

# TruPlasma RF Series 1000

Stable processes for maximum productivity and best in class wafer results

## Features

- Arc Management
- Smart Auto Frequency Tuning
- Best in class wall-plug efficiency of > 80 %
- Highest accuracy and stability down to 1 W
- Patented CombineLine Technology with true 50  $\Omega$  impedance



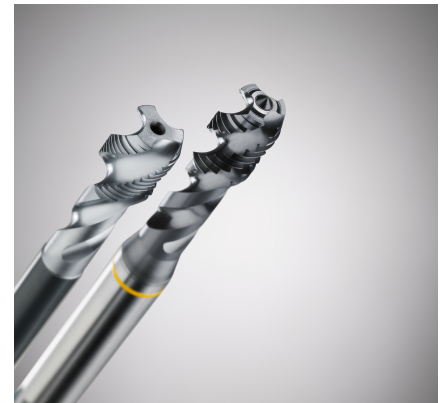
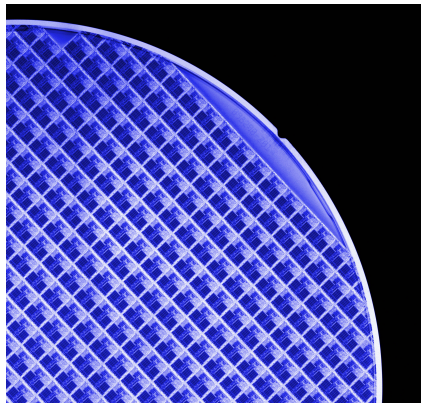
## Applications

### Semiconductor Applications

- Chemical Vapor Deposition (CVD)
- Plasma Enhanced CVD Processes
- Atomic Layer Deposition
- Atomic Layer Etch
- Reactive Ion Etching
- Etching Applications

### Industrial Coating Applications

- Tool Coating
- Hard Coating
- Decorative Coating



## Benefits



Flexible adaption to the process



Extremely efficient and cost effective



Stable process power for best productivity and reproducibility



Substantial contribution to process homogeneity and highest uptime

**TRUMPF**



**TRUMPF Hüttinger**  
generating confidence

## Technical data

RF output	TruPlasma RF 1000-2/13	TruPlasma RF 1000-3/13
Output power	2 kW	3 kW
Rated power	2 kW	3 kW
Nominal load impedance	50 Ω	50 Ω
Output frequency	13.56 MHz	13.56 MHz
<b>Networking connection data</b>		
Line voltage	200 – 480 V	200 – 480 V
Line frequency	50 – 60 Hz	50 – 60 Hz
Line input power	3.1 kVA	4.1 kVA
Power factor	0.95	0.95
<b>Communication interfaces</b>		
Sync interfaces	yes	yes
Analog / digital	yes	yes
RS 232 / RS 485	yes	yes
Profibus	yes (optional)	yes (optional)
EtherCAT	yes (optional)	yes (optional)
DeviceNet	yes (optional)	yes (optional)
<b>Housing</b>		
Weight	18 kg	18 kg
IP protection class	30	30
<b>Cooling requirements</b>		
Maximum water pressure	7 bar	7 bar
Minimum pressure difference	1.1 bar	1.1 bar
Minimum flow rate	4 l/min	4 l/min
Coolant temperature	5 °C – 35 °C	5 °C – 35 °C
<b>General</b>		
Overall efficiency	80 %	80 %
Certificates / standards	UL, CE, RoHs, NRTL	UL, CE, RoHs, NRTL
<b>Ambient conditions</b>		
Outside temperature	5 °C – 40 °C	5 °C – 40 °C
Humidity	5 % – 85 %	5 % – 85 %
Barometric pressure	79.5 kPa – 106 kPa	79.5 kPa – 106 kPa