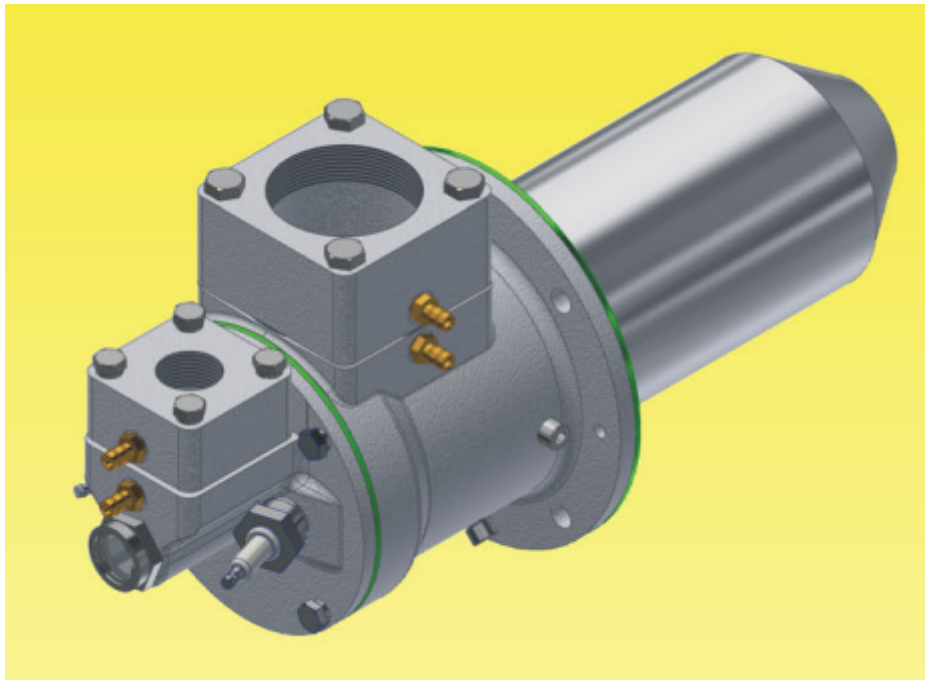




## **A-TJ Burner**



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## ATJ Aeries Burner

### Features

- The structure of the furnace body is simplified, and the spacious combustion chamber of the ordinary heating furnace is no longer needed except the fire channel.
- The high temperature flue gas emitted at high speed can inject a large number of lower temperature flue gas in the furnace, forming a strong flue gas reflux and stirring, so that the temperature distribution in the furnace is uniform.
- The adjustment ratio is large, and convection heat transfer is the main method, so that the temperature in the furnace can be high, the thermal inertia can be low, and the application range of the furnace can be expanded.
- Inhibit the generation of NOx. In the process of combustion, the concentration of oxygen can be controlled to the minimum, and the flue gas stays in the high temperature area for a short time. The lower temperature flue gas in the furnace is diluted rapidly after the high-temperature and high-speed flue gas is injected into the furnace, and the temperature is reduced rapidly by the strong heat transfer in the furnace, so the formation of NOx is restrained.
- The utility model has the advantages of fuel saving and high combustion efficiency.
- A variety of fire channel structures (burner brick, ceramic silicon carbide, metal combustion chamber) can be selected according to the actual situation.



### Product Description

- |   |  |
|---|--|
| ● Air shell: Cast iron HT250                  | ● Power Range: 40~528KW                      |
| ● Air inlet flange material: Cast iron HT250  | ● Air inlet pressure: 30~ 50mbar             |
| ● Applied maximum furnace temperature: 1540°C | ● Gas inlet pressure: 10~ 50mbar             |
| ● Fire pipe material: SUS 310S/SIC            | ● Fuel: NG /L PG/COG;                        |
| ● Combustion head material: SUS 310S          | ● Adjustment ratio: 1: 20                    |
| ● Fixed flange: Cast iron HT250               | ● Speed selection: medium speed / high speed |
| ● Maximum preheating air temperature: 600°C   | ● Flame Outlet Speed 125~230m/s              |

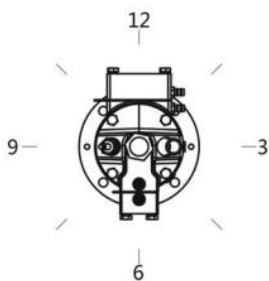
### Applications

- |   |  |                           |
|---|--|---------------------------|
| ● Push Steel Heating Furnace                    | ● Annular Heating Furnace                            | ● Chamber Heating Furnace |
| ● Walking Heating Furnace                       | ● Stainless Steel Strip Continuous Annealing Furnace |                           |
| ● Bottom Type Low Temperature Tempering Furnace | ● Trolley Type Heating Furnace                       |                           |

### Ignition and Flame Monitoring

- Burner ignition can be achieved through the ignition electrode (model EN or WAND).
- Ion electrode and UV ultraviolet can be selected for flame detection.
- When the burner is used in the furnace where the temperature is lower than 750 °C, it is recommended to install a flame detection system.

