Hazardous waste treatment and recycling Limitation of greenhouse gas emissions

Europlasma is a French company whose expertise built up 25+ years, is based on its proprietary technoloy: **the plasma torch**



OUR TECHNOLOGY: THE NON-TRANSFERRED ARC PLASMA TORCH

The non-transferred arc plasma torch operates independently, with the electric arc being created inside the torch and does not require any additional equipment to be operated.

- Very high efficiency,
- Excellent reliability and adjustability.

Technology advantages :

- Electrode lifetime,
- Large power range from 50kW to 4MW (up to 20 MW can be developed),
- Use of different type of gas and gas mixture (Air, pure O2, CO2, complex gas mixtures coming from gasification or metallurgical processes),
- Automatic connections improving the operability of the system.



ISO 9001 certified since 2003 for the engineering, design, construction and sale of plasma heating systems, plasma furnaces and plasma reactors.

EUROPLASMA INDUSTRIES

Plasma solutions for waste

EUROPLASMA

OUR PLASMA TECHNOLOGY FOR HAZARDOUS WASTE TREATMENT, VOLUME REDUCTION AND RECYCLING

Our plasma process allows a wide range of hazardous waste types to be treated such as toxic ashes, asbestos, blasting dust, polluted soil, etc.

Customized plasma melting furnaces...

Adapted to specific requirements such as :

- type of waste
- furnace capacity
- plasma torch power
- ... in accordance with client's specifications.



Hazardous Waste Plasma Furnace



Added value : The glassy-end product obtained is totally inert and can be recycled as aggregate for road under-layer.



Volume reduction and conditioning of low and Intermediate Level radioactive Waste (LILW)

The plasma melting of LILW can reduce up to 80 times its volume while ensuring their long-term immobilization.

Added value : Plasma solution accepts mixed waste either organic or inorganic, liquid or solid, without prior separation and pretreatment.

Plasma solutions for gas

OUR PLASMA TECHNOLOGY FOR PROCESS GAS VALORISATION AND LIMITATION OF GREENHOUSE GAS EMISSIONS

Purification of exhaust top gases coming from industrial processes :

The use of the plasma torch into a plasma reactor aims at refining exhaust gases. It also enables to decrease the greenhouse gas emissions.

Process enhancement by gas overheating :

The plasma torch improves the thermal efficiency of the process, while using fewer fossil fuels.

OUR RESEARCH AND DEVELOPMENT TEST PLATFORM

Located in Morcenx (France), the test platform has been designed to be easily reconfigurable. The platform hosts dedicated plasma torch test bench and gas refining plasma reactor.



Gas refining Plasma reactor



Added value :

The platform allows:

- Testing plasma torches with different gas mixtures;
- Collecting and analysing datas related to the contribution of the plasma technology;
- Welcoming companies which want to test the Europlasma's technology in their process at pilot scale.

EUROPLASMA INDUSTRIES OFFERS A COMPLETE RANGE OF EQUIPMENTS AND SERVICES

- Preliminary and detailed technical and economic studies on plasma treatment solutions,
- Supply of plasma torch systems and plasma reactors,
- Technical assistance and training of operators,
- After sales service and supply of plasma torch spare parts.

Europlasma designs, manufactures and delivers Plasma Heating Systems, Plasma Reactors and Plasma Furnaces for toxic waste treatment and gas cleaning all over the world.

Main references :

- 💡 Hazardous Waste : Japan, Korea, France, China
- 💡 Radioactive Waste : France, Bulgaria
- 🖓 Gas cleaning : France



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