

# Crop protection is our business

**AirMix® – nozzles for modern agriculture  
precisely • efficiently • economically**

**Do you like to spray on your neighbour's field?**



Application of herbicide with standard nozzle

**Or do you prefer spraying your own!**



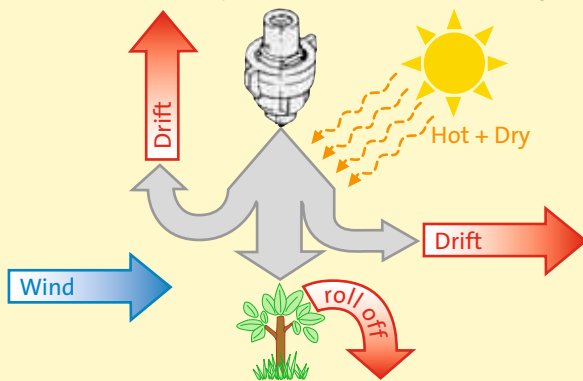
Application of herbicide with venturi nozzle, e. g. AirMix® by agrotop



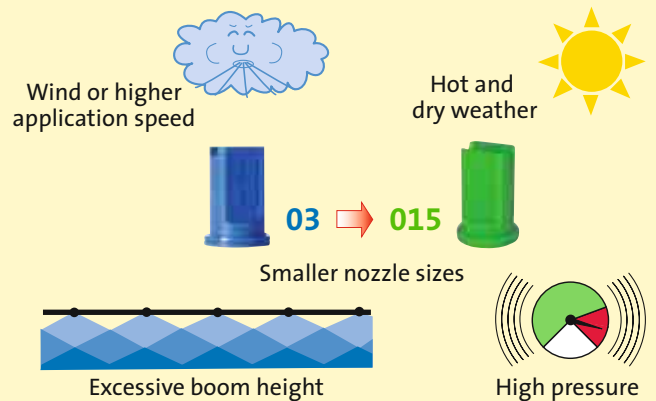
**agrotop**  
Spray Technology

## Drift is

the part of the spray which does not reach the target



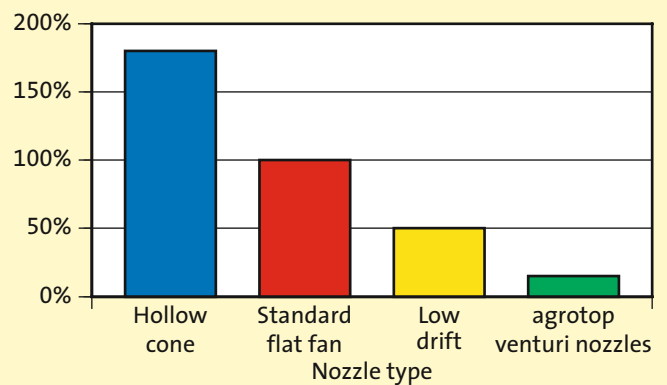
## Main factors for drift



## Negative effects of drift

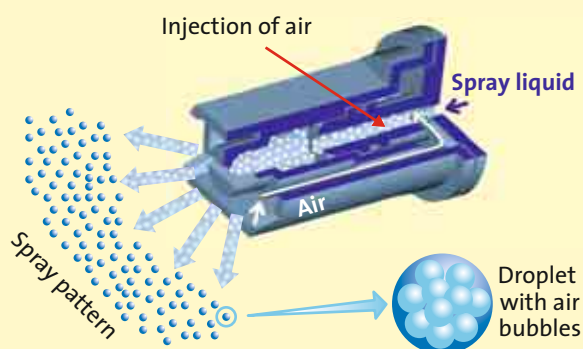
- Loss of chemical ⇒ Higher costs
- Part of the spray does not reach the target ⇒ Inefficient application
- Spraying impossible at bad weather conditions ⇒ Reduced "application window"
- Damage of neighbour crops or environment ⇒ Risk of claims for damages
- Contamination of farm workers ⇒ Intoxication
- ⇒ Pollution
- ⇒ Legal restraints
- ⇒ Legal restraints