### Type selection of Burner

Product Type	Product Power	Outlet Speed	Combustion chamber	Flame detection	Installation direction
ATJ-0015					
ATJ-0025					
ATJ-0040					
ATJ-0050					
ATJ-0075					
ATJ-0100					
ATJ-0150					
ATJ-0200					
H = high speed; M = medium speed					
A=Metal combustion chamber; S=Silicon carbide Combustion chamber					
U=UV Ultraviolet flame detection; D=Ion rod flame detection					
1 = the air outlet is toward 12 o'clock; the gas inlet is toward 12 o'clock. 2 = the air outlet is toward 12 o'clock; the gas inlet is toward 3 o'clock. 3 = the air outlet is toward 12 o'clock; the gas inlet is toward 6 o'clock. 4 = the air outlet is toward 12 o'clock; the gas inlet is toward 9 o'clock.					

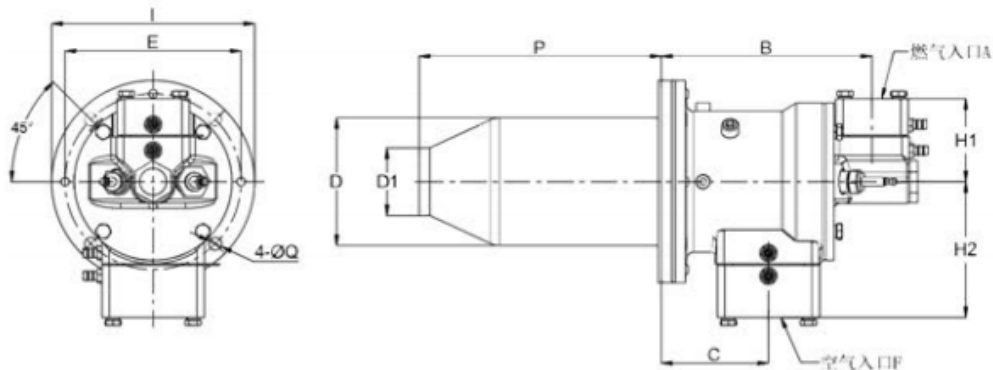
Example: ATJ0050HAU-2

If the direction is not selected, the default is 3 (the air port is 12 o'clock; the gas inlet is 6 o'clock)

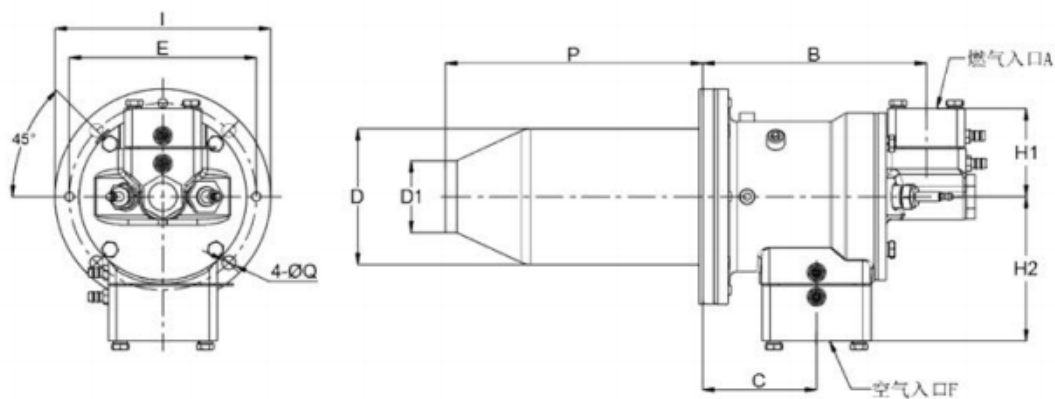
### ATJ values

Model	Power (kw)	Gas inlet pressure (mbar)		Air inlet pressure (mbar)		Flame Length(mm)		Flame Outlet Speed (m/s)2		Diameter of gas orifice plate(mm )	Diameter of air orifice plate(mm )
				About 15% air coefficient							
		High speed	Medium speed	High speed	Medium speed	High speed	Medium speed	High speed	Medium speed		
ATJ0015	35	32.4	18.7	42.3	27.4	220	270	130	80	7	23
ATJ0025	66	34.9	16.9	42.3	24.9	300	350	130	80	9.1	29
ATJ0040	106	29.9	13.7	38.6	22.4	350	450	160	90	10.8	37
ATJ0050	132	40.3	22.2	41.6	24.6	630	700	160	90	11.5	42
ATJ0075	198	34.4	17.9	39.8	22.4	700	960	140	70	13.5	49
ATJ0100	264	31	14	41	23	830	1000	190	90	18	57
ATJ0150	396	36	17.5	44	24	960	960	200	100	20	66
ATJ0200	528	23	18	31	25	860	1600	150	100	24	70

