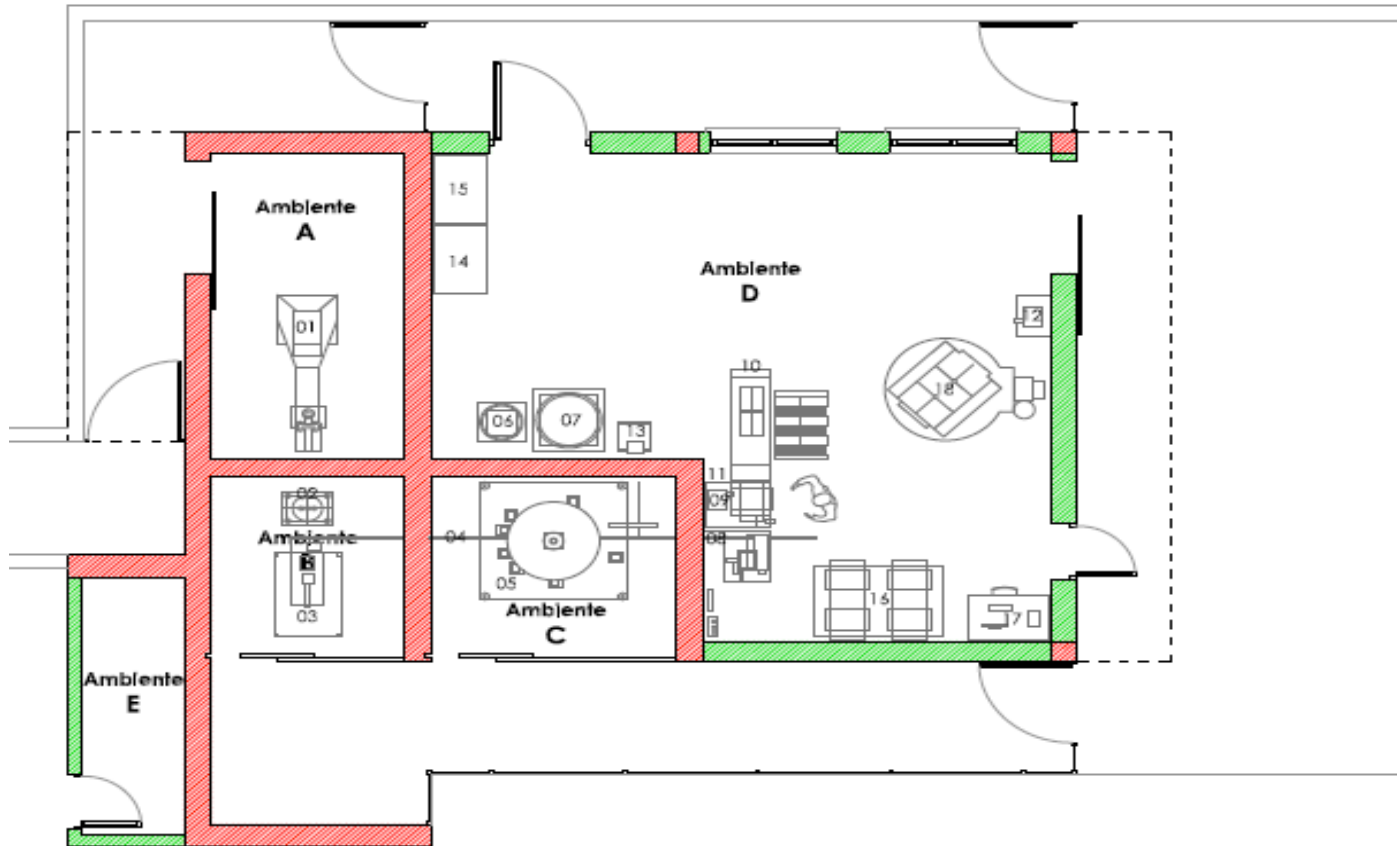
DESIGN DIVISION



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D E S I G N D I V I S I O N

BOOSTER FOR EXPLOSIVE TO CIVILIAN USE



REFERENCES

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Esploidenti Sabino Srl

R E F E R E N C E S

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