



 **DYNAJET**<sup>®</sup>  
SMART DROPLET MANAGEMENT



*TeeJet*<sup>®</sup>  
TECHNOLOGIES

# DYNAJET®

## A FULLY AUTOMATIC SPRAYING SYSTEM

Spraying crop protection products is a delicate balance between ground speed and operating pressure. The goal is uniform distribution in the right dose throughout the field.

### MANY FACTORS CAN IMPACT APPLICATION UNIFORMITY AND CONSISTENCY, INCLUDING

- Changing weather conditions limiting the time available to complete spraying operations
- Faster speeds changing droplets size, flow rate and pressure or requiring nozzle changes
- Field surfaces including downhill grades and curves impacting application
- Variations in speed from the inside to the outside of the boom during turns resulting in over- or under-application



## DYNAJET IS A GAME CHANGER

By automatically controlling the pressure and droplet size across a wide range of speeds, dynajet allows you to choose optimal speeds while maintaining a consistent droplet size everywhere in the field under even the most challenging conditions. Just program your droplet size from the cab and go.

**Consistent drop size, spray quality and performance require dynajet.**

“I BELIEVE THIS TECHNOLOGY  
WILL SOON BE A REQUIREMENT  
ON ALL SPRAYERS.”



Benoît Desgranges,  
86 Charroux,  
France

## IMPROVE OVERALL SPRAY QUALITY

ACHIEVE CONSISTENT DROPLET SIZE AND SPRAY QUALITY REGARDLESS OF THE FIELD CONDITIONS

“ Before dynajet, spraying was never optimal. I juggled to achieve the best compromise. Today, I don't care about speed limits. The system gives me wide range of speeds based on the size and configuration of my fields. I can also work at different pressures at constant volume.”



Jean Hilaire Renaudat,  
36 Saint Martin de Lamps,  
France

## LIKE 4 SPRAY TIPS IN 1

ONE NOZZLE FOR ALL OPERATIONS - MAINTAIN A CONSTANT DROPLET SIZE ACROSS A WIDE RANGE OF SPEEDS AND PRESSURES WITHOUT CHANGING NOZZLES

“ I am a contractor and work with all types of fields. It is challenging to find a tool to meet every need. Working with DynaJet, I no longer need to change my tips, I can get constant droplet size, significant time-saving and higher working speeds.”



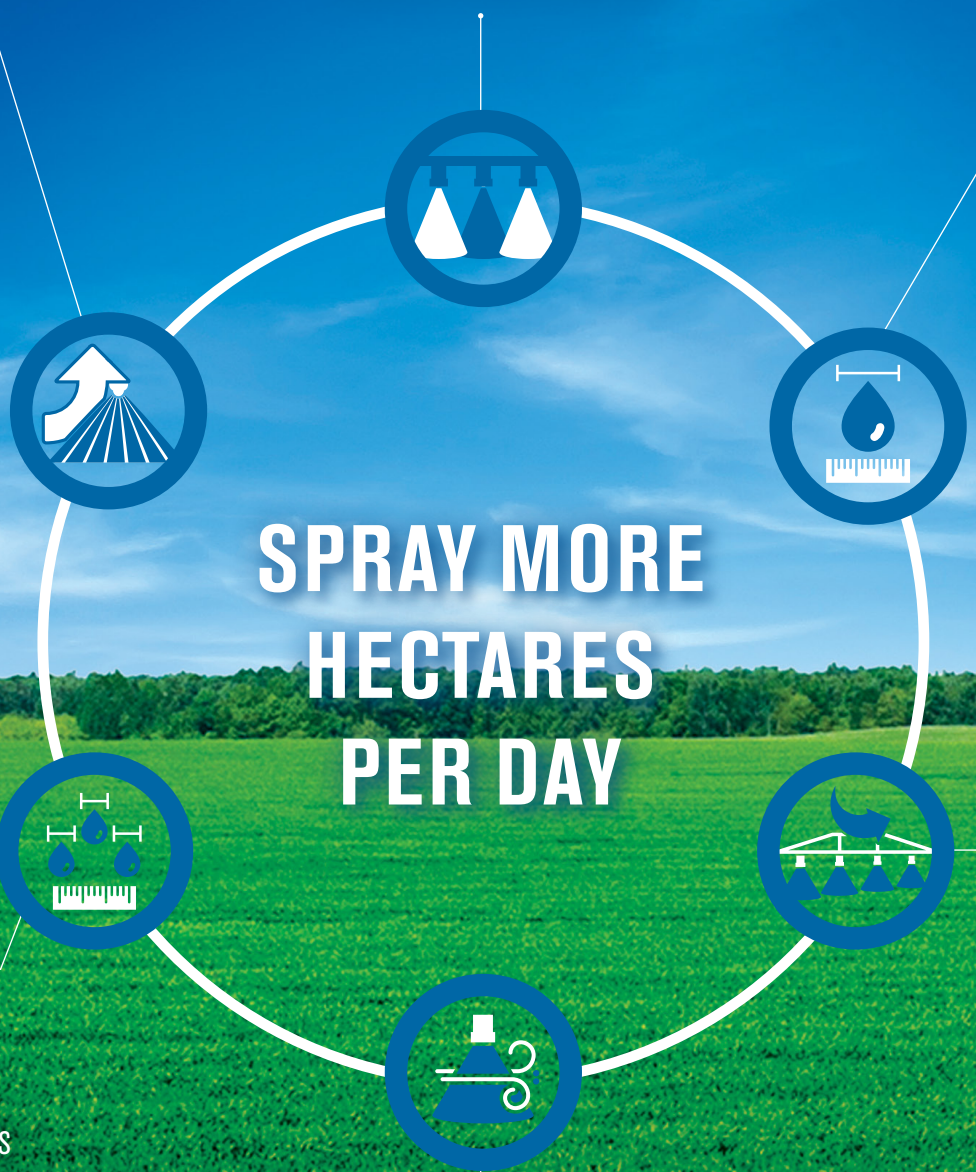
Bruno Van-Malleghem,  
02520 La Herie,  
France

