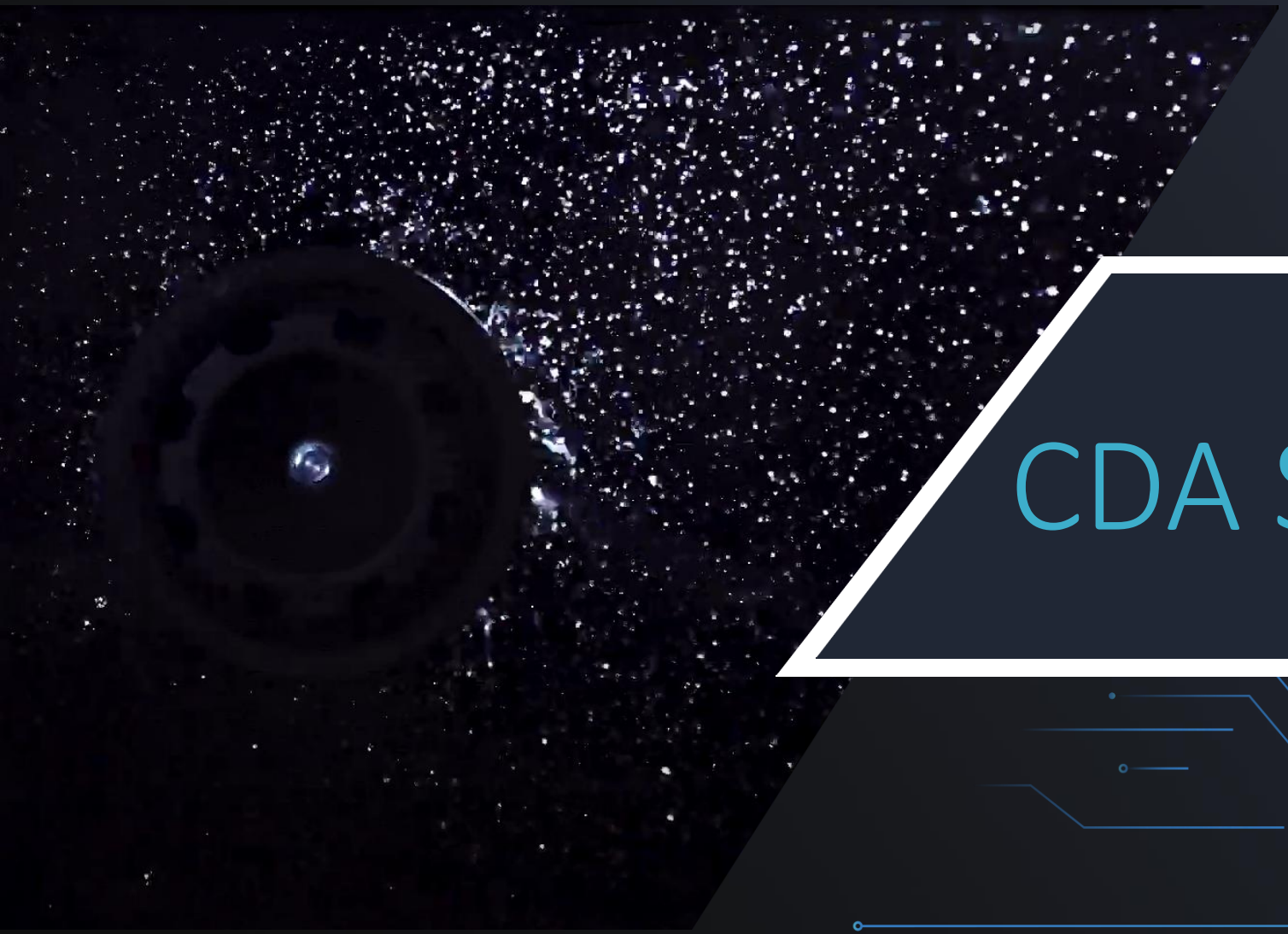

CDA Spraying System

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Plant protection practices today

Significant fuel consumption and Co2 emission

Tractor wheel destroy ~5% of crops and squeezes soil

Hydraulic atomization means random droplet size:

- Less than 60 micros: evaporates to the air
- More than 300 micron: goes to soil
- Ideal droplet size cannot be set
- Only 50% of chemicals reaches the target
- Significant waste of chemicals and water
- At 20-25 degrees Celsius and 60% humidity the droplets lost half of their liquid content

