

# UPTIMUM

Burn-Wet System

## UPTIMUM – Waste Gas Treatment for PV and Compound Semiconductor Industry

**UPTIMUM** is a process waste gas abatement system using burn-wet technology. UPTIMUM safely and efficiently treats up to 500 slm\* of waste gases from different processes in various industry sectors and directly from where they originate (Point-of-Use, POU). The system can be operated with different fuel gases and provides a process-tool-interface that allows an efficient tool operation. Access for operation and maintenance is on front and back side.

\* Average value, depending on process

### Options

- › Power Supply: 3 x 400 V/50 Hz or 3 x 208 V/60 Hz
- › Fuel Gas: NG, LPG
- › 1 to 6 heated waste gas pipes, bypass valves and inlets
- › Circulation with water or lye
- › Process-Tool-Interface
- › Signal Tower
- › Drip Pan
- › Earthquake Safety Kit
- › IPAS Solution (Integrated Pump and Abatement System)
- › Customized water treatment solution available

### UPTIMUM

- › Integrated rotary dust collector (RDC *MINI*)
- › Oxidant: O<sub>2</sub>

### UPTIMUM PLUS

- › Roof mounted rotary dust collector (RDC)
- › Roof mounted side channel blower
- › Oxidant: CDA

**UPTIMUM PLUS** is based on the same operation principle as UPTIMUM, but was specifically designed to meet the requirements of processes in photovoltaic and compound semiconductor manufacturing. The UPTIMUM PLUS is capable of treating large amounts of H<sub>2</sub> (up to 700 slm\*), NF<sub>3</sub> or F<sub>2</sub>. Roof mounted equipment can be added to increase the particle removal efficiency and decrease the consumption of compressed dry air.

### Basic Features

- › Specifically for CVD processes, photovoltaic and compound semiconductors manufacturing
- › Treats loads of up to 700 slm\* H<sub>2</sub>
- › Long Uptime ≥98%
- › Options for improved dust removal and reduced CDA consumption



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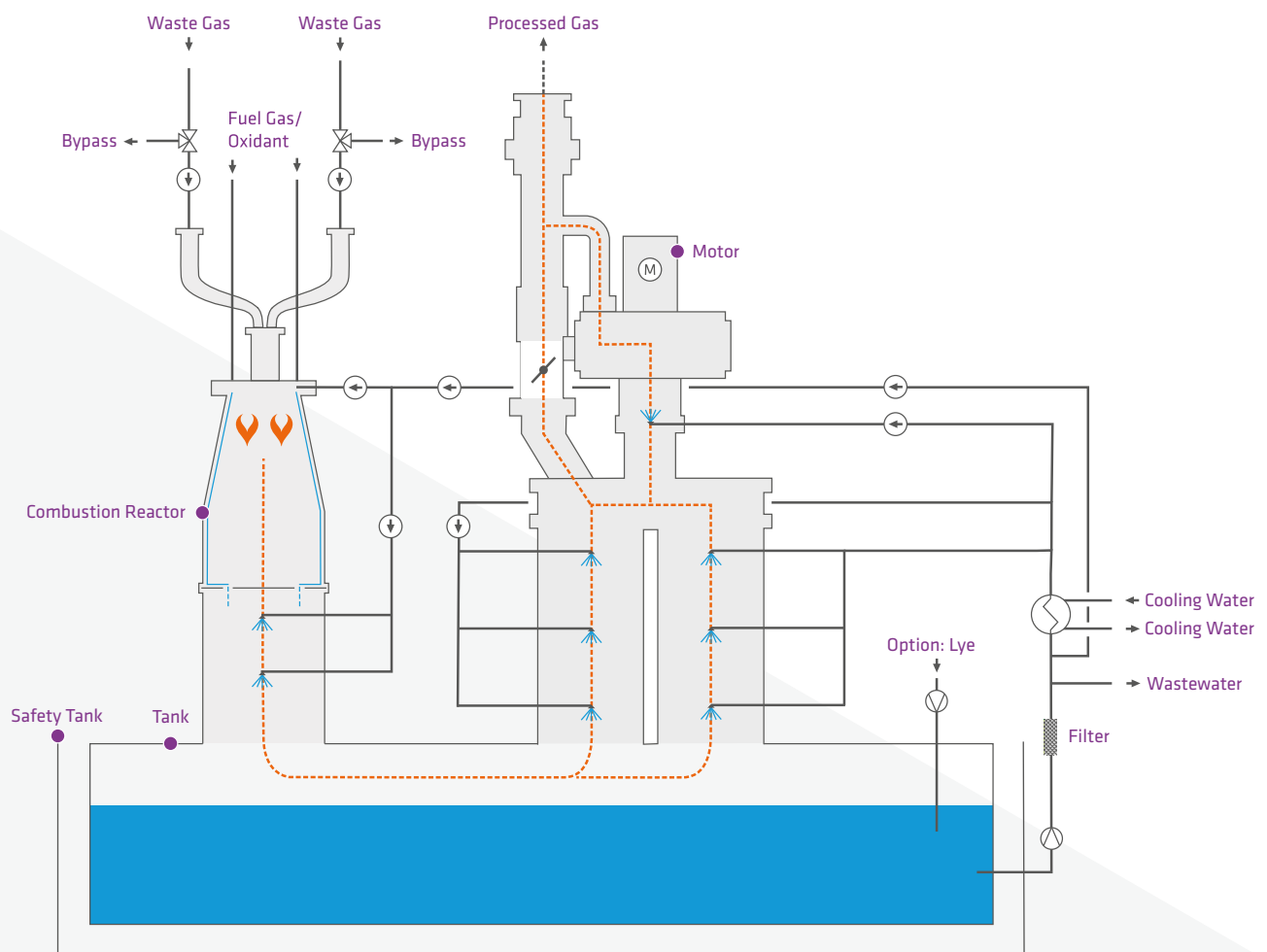
## Technical Data

	UPTIMUM	UPTIMUM PLUS
Dimensions (W x D x H)	1525 mm x 1050 mm x 2100 mm	1525 mm x 1050 mm x 2100 mm
Max. gas flow	500 slm*	700 slm*
Gas entry	6 x DN 40	6 x DN 40
Electricity	3 x 400 V / 50 Hz or 3 x 208 V / 60 Hz	3 x 400 V / 50 Hz or 3 x 208 V / 60 Hz
Optional equipment	RDC <i>MINI</i> integrated	Roof mounted RDC and side channel blower

\* Average value, depending on process

## System Description

Process waste gases are induced through a maximum of six separate inlets. Depending on the chemical composition of the waste gases, various reactions take place (oxidation, reduction, pyrolysis). A fluid wall film prevents corrosion and deposition of particles in the reactor. In the two washing columns next to the reactor, soluble components are absorbed, and particles suspended. The scrubbing liquid cools and neutralizes combustion products such as hydrogen halogens and all remaining residual gases.



Operation Principle **UPTIMUM** with integrated RDC *MINI*