## Drift potential of different nozzle types

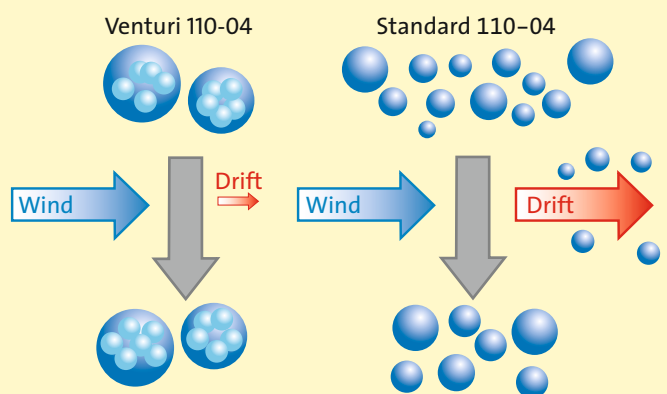


## Venturi nozzle

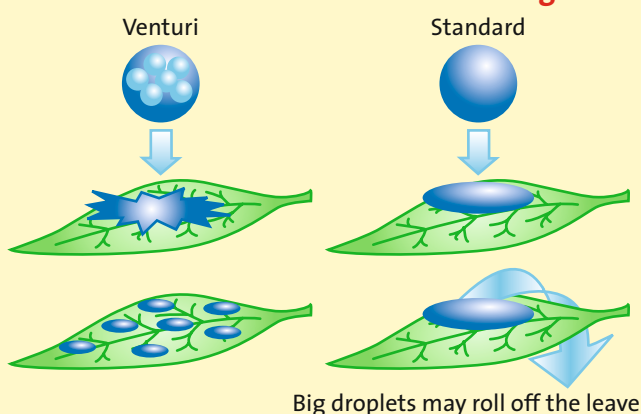
Injection and mixture of air and liquid – Mode of operation



## Effect of venturi nozzles on drift



## Effect of venturi nozzles on coverage



## Advantages of venturi nozzles

- Drift reduction up to 90 % + saves money  
Depending on size and pressure + protects environment
- Same efficiency/coverage as standard nozzles  
Venturi nozzles might be operated at a different pressure
- Excellent penetration
- Spray applications are more independent from weather conditions
- Reduce contamination of environment, neighbour crops or persons with chemical spray

## AirMix® Flat Fan

Low Pressure  
Flat Fan Venturi Nozzle made  
from hard-wearing plastic POM



Spray angle



110°

Size



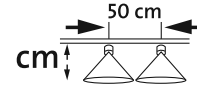
01 – 06

Pressure range



bar  
1 – 6

Boom level



40 – 90 cm

Application



110-01	110-015	110-02	110-025	110-03	110-04	110-05	110-06
Filter 50 M blue				Filter 24 M white			

### Characteristics:

- Two-piece design, no tools required for opening, no seals
- Spanner width 8 mm, same as for standard flat fan nozzles
- Air cleaning system, no blocking of air entrance
- Droplet size adjustable from coarse to fine through pressure
- Up to 90 % drift reduction
- Wide application range from 40–1000 l/ha
- Fits in double flat fan cap



Compact design, only 22 mm more than a standard tip



Easy disassembling for cleaning



Metering orifice easy accessible, blockage can be wiped off



Air suction from below through the spray fan

## Other AirMix® nozzles



### AirMix® HC

Application:



### AirMix® OC

Application:



### AirMix® DF

2 x AirMix® Flat Fan  
in special double cap

(Flow rate AirMix® DF  
= 2 x AirMix® single Flat Fan)

Application:

## Universal application chart for boom sprayers at 50 cm nozzle spacing Nozzle size and colour according to ISO 10625 or equivalent