## MAINTAIN CONTROL OF EVERY NOZZLE

INDIVIDUAL NOZZLE SHUT-OFF

# SPRAY MORE HECTARES PER DAY

SAFEGUARD THE ENVIRONMENT BY REDUCING SPRAYDRIFT



# DYNAJET MAKES SPRAYING EASIER

## MANAGE DROPLET SIZE ON THE FLY

“ My farm has steep slopes and large areas of up to 65 ha without obstacles and other terrain that require me to adapt my speed. Dynajet allows me choose my speed without sacrificing the quality of the application – from 5-15 km/h without changing pressure, droplet sizes or nozzles. ”



Andreas Döerr,  
98634 Oepfershausen,  
Germany

## SIMPLICITY

JUST SELECT THE DROPLET SIZE REQUIRED FOR THE PRODUCT YOU ARE APPLYING AND GO

## PRECISION

DROPLET SIZE REMAINS CONSTANT THROUGHOUT THE ENTIRE APPLICATION, ENSURING OPTIMAL CROP PROTECTION

## COMFORT

LESS STRESS, NO MORE HAVING TO CALCULATE DROPLET SIZE BASED ON PRESSURE AND SPEED DYNAJET DOES IT FOR YOU

## EFFICIENCY

USE FEWER SPRAY TIPS TO COVER A WIDER RANGE OF SPRAYING APPLICATIONS, FOR IMPROVED PRODUCTIVITY

## FLEXIBILITY

CHOOSE THE BEST GROUND SPEED FOR YOUR APPLICATION WITHOUT HAVING TO CHANGE SPRAYER SETTINGS

## COMPENSATE FOR TURNS

MAINTAIN THE RIGHT DOSE RATE ACROSS THE BOOM ON THE TURNS AND CURVES - ELIMINATING OVER- AND UNDER-APPLICATION

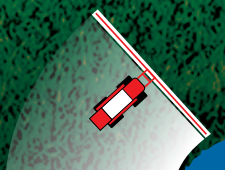
“ Terrain and soil irregularities impose lower speeds (around 12 km/h). With dynajet, I can spray faster while maintaining the dose rate at a constant pressure. ”



Edie Yvard,  
61 La Chapelle Souef,  
France



BOOM WITH TURN COMPENSATION



BOOM WITHOUT TURN COMPENSATION

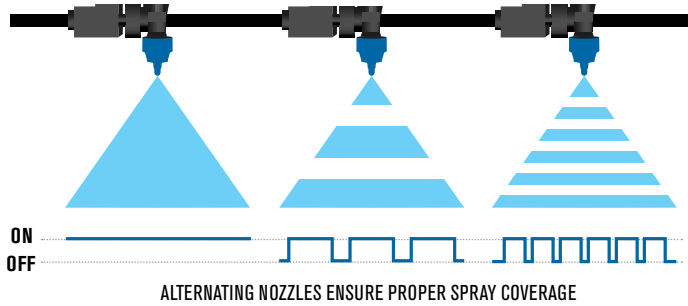
## SUSTAINABILITY.

SPRAY THE CORRECT DROPLET SIZE FOR FIELD CONDITIONS AND REDUCE THE RISK OF DRIFT

# HOW DOES DYNAJET WORK?

## PULSE WIDTH MODULATION (PWM) TECHNOLOGY

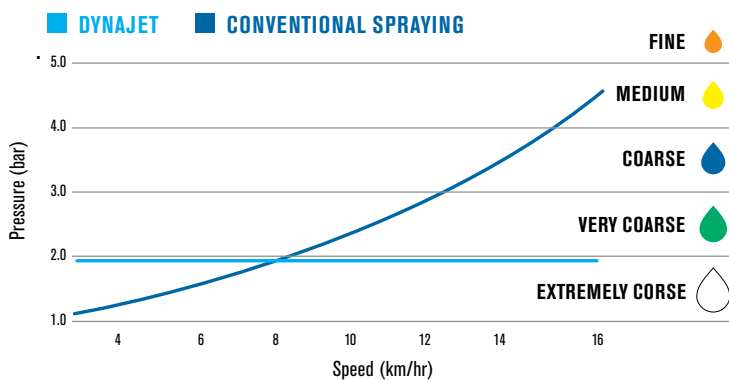
Using PWM with individual tip solenoid shutoffs, DynaJet turns nozzles on and off 20 times per second (20 Hz). Like changing nozzle size on the go, by varying the amount of time nozzles are on, DynaJet adjust flow rates independent of pressure to ensure a high quality spray.



