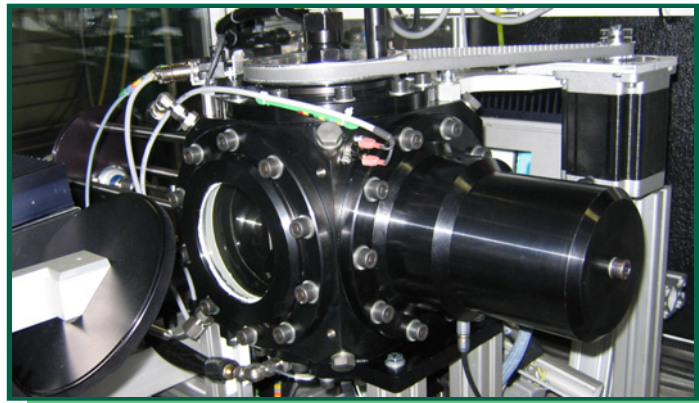


PRESENTATION

The **INJETVISION** vision system is designed to determine **automatically** the evolution of the morphological parameters of **gas** or **diesel** injectors, mono or **multi-jets**, during the injection.



INJETVISION

SPRAY CHARACTERISTICS

The system characterizes the jets as follows:

- spray tip penetration
- spray cone angle
- spray area
- spray volume
- Alpha spray (α) angles with localization (for HP diesel injectors)
- Lambda spray (λ) angles with localization.

SYSTEM DETAILS

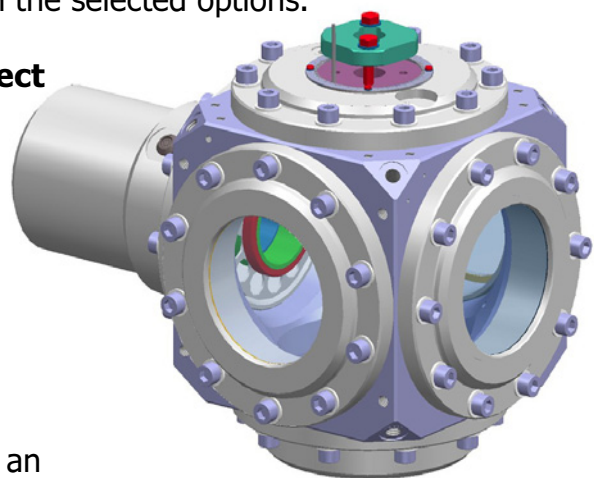
The system is made up of a **modular pressure chamber** equipped with 3 or 4 visualization windows, depending on the selected options.

A fog extraction system provides **perfect measurement reproducibility** at a rate of up to 0.5Hz.

A control rack (8212-2A) controls the chamber pressurization.

Lighting is provided by a continuous white light.

Image acquisition is obtained through an **intensified camera** allowing instantaneous imaging (minimum exposure time 200ns).



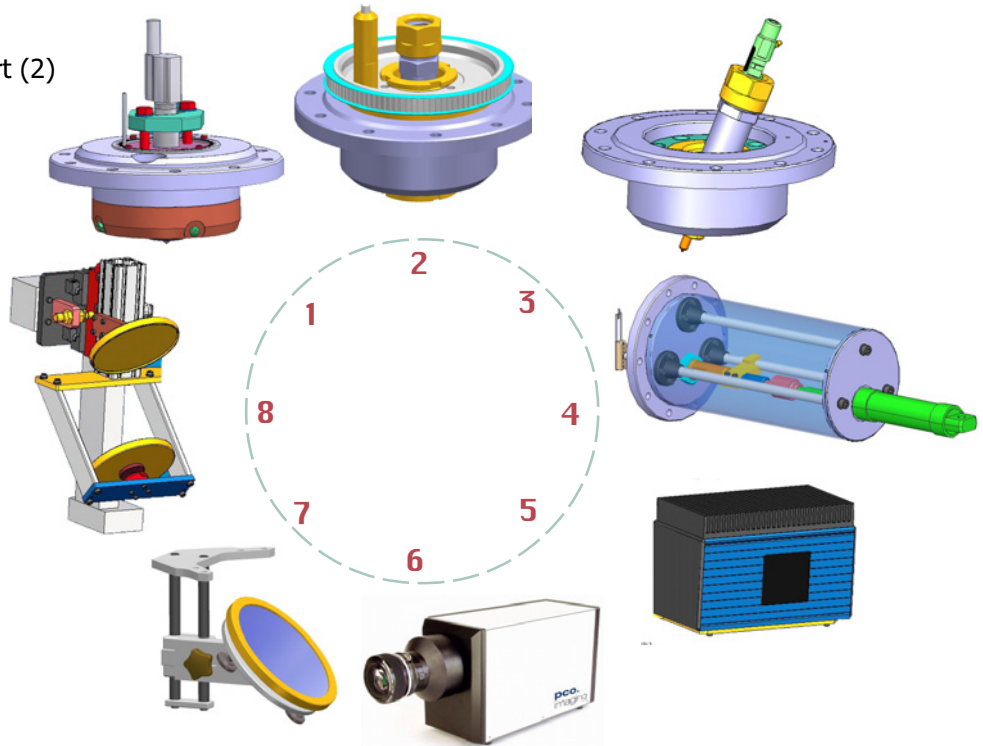
The equipment complies with the 97/23/CE directive for equipment under pressure.

AVAILABLE OPTIONS

- Straight injector support (1)
8212-1D-1 option (*)
- Turning straight injector support (2)
8212-1D-2 option (*)
- Biased injector support (3)
8212-1D-3 option (*)

- Reflecting module (4)
8212-1E option
- Light module (5)
option 8212-3A option
- Camera module (6)
8212-3B option

- Alpha visualization module (7)
8212-3C option
- Lamba visualization module (8)
8212-3D option



(*) These supports can be adapted to any type of injector.

The chamber can be installed on an existing bench or on an EFS **ITB 234v** bench.

TECHNICAL SPECIFICATIONS

Penetration resolution	$\pm 0,1\text{mm}$
Cone angle resolution	$\pm 0,1^\circ$
Angle α resolution	$\pm 0,1^\circ$
Angle λ resolution	$\pm 0,1^\circ$
Area resolution	$\pm 0,01\text{mm}^2$
Volume resolution	$\pm 0,01\text{mm}^3$
Injection start detection	$\pm 2\mu\text{s}$
Number of sprays	1 to 8
Injection frequency	$< 0,5\text{Hz}$
Atmosphere	N_2, CO_2
Chamber pressure	$< 50\text{bars}$
Data retrieval	.xls, .txt files
Representation of results	Average image, injection located area, table, graph.



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BP 34 F - 69390 Millery
 Tel. : +33 (0)4 72 49 27 72
 Fax : +33 (0)4 72 49 27 77
 E-mail : efs@efs.fr
 Site : www.efs.fr

Order reference

INJETVISION