Application rate l/ha											Flow rate l/min	Nozzle size ISO							
50	60	80	100	120	140	150	160	180	200	250		-01	-015	-02	-025	-03	-04	-05	-06
5,8	4,8										0,24	1,1							
6,2	5,2										0,26	1,3							
6,7	5,6	4,2									0,28	1,5							
7,2	6,0	4,5									0,30	1,7							
7,7	6,4	4,8									0,32	1,9							
8,2	6,8	5,1	4,1								0,34	2,2							
8,6	7,2	5,4	4,3								0,36	2,4	1,1						
9,1	7,6	5,7	4,6								0,38	2,7	1,2						
9,6	8,0	6,0	4,8	4,0							0,40	3,0	1,3						
12,0	10,0	7,5	6,0	5,0	4,3	4,0					0,50	4,7	2,1	1,2					
14,4	12,0	9,0	7,2	6,0	5,1	4,8	4,5	4,0			0,60	6,7	3,0	1,7	1,1				
15,6	13,0	9,8	7,8	6,5	5,6	5,2	4,9	4,3			0,65		3,5	2,0	1,3				
16,8	14,0	10,5	8,4	7,0	6,0	5,6	5,3	4,7	4,2		0,70		4,1	2,3	1,5	1,0			
18,0	15,0	11,3	9,0	7,5	6,4	6,0	5,6	5,0	4,5		0,75		4,7	2,6	1,7	1,2			
19,2	16,0	12,0	9,6	8,0	6,9	6,4	6,0	5,3	4,8		0,80		5,3	3,0	1,9	1,3			
20,4	17,0	12,8	10,2	8,5	7,3	6,8	6,4	5,7	5,1	4,1	0,85		6,0	3,4	2,2	1,5			
21,6	18,0	13,5	10,8	9,0	7,7	7,2	6,8	6,0	5,4	4,3	0,90		6,8	3,8	2,4	1,7			
22,8	19,0	14,3	11,4	9,5	8,1	7,6	7,1	6,3	5,7	4,6	0,95			4,2	2,7	1,9	1,1		
24,0	20,0	15,0	12,0	10,0	8,6	8,0	7,5	6,7	6,0	4,8	1,00			4,7	3,0	2,1	1,2		
	22,0	16,5	13,2	11,0	9,4	8,8	8,3	7,3	6,6	5,3	1,10			5,7	3,6	2,5	1,4		
	24,0	18,0	14,4	12,0	10,3	9,6	9,0	8,0	7,2	5,8	1,20			6,7	4,3	3,0	1,7	1,1	
	26,0	19,5	15,6	13,0	11,1	10,4	9,8	8,7	7,8	6,2	1,30				5,1	3,5	2,0	1,3	
		21,0	16,8	14,0	12,0	11,2	10,5	9,3	8,4	6,7	1,40				5,9	4,1	2,3	1,5	1,0
		22,5	18,0	15,0	12,9	12,0	11,3	10,0	9,0	7,2	1,50				6,8	4,7	2,6	1,7	1,2
		24,0	19,2	16,0	13,7	12,8	12,0	10,7	9,6	7,7	1,60					5,3	3,0	1,9	1,3
		25,5	20,4	17,0	14,6	13,6	12,8	11,3	10,2	8,2	1,70					6,0	3,4	2,2	1,5
			21,6	18,0	15,4	14,4	13,5	12,0	10,8	8,6	1,80				6,7	3,8	2,4	1,7	
			22,8	19,0	16,3	15,2	14,3	12,7	11,4	9,1	1,90					4,2	2,7	1,9	
			24,0	20,0	17,1	16,0	15,0	13,3	12,0	9,6	2,00					4,7	3,0	2,1	
			25,2	21,0	18,0	16,8	15,8	14,0	12,6	10,1	2,10					5,2	3,3	2,3	
				22,0	18,9	17,6	16,5	14,7	13,2	10,6	2,20					5,7	3,6	2,5	
				23,0	19,7	18,4	17,3	15,3	13,8	11,0	2,30					6,2	4,0	2,8	
				24,0	20,6	19,2	18,0	16,0	14,4	11,5	2,40						4,3	3,0	
				25,0	21,4	20,0	18,8	16,7	15,0	12,0	2,50						4,7	3,3	
				26,0	22,3	20,8	19,5	17,3	15,6	12,5	2,60						5,1	3,5	
					23,1	21,6	20,3	18,0	16,2	13,0	2,70							5,5	3,8
					24,0	22,4	21,0	18,7	16,8	13,4	2,80							5,9	4,1
					24,9	23,2	21,8	19,8	17,4	13,9	2,90							6,3	4,4
					25,7	24,0	22,5	20,0	18,0	14,4	3,00								4,7
					24,8	23,3	20,7	18,6	14,9	11,1	3,10								5,0

Data measured with water at 20°C, pressure directly at the nozzle. Check application rate before spraying.

**Bold** = best nozzle performance, use lower end of pressure range for best drift control

--- E.g.: 100 l/ha at 13,2 km/h requires a flow rate of 1,10 l/min at each nozzle, which can be obtained by setting pressure at 5,7 bar for nozzle size -02; 3,6 bar for size -025, 2,5 bar for size -03, 1,4 bar for size -04.

More information under [www.agrotop.com](http://www.agrotop.com)

More information:



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