



AIRBLAST

ATJD(X)

Tungsten Carbide Medium Venturi Nozzle with Aluminium Jacket



ATJD(X)

The ATJD(X) range comprises of Tungsten Carbide lined medium venturi nozzles with Aluminum Jackets. Tungsten Carbide is the liner material of choice for the majority of contractors due to long life and impact resistance - the Aluminum Jacket adds to the rugged character of the nozzle. Medium venturi nozzles are mainly used in applications in which the blasting is conducted in a confined space - therefore the blaster will normally operate at a distance of less than 30 cm (12") from the surface.

The ATJD nozzle has a 25 mm (1") inlet and the ATJD(X) has a 32 mm (1¼") inlet - both are available with a standard large thread (1/50) or fine thread.

Airblast high velocity venturi style nozzles have been designed to maximize blast cleaning rates and provide uniform abrasive distribution. The venturi design accelerates the air / abrasive mix as it exits the nozzle providing additional momentum - this can increase productivity and reduce abrasive consumption by up to 40% when compared with straight bore nozzles.

Airblast offers a full selection of nozzles with various orifice sizes, nozzle lengths, insert and liner materials. Contact Airblast to discuss which nozzle is most suitable for your specific application.

ATJD - Tungsten Carbide Medium Venturi Nozzles with Aluminium Jacket

Part no.	Description	Orifice	Lenght	Inlet
2027000	ATJD-3 TC Nozzle with fine thread	4,8 mm	85 mm	25 mm
2028000	ATJD-4 TC Nozzle with fine thread	6,4 mm	85 mm	25 mm
2029000	ATJD-5 TC Nozzle with fine thread	8,0 mm	85 mm	25 mm
2030000	ATJD-6 TC Nozzle with fine thread	9,5 mm	85 mm	25 mm
2031000	ATJD-7 TC Nozzle with fine thread	11,0 mm	85 mm	25 mm
2032000	ATJD-8 TC Nozzle with fine thread	13.0 mm	85 mm	25 mm
2032900	ATJDX-4 TC Nozzle with fine thread	6,4 mm	85 mm	32 mm
2033000	ATJDX-5 TC Nozzle with fine thread	8,0 mm	85 mm	32 mm
2034000	ATJDX-6 TC Nozzle with fine thread	9,5 mm	85 mm	32 mm
2035000	ATJDX-7 TC Nozzle with fine thread	11,0 mm	85 mm	32 mm
2036000	ATJDX-8 TC Nozzle with fine thread	13.0 mm	85 mm	32 mm
2037000	ATJDX-10 TC Nozzle with fine thread	16.0 mm	85 mm	32 mm
2038000	ATJD-3/50 TC Nozzle with large 50 mm thread	4,8 mm	85 mm	25 mm
2039000	ATJD-4/50 TC Nozzle with large 50 mm thread	6,4 mm	85 mm	25 mm
2040000	ATJD-5/50 TC Nozzle with large 50 mm thread	8,0 mm	85 mm	25 mm
2041000	ATJD-6/50 TC Nozzle with large 50 mm thread	9,5 mm	85 mm	25 mm
2042000	ATJD-7/50 TC Nozzle with large 50 mm thread	11,0 mm	85 mm	25 mm
2043000	ATJD-8/50 TC Nozzle with large 50 mm thread	13.0 mm	85 mm	25 mm
2043900	ATJDX-4/50 TC Nozzle with large 50 mm thread	6,4 mm	85 mm	32 mm
2044000	ATJDX-5/50 TC Nozzle with large 50 mm thread	8,0 mm	85 mm	32 mm
2045000	ATJDX-6/50 TC Nozzle with large 50 mm thread	9,5 mm	85 mm	32 mm
2046000	ATJDX-7/50 TC Nozzle with large 50 mm thread	11,0 mm	85 mm	32 mm
2047000	ATJDX-8/50 TC Nozzle with large 50 mm thread	13.0 mm	85 mm	32 mm
2048000	ATJDX-10/50 TC Nozzle with large 50 mm thread	16.0 mm	85 mm	32 mm

