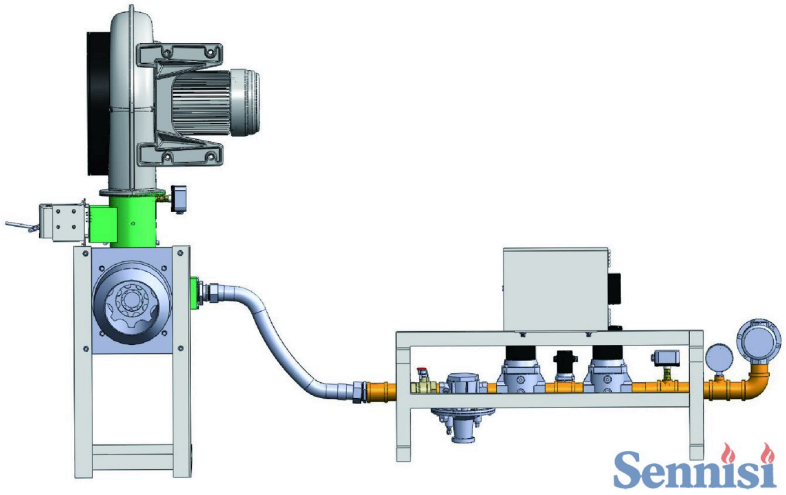
STJ Series high-velocity burner

Nozzle-mix burner with a fast, stable flame for furnaces up to 1,540 °C. 14 sizes, 44 to 5,861 kW.



Features

- **Wide turndown, high-velocity flame** and more complete combustion.
- **Works with several control methods**: on/off, high/low or modulating.
- **Even furnace temperature**: the jet drives circulation through the load.
- **Reliable ignition** anywhere in the ignition range, no separate pilot needed.
- **High excess air capability** for low-temperature drying and soaking.
- **Burns several gases** without changing the nozzle.

Technical data

Type	Nozzle-mix
Turndown	Wide, depends on size and control
Sizes	14 sizes, STJ-0015 to STJ-2000
Fuels	Natural gas, propane, butane
Output range	44 to 5,861 kW (150,000 to 20,000,000 Btu/h)
Max. process temperature	1,540 °C (2,800 °F)
Supply	Burner, blower, gas train skid, control panel

Applications

- Tempering and heat-treatment furnaces
- Reheating and forging furnaces
- Thermal oxidizers
- Galvanizing kettles
- Kilns: ceramics, refractories, minerals
- Non-ferrous metal and light-alloy furnaces

Each burner is sized to the furnace and supplied with its gas train and control panel. Data subject to change; confirm with the order drawing.

> **To size a burner, send us**
>
> Furnace type and size, operating temperature, heat input per zone, fuel and gas pressure. For a replacement, a photo of the old burner's nameplate is enough to start.

Sizes and inputs

Model	Max. input, kW	Btu/h	kcal/h	Replaces
STJ-0015	44	150,000	37,800	TJ0015 / TJPCA0015
STJ-0025	73	250,000	63,000	TJ0025 / TJPCA0025
STJ-0040	117	400,000	100,800	TJ0040 / TJPCA0040
STJ-0050	147	500,000	126,000	TJ0050 / TJPCA0050
STJ-0075	220	750,000	189,000	TJ0075 / TJPCA0075
STJ-0100	293	1,000,000	252,000	TJ0100 / TJPCA0100
STJ-0150	440	1,500,000	378,000	TJ0150 / TJPCA0150
STJ-0200	586	2,000,000	504,000	TJ0200 / TJPCA0200
STJ-0300	879	3,000,000	756,000	TJ0300 / TJPCA0300
STJ-0500	1,465	5,000,000	1,260,000	TJ0500 / TJPCA0500
STJ-0750	2,198	7,500,000	1,890,000	TJ0750 / TJPCA0750
STJ-1000	2,931	10,000,000	2,520,000	TJ1000 / TJPCA1000
STJ-1500	4,396	15,000,000	3,780,000	TJ1500 / TJPCA1500
STJ-2000	5,861	20,000,000	5,040,000	TJ2000 / TJPCA2000

Inputs are maximum, gross (HHV), with ambient combustion air; preheated-air versions on request. Each size matches the input of the ThermJet size with the same number; mounting is confirmed from flange photos before quoting. ThermJet is a trademark of its owner; SENNISI is not affiliated with it.