### Installation Dimensions of Burner



Model	A	B	P	H1	H2	C	D	D1	Q	E	I	F
A-TJ0015-MA	Rp1/2	126	230	97	90	53	89	34	12	136	161	Rp1 1/2
A-TJ0015-HA	Rp1/2	126	230	97	90	53	89	28	12	136	161	Rp1 1/2
A-TJ0025-MA	Rp1/2	126	220	97	90	53	89	45	12	136	161	Rp1 1/2
A-TJ0025-HA	Rp1/2	126	220	97	90	53	89	35	12	136	161	Rp1 1/2
A-TJ0040-MA	Rp3/4	170	194	90	98	86	89	63	12	136	161	Rp 2
A-TJ0040-HA	Rp3/4	170	212	90	98	86	89	45	12	136	161	Rp 2
A-TJ0050-MA	Rp 1	184	230	78	128	87	114	57	12	165	190	Rp2 1/2
A-TJ0050-HA	Rp 1	184	230	78	128	87	114	45	12	165	190	Rp2 1/2
A-TJ0075-MA	Rp 1	184	230	78	128	87	114	78	12	165	190	Rp2 1/2
A-TJ0075-HA	Rp 1	184	230	78	128	87	114	57	12	165	190	Rp2 1/2
A-TJ0100-MA	Rp1 1/2	200	229	82	139	90	140	80	12	190	218	Rp 3
A-TJ0100-HA	Rp1 1/2	200	229	82	139	90	140	58	12	190	218	Rp 3
A-TJ0150-MA	Rp1 1/2	200	229	82	139	90	140	93	12	190	218	Rp3
A-TJ0150-HA	Rp1 1/2	200	229	82	139	90	140	67	12	190	218	Rp 3
A-TJ0200-MA	Rp1 1/2	200	260	82	139	90	140	105	12	190	218	Rp3
A-TJ0200-HA	Rp1 1/2	200	260	82	139	90	140	85	12	190	218	Rp 3



Model	A	B	P	H1	H2	C	D	D1	Q	E	I	F
A-TJ0015-MS	Rp1/2	126	230	97	90	53	95	42	12	136	161	Rp1 1/2
A-TJ0015-HS	Rp1/2	126	230	97	90	53	95	35	12	136	161	Rp1 1/2
A-TJ0025-MS	Rp1/2	126	220	97	90	53	89	52	12	136	161	Rp1 1/2
A-TJ0025-HS	Rp1/2	126	220	97	90	53	89	42	12	136	161	Rp1 1/2
A-TJ0040-MS	Rp3/4	170	194	90	98	86	89	70	12	136	161	Rp 2
A-TJ0040-HS	Rp3/4	170	212	90	98	86	89	52	12	136	161	Rp 2
A-TJ0050-MS	Rp 1	184	230	78	128	87	114	63.5	12	165	190	Rp2 1/2
A-TJ0050-H S	Rp 1	184	230	78	128	87	114	51	12	165	190	Rp2 1/2
A-TJ0075-MS	Rp 1	184	230	78	128	87	114	84	12	165	190	Rp2 1/2
A-TJ0075-HS	Rp 1	184	230	78	128	87	114	63.5	12	165	190	Rp2 1/2
A-TJ0100-MS	Rp1 1/2	199.5	229	82	138.5	89.5	140	86.5	12	190	218	Rp 3
A-TJ0100-HS	Rp1 1/2	199.5	229	82	138.5	89.5	140	64	12	190	218	Rp 3
A-TJ0150-MS	Rp1 1/2	199.5	229	82	138.5	89.5	140	99	12	190	218	Rp3
A-TJ0150-HS	Rp1 1/2	199.5	229	82	138.5	89.5	140	73.5	12	190	218	Rp3
A-TJ0200-MS	Rp1 1/2	199.5	260	82	138.5	89.5	140	115	12	190	218	Rp3
A-TJ0200-HS	Rp1 1/2	199.5	260	82	138.5	89.5	140	85	12	190	218	Rp 3