Unnecessary pollution

Significant waste of water and chemicals

Expensive operation + high environmental impact

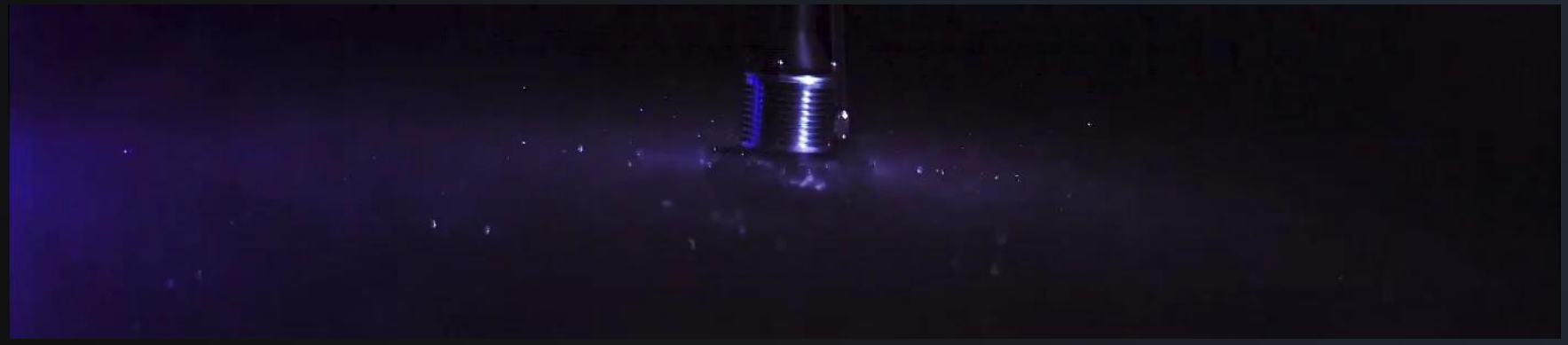
How does CDA spraying works?

CDA – Controlled Droplet Application

The secret of efficient spraying lies in even and targeted liquid distribution.

- Low pressure
- Rotating disc
- Centrifugal force
- Droplets break off from the edge of disc
- No relation between flow rate setting and droplet size setting

By adjusting how fast the disc spins, we can accurately set the desired droplet size. Being able to set different droplet sizes allows us to customize intervention plans for specific needs, as all plants, all pests and all diseases require different treatment to achieve the best results. Also we can get rid of the too big and too small droplets, which means no waste and no unnecessary pollution.



Why is the CDA Spreading System good?

Better coverage due to intense airflow with CDA technology

- No pressure needed – maintenance free
- Ideal droplet size can be set within a 5% margin – no waste of pesticides
- Suitable for organic farms
- Up to 95% less water
- Up to 60% less pesticides
- Further saving possibilities of precision spraying is applied

Case of study – Vineyards of Tokay, Hungary

Compared to Axial Sprayer:

- 88% less water
- 54% less pesticides
- 50% lower operating costs

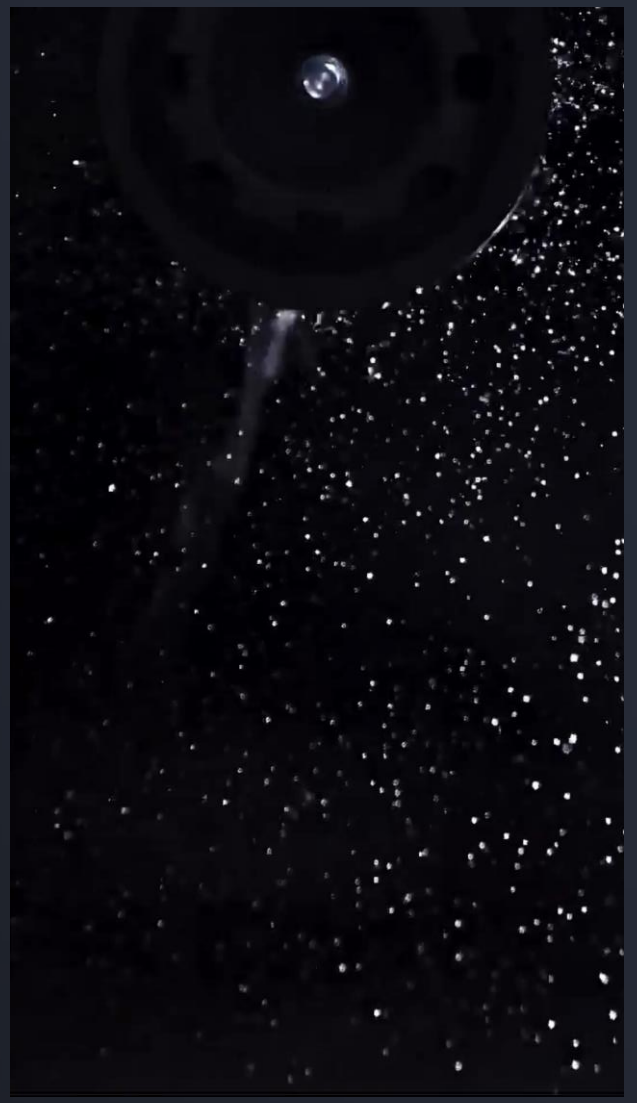
Case of study – Weed control in corn

Compared to tractor sprayer:

