



DCDR / DCDSR
SPECIALIST SOLUTIONS

**Diesel Injection
Systems**

Innovative, compact and professional
solutions for every workshop to test
& service Diesel Injection Systems

DCDR / DCDSR

Carbon Zapp's Revolutionary DCD / DCDS Diesel Injector Coder and Simulator provides the capability for every Standalone or Conventional Test Bench out in the market to renovate and test efficiently All Makes and Types of Common-Rail Injectors up to 2800Bar after being serviced by Diesel Specialists.

The Affordable Coding Solution for Everyone

Standalone Diesel Bench Attachment Unit
NVcT: VCC / NCC / EU6 Needle Control Testing
CRS.3-27 / CRS.2-25 / iArt / and more EU6 Capable...
Compact Size for Every Laboratory
Testing & Coding of All Types / Makes

Diesel Specialists Choice

new



Works with every Standalone & Conventional TestBench in the Market

Controls all Types and Makes of Injectors. Includes OEM Database and Test Plans for 1 CRi/CRiN / CRiN 4.2 / HEUi solenoid or piezo

Electronic Measurement and Coding for every Test bench

Controls NEW Generation CRi3-25 and CRi3-27 injectors with NCC and VCC technology

EU5 and EU6 systems testing [Denso I-Art (6-pin), VDO, etc...]

Injector Coding VDO IIC, Delphi C2i/C3i, Bosch IMA/ISA and Denso QR

VDO CR injectors (EU5) testing only with approved Energy Control by **VDO**

Nozzle reaction time measurement for all systems via RSP sensor

Actuator Valve measurement via RSP/BIP sensor

Fully Automatic and fast testing phase through a 8" Touchscreen HMI with AZO software

CRDi Piezo Stack Regeneration function

Blue Limits Diagnosis for Diesel Specialists

Static Electronic Mass (DFAP) Measurement

Emergency Safety Stop function

Compact, Lightweight and Portable Unit

Connects to any Cambox. Automatic function with complete database and test plans (Coding*) with the Hartridge HK-1400A Cambox powered by Carbon Zapp (optional-future update)

High Pressure Testing up to 2800Bar (EU6) with BCR-Kit (optional)

CZ Technologies

Tests Performed

R2LC

Electrical actuator test for $k\Omega/\mu F$, $\Omega/\mu H$

CFL

Check For internal and external Leaks

NLT

High Pressure Nozzle Leakage

LKT

Static Back Leakage (Overflow) measurement

aNOP

Automatic Nozzle Opening Pressure

iVM (FL, PL, EM, LL, PI)

Injector Volume Measurements (full-load, part-load, emissions, low-load, pre/post-injection.)

iVM-aDFi

Injector Volume Measurement Performance Ramp (multiple testpoints slope / different Pressure points)

RSP

Injector Nozzle Response Time

BIP [EUI / EUP systems]

Injector / Pump Control Valve Response Time for Unit Injection Systems

SPR

Dynamic Spray Test performed in all testing conditions up to 2800Bar

Extra Tests

High pressure Control Valve operation (DRV, IMV, VCV, PCV, etc...) High Pressure Sensor reaction, High Pressure relief safety valve operation CR Pump flow limiter valve operation (ZME, IMV, SCV.)

MIM

Multiple Injection Metering (up to 8 fully programmable delay and overlap times)

Features

AZO Software

Advanced Android based HMI/PC, Wi-Fi printing, sharing, syncing, software/ hardware & database updating, via USB or Wi-Fi, Real-time Oscilloscope and CSV data export

Reports

Easy fail-track color report for each component tested. Single-page Quick report or Multi-page Analytic reporting

aMACC Flushing / Cleaning function

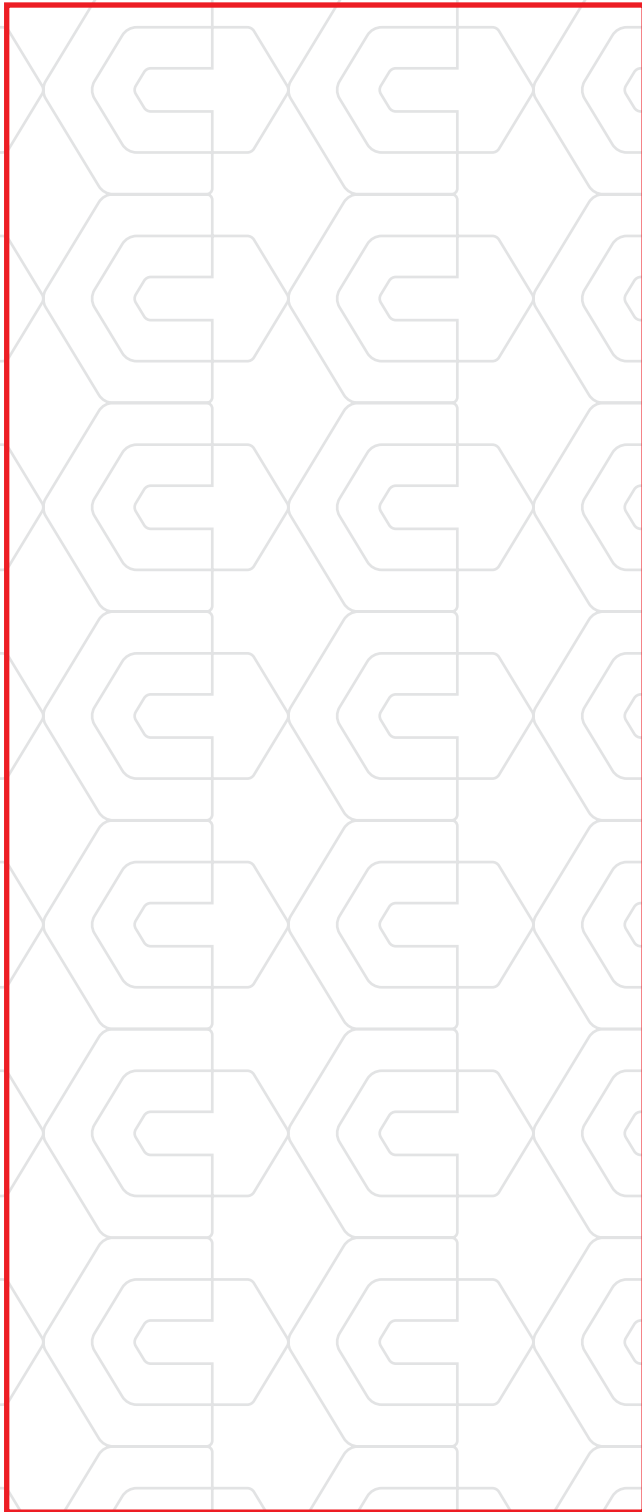
Automatic chemical treatment and flushing of the injector before testing under high pressure and using a specially formulated detergent

RSP / BIP

Response Sensor (RSP) adaptable to all Injector Nozzles

Response Sensor (BIP) adaptable to all Control Valves [EUI/EUP].

Precise measurement of Control Valve & Nozzle reaction time to easily diagnose a slow acting injector, a retarded injection event, poor engine performance and emissions issues."



1. BK



2. DFAP

Electronic Measurement

1. Dynamic Electronic Mass Measuring Sensor (BK). Ramp function capable for aDFI function, Injector Coding Capable, Acc:0.2%FS, repeatability: 0.05%. Fast and Accurate Measurement with Coriolis technology
2. Static Electronic Mass Measuring Sensor (DFAP) Acc: 0.6%FS, Accurate and Repeatable Measurement with Differential Absolute Pressure Technology