

VENTURI AIR EJECTOR CHEGEJ TYPE

CHEGEJ type Venturi air ejectors are a perfect solution for moving air in confined spaces or ventilating hazardous areas. Compressed air or steam are the energy source for these devices.

They operate according to the Venturi principle, using small volumes of high-pressure air that pass through the body and exit through multiple nozzles, drawing a large volume of air through the Venturi cone and into the atmosphere.

To choose the compressor to pair with the CHEGEJ ejector, refer to the tables below, which indicate air consumption at various inlet pressures.

The unique free-flow construction minimizes pressure drops.

CHEGEJ Series Venturi air ejectors, constructed from cast aluminum alloy and a galvanized steel cone (painted in RAL 2008), guarantee high suction ratios under all operating conditions.

These are devices powerful enough to be used with flexible ducts, but, equipped with comfortable handles, they are "portable" due to their light weight.

PERFORMANCES

CHEGEJ type 3S				
MOTIVE PRESSURE (bar g)	2	4	6	8
MOTIVE FLOW RATE Sm ³ /h (kg/h)	45 (55)	76 (93)	107 (131)	137 (168)
DISCHARGE FLOW RATE (Sm ³ /h)	1530	2230	2620	3030
Suction Ratio	34	29	24.5	22
Max vacuum (mbar)	10	14	19	24

CHEGEJ type 3				
MOTIVE PRESSURE (bar g)	2	4	6	8
MOTIVE FLOW RATE Sm ³ /h (kg/h)	45 (55)	76 (93)	107 (131)	137 (168)
DISCHARGE FLOW RATE (Sm ³ /h)	1640	2485	2880	3420
Suction Ratio	36.5	32.5	27	25
Max vacuum (mbar)	10	14	19	24

CHEGEJ type. 6				
MOTIVE PRESSURE (bar g)	2	4	6	8
MOTIVE FLOW RATE Sm ³ /h (kg/h)	94 (115)	159 (195)	220 (270)	285 (350)
DISCHARGE FLOW RATE (Sm ³ /h)	4250	6410	7770	8700
Suction Ratio	45	40	35	30.5
Max vacuum (mbar)	7	10	15	18

CHEGEJ type 8				
MOTIVE PRESSURE (bar g)	2	4	6	8
MOTIVE FLOW RATE Sm ³ /h (kg/h)	170 (209)	289 (354)	404 (495)	518 (635)
DISCHARGE FLOW RATE (Sm ³ /h)	6270	9060	10640	11880
Suction Ratio	37	31	26	23
Max vacuum (mbar)	6	9	14	17

CHEGEJ type 9				
MOTIVE PRESSURE (bar g)	2	4	6	8
MOTIVE FLOW RATE Sm ³ /h (kg/h)	253 (310)	428 (525)	636 (780)	884 (1085)
DISCHARGE FLOW RATE (Sm ³ /h)	7860	11225	13540	16820
Suction Ratio	31	26	21	19
Max vacuum (mbar)	9	13	18	21



AREAS OF APPLICATION

➤ **Shipyards**

The CHEGEJ Series Venturi air ejectors are used to ventilate confined spaces where welding fumes and emissions accumulate.

➤ **Marine industry**

After emptying the cargo holds of supply vessels, tankers and gas carrier need to evacuate toxic vapors or fumes: CHEGEJ Series Venturi Air Ejectors can quickly and safely expel fumes from these areas.

➤ **Chemical plants and refineries**

Fumes or vapors, sometimes poisonous, explosive, or harmful, must be removed from process towers, tanks, and large pipes before operators can access these areas.

CHEGEJ Series Venturi air ejectors are also used for conveying light materials (powders and grains).

➤ **Steelworks and paper mill**

CHEGEJ Series Venturi air ejectors are used to remove toxic gases and cool ladles and equipment prior to repair and maintenance. They are therefore ideal for improving breathing conditions in hazardous areas.

➤ **Underground operations**

Clean up hazardous gases or vapors from underground networks and spaces before performing maintenance.

The use of electrical appliances could be a source of ignition, whereas CHEGEJ ejectors, being static devices, are safe and suitable for these environments.

➤ **Packaging**

Compressed air powers the CHEGEJ Series Venturi air ejector to handle trimmings, paper scraps or plastic film.