- 96% less water
- 50% less pesticides
- 40% lower opreating costs

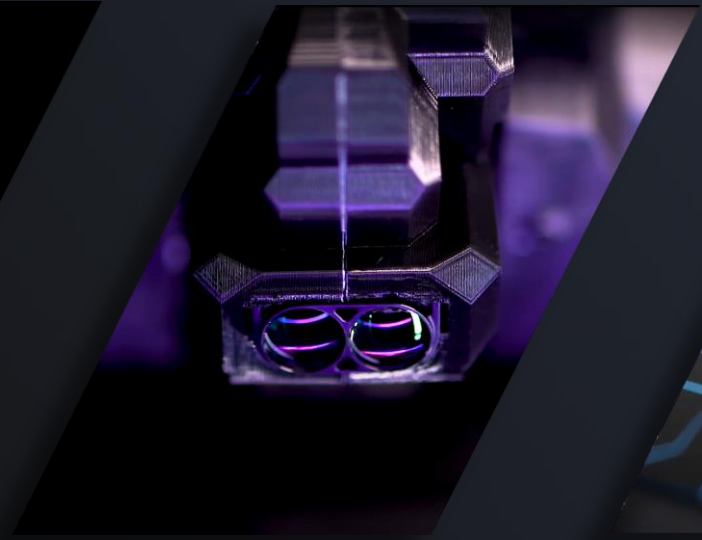
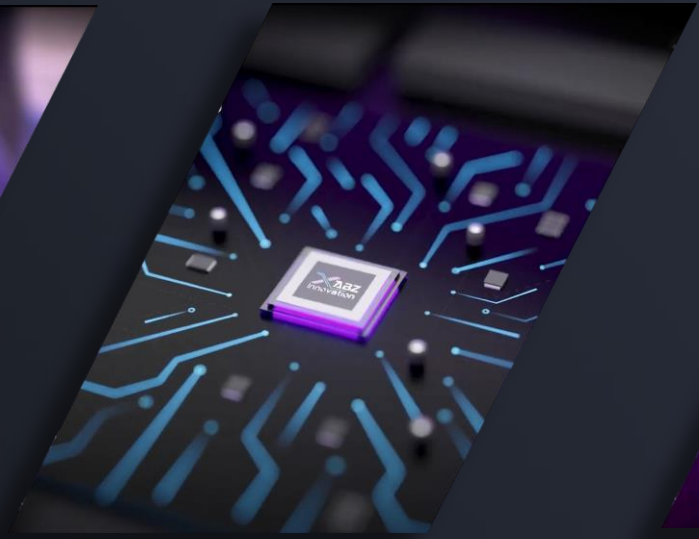
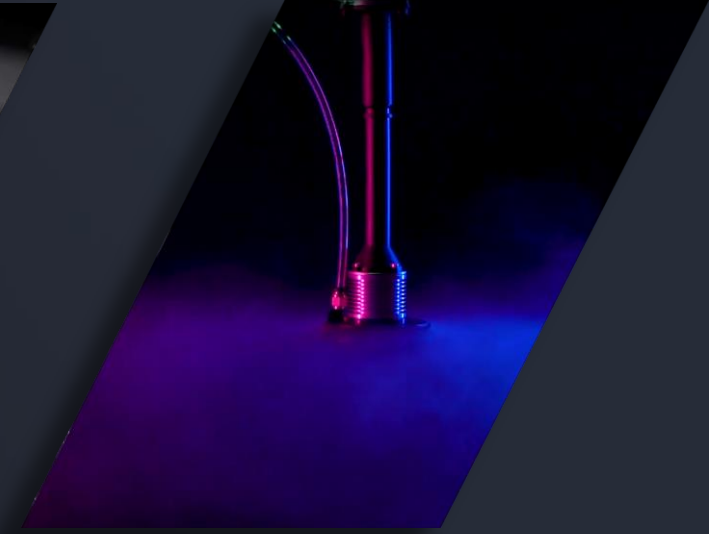
Main advantages and disadvantages of CDA system

	Hydraulic	CDA
Droplet size	Random between 130 and 250 µm	Can be set exactly between 40 and 1000 µm
Adjustable droplet size	X	✓
Drift	High risk	Low risk
Adjustable working width	X	✓
Pressure	High pressure	No pressure
Clogging	High risk	No risk
Maintenance	Frequent	Maintenance free



Health and Safety

CDA spray system produce controlled droplets that minimize the formation of very small droplets that are prone to drift. The discs on the CDA spraying system, combined with the downward airflow created by the propeller, ensure that the chemical is delivered exactly where it is intended, and the pesticides can be applied in windier conditions than with traditional application methods.

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