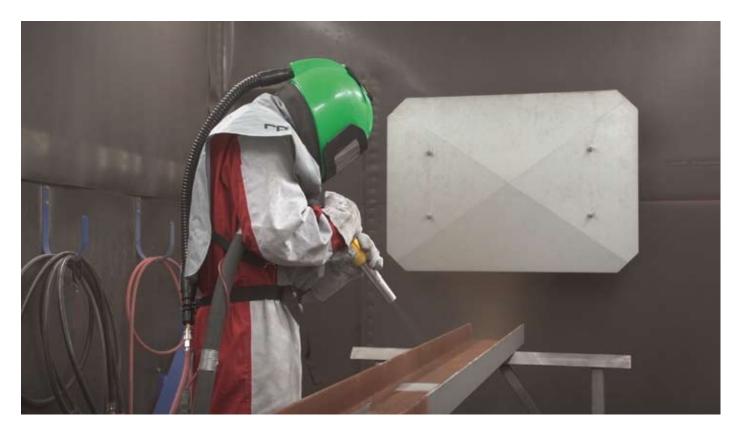
## airblastechtips







Compressed air is, with abrasive, one of the most important components of the entire abrasive blast system.

#### 1. Compressed air has to be clean.

It has to be free from any trace of oil and moisture.

- oil would contaminate abrasive and thus blasted surfaces.
- moisture would cause flash rusting and abrasive pot clogging.

### 2. Air supply has to be adapted to the application

Abrasive velocity and flow rate, which determine the productivity of a blasting operation, are directly linked to air pressure and flow rate. Influential parameters are:

- compressor characteristics
- pressure loss through hoses and fittings
- nozzle wear

#### 3. A few important points

- To reduce pressure drop as much as possible, air piping has to be as short, as direct and as big in diameter as possible.
- All parts and connections have to match up with inside diameter of supply hose to prevent any turbulence and extra pressure drop.
- Hose must be cut square and fully inserted.
- Fastening screws must not dimple or penetrate inner lining of hose.
- Blast hose inside diameter should be 3 to 4 times the size of the nozzle orifice.
- To prevent the productivity from dropping as soon as the nozzle starts to wear, the air supply system should be able to provide at least 50% more air flow than the new nozzle would need to develop the required working blasting pressure.

# airblastechtips Compressed Air



### 4. Maximum hose lenghts and suggested diameters according to nozzle diameter

nozzle diameter		air hose diameter		max. lenght per diameter		blast hose inside diameter		
mm	inch	mm	inch	mtr.	ft	mm	inch	
5	3/16	19	3/4	23	75	19	3/4	
5	3/16	25	1	30	100	19	3/4	
6	1/4	25	1	23	75	25	1	
6	1/4	32	1 1/4	45	150	25	1	
8	5/16	25	1	18	60	25	1	
8	5/16	32	1 1/4	30	100	32	1 1/4	
10	3/8	32	1 1/4	15	50	32	1 1/4	
10	3/8	38	1 1/2	30	100	32	1 1/4	
10	3/8	51	2	45	150	38	1 1/2	
11	7/16	32	1 1/4	5	18	32	1 1/4	
11	7/16	38	1 1/2	15	50	32	1 1/4	
11	7/16	51	2	45	150	38	1 1/2	
11	7/16	63	2 1/2	90	300	38	1 1/2	
13	1/2	38	1 1/2	8	25	38	1 1/2	
13	1/2	51	2	30	100	38	1 1/2	
13	1/2	63	2 1/2	50	170	38	1 1/2	
16	5/8	51	2	30	100	38	1 1/2	
16	5/8	63	2 1/2	45	150	38	1 1/2	
16	5/8	76	3	90	300	44	1 3/4	

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### 5. Nozzle and compressor size

nozzle			pressure psi		60	80	100	140
diameter no.					00			
		no.	pressure ba	ar	4	5.5	7	9.5
mm	inch		<b>P</b>		<u>-</u>	0.0	_	
5	3/16	3	HP		7	9	10	15
			CFM		30	40	45	70
			m³/hr		50	65	75	120
6	1/4	4	HP		12	16	19	27
			CFM		55	70	80	115
			m³/hr		90	115	135	195
8	5/16	5	HP		20	26	31	45
			CFM		90	115	135	200
			m³/hr		150	195	230	340
10	3/8	6	HP		30	35	45	65
			CFM		125	160	200	315
			m³/hr		210	270	340	535
	7/16	7	HP		40	50	60	90
11			CFM		170	215	255	405
			m³/hr		290	365	435	690
13	1/2	8	НР		50	63	75	120
			CFM		225	275	340	540
			m³/hr		380	465	580	920
16	5/8	10	HP		80	100	120	195
			CFM		350	450	550	880
			m³/hr		595	765	935	1500
19	3/4	12	HP		115	145	175	275
			CFM		500	650	800	1255
			m³/hr		850	1100	1360	2135