CHEGEJ TYPE

	NOISE VALUES	
	Bar g	dB(A)
MOD.3	4	81
MOD. 3	6	85
MOD. 3	8	89
MOD.3S	4	81
MOD. 3S	6	85
MOD. 3S	8	89
MOD. 6	4	85
MOD. 6	6	89
MOD. 6	8	93
MOD. 8	4	87
MOD. 8	6	91
MOD. 8	8	95
MOD. 9	4	88
MOD. 9	6	92
MOD. 9	8	95
Measured @ 1mt		

- Motive fluid: compressed air or steam (max 10 bar).
- No moving parts, zero maintenance.
- Three-way threaded connection for easy installation..
- Suction ratio: up to 45.
- Robust earthing clamp with 2.0 m yellow spiral cable. Possibility of installing suction or exhaust pipes (see dedicated table).
- Connections adapters available upon request.

OPERATION AND SAFETY REGULATIONS

- ✓ Whenever the CHEGEJ Series Venturi Air Ejector is used in potentially explosive environments, connect the ground wire to discharge any static electricity.
- ✓ When evacuating gas or fumes from closed tanks, be careful not to create a vacuum that could cause the system to implode.
- ✓ It is possible to supply (as an optional) adapters (fig.2) to interface with any suction pipe or duct.
- ✓ Do not allow solid objects or debris to be sucked in during operation
- ✓ Before using the CHEGEJ ejector, make sure all motive nozzles are open and intact.
- ✓ Periodically blow a jet of steam through the nozzles for proper maintenance.



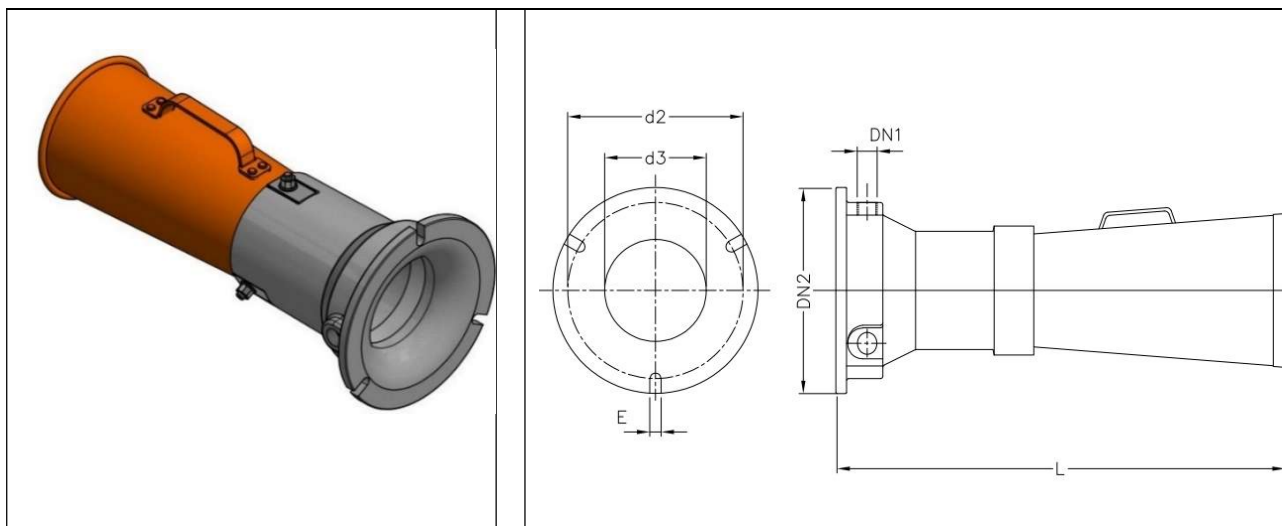
Fig.1



Fig.2

PERFORMANCE THROUGH VARIOUS LENGHT OF PIPE (motive pressure 6 bar g)
Inlet or outlet installation

TYPE	NOMINAL PIPE DN	TOTAL FLOW RATE	6 mt	9 mt	12 mt	15 mt
	pollici/mm	Sm3/h	Sm3/h	Sm3/h	Sm3/h	Sm3/h
3S	8"/203	2620	2200	2102	2004	1925
3	8"/203	2880	2610	2508	2389	2288
6	12"/305	7770	7000	6720	6465	6225
8	14"/356	10640	9770	9290	8880	8525
9	14"/356	13540	11761	11250	10735	10300



DIMENSIONS (mm)

TIPO	DN1	DN2	DN3	L	Suction connection				Weight (kg)
					d2	d3	N.°	E	
3S	1/2" NPT	190	152	419	165	95	3	10	3.5
3	1/2" NPT	190	185	838	165	95	3	10	5.0
6	1" NPT	292	305	1123	274	160	3	10	11.5
8	1" NPT	363	356	1168	343	195	3	10	16
9	1" NPT	427	356	1168	387	195	10	23	19.5