ORIFICE (mm) (")	NOZZLE PRESSURE / NOZZLE DIAMETER GUIDE												REQUIRED AIR	REQUIRED ABRASIVE	REQUIRED POWER	CFM Lbs./hr. hp	m ³ /min KG/hr.* kw
	60 PSI	4.2 BAR	70 PSI	4.9 BAR	80 PSI	5.6 BAR	90 PSI	6.3 BAR	100 PSI	7.0 BAR	120 PSI	8.5 BAR					
5.0 mm 3/16"	30.0	0.85	33.0	0.93	38.0	1.08	41.0	1.16	45.0	1.27	58.0	1.64	REQUIRED AIR	CFM	m ³ /min		
	171.0	77.00	196.0	89.00	216.0	96.00	238.0	108.00	264.0	120.00	375.0	170.00	REQUIRED ABRASIVE	Lbs./hr.	KG/hr.*		
	7	5.3	8	5.6	9	6.4	10	7.1	10	7.5	12	9.0	REQUIRED POWER	hp	kw		
6,5 mm 4/16"	54.0	1.53	61.0	1.73	68.0	1.93	74.0	2.10	81.0	2.29	105.0	2.97	REQUIRED AIR	CFM	m ³ /min		
	312.0	141.00	354.0	160.00	408.0	185.00	448.0	203.00	494.0	224.00	660.0	300.00	REQUIRED ABRASIVE	Lbs./hr.	KG/hr.*		
	12	9.0	14	10.1	16	11.6	17	12.4	18	13.5	22	16.2	REQUIRED POWER	hp	kw		
8.0 mm 5/16"	89.0	2.52	101.0	2.86	113.0	3.20	126.0	3.57	137.0	3.88	160.0	4.53	REQUIRED AIR	CFM	m ³ /min		
	534.0	242.00	604.0	274.00	672.0	305.00	740.0	335.00	850.0	385.00	1.050.0	476.00	REQUIRED ABRASIVE	Lbs./hr.	KG/hr.*		
	20	15.0	23	19.1	26	20.2	28	21.0	31	22.9	37	27.5	REQUIRED POWER	hp	kw		
9.5 mm 6/16"	126.0	3.57	143.0	4.05	161.0	4.56	173.0	4.90	196.0	5.55	235.0	6.65	REQUIRED AIR	CFM	m ³ /min		
	764.0	346.00	864.0	392.00	960.0	425.00	1.052.0	477.00	1.152.0	523.00	1.475.0	669.00	REQUIRED ABRASIVE	Lbs./hr.	KG/hr.*		
	28	21.0	32	24.0	36	27.0	39	28.9	44	33.0	52	39.6	REQUIRED POWER	hp	kw		
11.0 mm 7/16"	170.0	4.81	184.0	5.21	217.0	6.14	240.0	6.80	254.0	7.19	315.0	8.92	REQUIRED AIR	CFM	m ³ /min		
	1.032.0	468.00	1.176.0	533.00	1.312.0	595.00	1.448.0	657.00	1.584.0	719.00	2.050.0	930.00	REQUIRED ABRASIVE	Lbs./hr.	KG/hr.*		
	38	28.5	44	32.6	49	36.4	54	40.1	57	42.4	69	50.9	REQUIRED POWER	hp	kw		
12.5 mm 8/16"	224.0	6.34	252.0	7.14	280.0	7.93	309.0	8.75	338.0	9.57	410.0	11.61	REQUIRED AIR	CFM	m ³ /min		
	1.336.0	606.00	1.512.0	686.00	1.680.0	762.00	1.856.0	842.00	2.024.0	918.00	2.650.0	1.202.00	REQUIRED ABRASIVE	Lbs./hr.	KG/hr.*		
	50	37.5	56	42.0	63	46.9	69	51.8	75	56.3	90	67.6	REQUIRED POWER	hp	kw		

Chart shows calculated consumption rates of air and abrasive for new nozzles. When selecting a compressor add 50% to above figures to allow for normal nozzle wear and friction loss.

* Based on abrasive density of 1,5 kgs. per liter.

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