CLEMCO
The Performance System

TECHNICAL DATA SHEET

Note: For safe, efficient blasting, read and follow the owner's manual and seek training for everyone who will use this equipment.

Purpose

A blast nozzle accelerates the air and abrasive as the mixture exits the end of the hose. The length of the nozzle's inlet determines the pattern and velocity of the abrasive exiting the nozzle. The composition of the liner material determines its resistance to wear.

Requirements for Operation

Nozzles are sized by the diameter of their orifices in 1/16-inch increments. A No. 2 nozzle has a 2/16-inch (1/8-inch) orifice, a No. 3 nozzle has a 3/16-inch orifice, etc. The size of the nozzle orifice determines abrasive and air consumption. Air consumption is measured in cubic feet per minute (cfm) at a given pressure. See the air and abrasive consumption chart on the back of this page.

When choosing a nozzle, consider the amount of available air in cfm, the capacity of the blast machine and the inside diameter of the piping, the blast and air hoses. If too large a nozzle is used, low blast pressure and rapid wear on the blast hose will occur. If too small a nozzle is used, smooth media flow will be difficult to achieve.

Description of Operation

The operator attaches the nozzle to the nozzle holder on the coupled blast hose by turning the nozzle clockwise until the nozzle fully seats and is threaded in place. The Clemco nozzle holder keeps the nozzle firmly installed.

Description

Blast nozzle with straight barrel shape, tungsten carbide liner, and metal jacket. All CT nozzles have 3/4" threading and 1/2" diameter entry.

CT-4

With all related equipment correctly assembled and tested, the operator points the nozzle at the surface to be cleaned and presses the remote control handle to begin blasting. The operator holds the nozzle 3 to 6 inches from the surface and moves it smoothly at a rate that produces the desired cleanliness. Each pass should overlap slightly.

The operator must replace the nozzle once the orifice wears 1/16-inch beyond its original size.

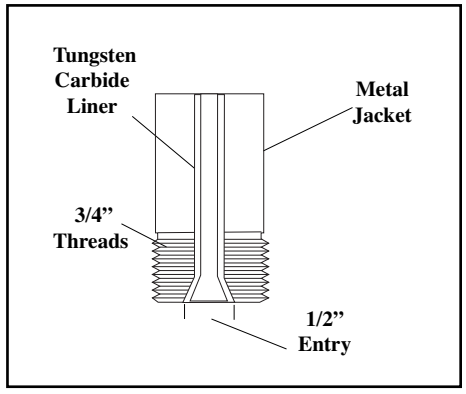
Advantages

- Tungsten Carbide liner material is the most rugged and durable. It is also the best value in a liner material.
- Short nozzles (CTs) are designed for blasting 3 to 6 inches away from the surface.
- Expected life with expendable abrasives is approximately 300 hours.
- 1/2-inch entry provides smooth transition and maximum productivity with 1/2-inch ID blast hose.

Nozzles

Tungsten Carbide Lined Metal Jacketed

Short Straight Barrel CT Series



Replacement Parts

Description	Stock No.
NW-1 Nozzle washers (Pkg of 10)	21580

Specifications	
Nozzle Model	**CT**
Mounting Thread	**3/4"**
Entry Diameter	**1/2"**
Liner	**Tungsten Carbide**
Liner Style	**Straight Barrel**
Jacket Material	**Aluminum**

Authorized Distributor:

Compressed Air and Abrasive Consumption

Nozzle Orifice	Pressure at the Nozzle (psi) 50	60	70	80	90	100	125	140	Air (in cfm) Abrasive & HP requirements
No. 2 (1/8")	11	13	15	17	18.5	20	25	28	Air (cfm)
	.67	.77	.88	1.01	1.12	1.23	1.52	1.70	Abrasive (cu.ft./hr
	67	77	88	101	112	123	152	170	& Lbs/hr)
	2.5	3	3.5	4	4.5	5	5.5	6.2	Compressor hp
No. 3 (3/16")	26	30	33	38	41	45	55	62	Air (cfm)
	1.50	1.71	1.96	2.16	2.38	2.64	3.19	3.57	Abrasive (cu.ft./hr
	150	171	196	216	238	264	319	357	& Lbs/hr)
	6	7	8	9	10	10	12	13	Compressor hp
No. 4 (1/4")	47	54	61	68	74	81	98	110	Air (cfm)
	2.68	3.12	3.54	4.08	4.48	4.94	6.08	6.81	Abrasive (cu.ft./hr
	268	312	354	408	448	494	608	681	& Lbs/hr)
	11	12	14	16	17	18	22	25	Compressor hp
No. 5 (5/16")	77	89	101	113	126	137	168	188	Air (cfm)
	4.68	5.34	6.04	6.72	7.40	8.12	9.82	11.0	Abrasive (cu.ft./hr
	468	534	604	672	740	812	982	1100	& Lbs/hr)
	18	20	23	26	28	31	37	41	Compressor hp
No. 6 (3/8")	108	126	143	161	173	196	237	265	Air (cfm)
	6.68	7.64	8.64	9.60	10.52	11.52	13.93	15.60	Abrasive (cu.ft./hr
	668	764	864	960	1052	1152	1393	1560	& Lbs/hr)
	24	28	32	36	39	44	52	58	Compressor hp
No. 7 (7/16")	147	170	194	217	240	254	314	352	Air (cfm)
	8.96	10.32	11.76	13.12	14.48	15,84	19.31	21.63	Abrasive (cu.ft./hr
	896	1032	1176	1312	1448	1584	1931	2163	& Lbs/hr)
	33	38	44	49	54	57	69	77	Compressor hp
No. 8 (1/2")	195	224	252	280	309	338	409	458	Air (cfm)
	11.60	13.36	15.12	16.80	18.56	20.24	24.59	27.54	Abrasive (cu.ft./hr
	1160	1336	1512	1680	1856	2024	2459	2754	& Lbs/hr)
	44	50	56	63	69	75	90	101	Compressor hp

Chart shows air consumption in cubic feet per minute (cfm), abrasive consumption in pounds per hour and cubic feet per hour for abrasives weighing 100 pounds per cubic foot, and compressor horsepower (hp) based on 4 to 4.5 cfm per horsepower.

NOTE: Figures vary depending upon working conditions. To maintain desired air pressure as nozzle orifice wears, air consumption increases. The effects of nozzle wear on air consump-tion must be considered when selecting nozzles and the compressors that support them.

When nozzle orifice is 3/8-inch or larger, blast machine valves and piping must be 1-1/4-inch or larger to provide sufficient air volume.

Nozzle Stock Number, Dimensions, & Weights

	Model No.	Stock No.	Orifice ID	Length	Net Wt	Pkg'd Wt	Holder	Washer
3/4" Thread	CT-2	01351	1/8"	1-3/4"	.30 lb	.5 lb	CHE Series	NW-1
	CT-3	01352	3/16"	1-3/4"	.30 lb	.5 lb		NW-1
	CT-4	01353	1/4"	1-3/4"	.30 lb	.5 lb		NW-1
	CT-5	01354	5/16"	1-3/4"	.30 lb	.5 lb		NW-1
	CT-6	01355	3/8"	1-3/4"	.20 lb	.5 lb		NW-1
	CT-8	01356	1/2"	1-3/4"	.20 lb	.5 lb		NW-1

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