DYNAJET OFFERS EVEN COVERAGE WITH NO SKIPS SHOWN HERE ON WATER-SENSITIVE PAPER

## DROP SIZE CONTROL

DynaJet maintains droplet size and flow rate without affecting the pressure. Even when conditions or ground speeds change, DynaJet maintains pressure and droplet size within desired parameters. DynaJet also offers a wide range of flow rates when compared to traditional spray tips.



## DRIFT REDUCTION

In conventional spraying, as speed increases, pressure grows causing a reduction in droplet size. Smaller droplets tend to drift away from the target.

With DynaJet, changes in speed range do not affect pressure so droplet size remains consistent and product is delivered to the target, reducing the risk of drift and pollution of the surrounding environment. And, DynaJet allows you to control the droplet size on the fly as field conditions change.

FUNCTIONALITY	DynaJet	Conventional spraying
Droplet size	Constant	Varying
Pressure	Constant	Varying
Nozzle choice	1 Nozzle	Multiple for different applications
Increased speed range	Yes	Restrictions apply
Droplet size change on the fly	Yes	No
Pressure change on the fly	Yes	No
Same spray quality on the field	Yes	No

## THE DYNAJET ADVANTAGE

- Choose from a wide range of droplet size categories (Fine to extremely coarse)
- Compatible with liquid fertilizer
- Less risk of clogged nozzles
- Achieve consistent Spray angle
- Automatic or manual control of pressure
- Compatible with specific 90% drift reduction nozzles



# SPECIFICATIONS

## DYNAJET SPRAY TIPS

- TT Turbo TeeJet®
- TTJ60 Turbo TwinJet®
- AITTJ60 Air Induction Turbo TwinJet®
- XR TeeJet®
- TTI Turbo TeeJet® Induction
- TTJ60 TTI TwinJet®
- TJ60 TwinJet®



## DYNAJET IC7140 VERSUS DYNAJET 7140

DynaJet offers two variations to achieve the optimal solution for your needs - DynaJet 7140 and DynaJet IC7140, an ISOBUS compatible system.

FEATURES	7140	IC7140
Real time droplet size spray quality feedback	■	■
Systems diagnostics and solenoid fault detection	■	■
Dual nozzle control	■	
Pressure selection		■
ISOBUS compatibility		■
Turn compensation		■
Individual Nozzle Shut-on/off		■
Variable Rate by nozzle		■

## DYNAJET COMPATIBILITY

DynaJet can be installed on all types of sprayers whether they are trailed or self-propelled, with front or back boom, new models or sprayers currently in use.

### EASY TO USE

The screenshot shows a control panel with the following elements:

- Top left: Sprayer icon and a yellow drop icon labeled 'M'.
- Top center: '53 %' and '3.8 bar'.
- Top right: 'F' (fault) and home icons.
- Center: A graph showing a blue area under a red line, representing spray distribution.
- Below graph: A nozzle selection menu with a red nozzle icon and the text 'TTJ60 - 11004'.
- Bottom left: A pressure gauge icon and a scale from 0 to 6 bar.
- Bottom right: A vertical menu with icons labeled 'M', 'C', 'VC', and 'XC'.

Annotations with arrows point to specific features:

- 'SELECT NOZZLE TYPE AND CAPACITY' points to the nozzle selection menu.
- 'EASY TO USE' points to the top right area.
- 'AUTOMATICALLY ADJUSTS FREQUENCY TO MAINTAIN PRESSURE' points to the '3.8 bar' display.
- 'SET DROP SIZE CATEGORY' points to the 'M' icon in the vertical menu.
- 'AUTOMATICALLY ADJUSTS TO MAINTAIN DROP SIZE' points to the 'XC' icon in the vertical menu.

## INDEPENDENTLY VERIFIED EFFICACY

DynaJet's efficacy, coverage and control without skips has been verified by Julius Kühn Institute (JKI), a neutral and authoritative third-party in Germany, passing test number G 2049 including several laboratory and field tests over one season. Approval is based on EN/ISO 16619 and additional work safety requirements and examinations.

### TEST RESULTS INCLUDE:

HORIZONTAL SPRAY DISTRIBUTION  
WITHOUT SKIPS - PASSED

FLOW RATE CHECK BASED  
ON ISO REQUIREMENTS - PASSED

RELIABILITY -  
PASSED

