

## DGFR

Diesel System Test Bench

# Diesel CRDi & Gasoline GDi Flushing Bench

Flushing / Cleaning and Servicing  
bench for up to 4 injectors.

### Features

#### A Continental/VDO Proposed Flushing Bench

- Xtremely Fast Flushing Times
- New Design for every Service Station
- Optimized Working Area to reduce Injector Set-up Times
- 1000Bar Operating Pressure
- EU6 Systems Capable
- CloudX Capabilities
- Off-Highways CR applications operation (John Deere, Komatsu, Hino, Isuzu)
- Cummins XPI, Caterpillar-Perkins C4/C6 and other Medium-Duty operation

### Diesel CRDi / Gasoline GDi Injector Flushing Bench

- Ergonomic, Fast and Easy Injector Clamping device to minimize mounting times.
- Fully Adjustable height for all types of CRDi / GDi injectors.
- Utilizes a spring-loaded injector holder to ease the operation of the user.
- Advanced self air-cooling system to optimize long term nonstop operation at all environmental conditions.
- Adaptability for every type of Diesel Injectors in the market
- Android Powered 10" HMI with unlimited flexibility and connectivity competencies.

**Authorized Solution  
for Continental/VDO**



## SPECIALISTS

CRDi

EUI/EUP

HEUI

CRP

ENGINE

GDi

EFI

GDi Pumps



CZ Piezo Stack Filler, Air remover and Stack Activator is the only automatic solution to assure optimum servicing and operation of Piezo injectors today after being serviced by Diesel Specialists.

Automatic and easy operation for 4 Piezo injectors at once

Connects directly at the return port (backleak)

Only needs single phase 100-250Vac

Lightweight and portable solution

Connects to any Carbon Zapp Test Bench for use of appropriate Test Plans

High Flow Vacuum Power 10KPa and Pressure of 100KPa

Automatic Start / Stop function

Adaptability to all types of Piezo injectors

# SPAR

## Diesel System Test Bench

## DGFR //X Specifications

DESCRIPTION		UNIT	DGFR-X (CZ-007091)
Machine Dimensions	Length	mm	510
	Width	mm	780
	Height	mm	780
Weight		kg	66
HMI	Tablet Touchscreen	Inches	10
Internet Update	WiFi / Ethernet	-	YES / YES
Pressure Source	Type	Air Driven High Pressure Pump (DxL-ISO) ISO4113	
Test Oil	Type	Calibration Oil	
Test Oil Tank	Capacity	Liters	4
Flush Tank	Capacity	Liters	4
Max Pressure	Pressure	Bar	1000
Max RPM	Max Revolutions Per Minute	RPM	-
Max Pumps	Pumps Test	Slots	-
Max Injectors	Test Injectors	Slots	4
HP Pump	High Pressure Pump	Type	Pneumatic Pump
LP Pump	Supply Pressure	Bar	-
	Pressure	Bar	6 - 8
	Air Tank Capacity	Lt	200
	Air Flow	Lt/ Min	300
Air Supply	Min Diameter at Air Supply Hose	mm	8
	Air	Type	Water / Oil FREE
Main Power Supply	Phases	Number	1
		TYPE	1P+N
	Voltage	VAC	100 - 240
	Frequency	Hz	50/60
	Current	Ampere	5
	Max Consumption	kVA (100V/240V)	0.5 / 1.2
Operating Temperature	Min / Max Room Temperature	Celsius	6 / 35
IVM Sensors	Measurement Sensors	Type / Quantity	-

**APPLICATIONS**  
 Passenger Car/ Motorcycles: Volumes up to 120mm<sup>3</sup>/H  
 Light Duty: Volumes up to 200mm<sup>3</sup>/H  
 Medium Duty: Volumes up to 300mm<sup>3</sup>/H  
 Heavy Duty: Volumes up to 650mm<sup>3</sup>/H  
 Marine: Volumes up to 1500mm<sup>3</sup>/H

**EXPLANATIONS**  
 - : N/A  
**PRESSURE SOURCES**  
 Air: Air Driven High Pressure Pump  
 Motor: Motor Driven High Pressure CR Pump  
 External: Pressure coming from another test bench or external source  
 Electric Pump: Fuel Injection system or Industrial Application Electrical Pump 12VDC  
 -: No Pressure Source

# eXpanding Capabilities

X Series 2023

Space saving, accessory organizers for everyday tasks.  
Increased productivity and uncluttered space.

## Extras MTBR-X & PTBR-X



1 Desk & Harness Shelf



Hydraulic Hose Side Panel Pocket with Drain

2



## Ultrasonic Shelf

for GTBR-X,  
ITBR-X, HTBR-X





**Carbon Zapp Trolley  
Fully Configured Setup**



**CZ Base Trolley**



**Hose & Harness  
Side Organizer**  
(max. 2 pcs per trolley)

**Carbon Zapp Trolley**

Ideal workshop organizer to fit most parts of the machine like harnesses, hoses, adapters, tools and flanges. Can be easily transformed to a Cambox and/or pump rack for easy transfer and storing.



**CRp Flange Drawer  
Organizer**  
(max. 1 pc per trolley)



**Cambox/Pump  
Transfer Rack**  
(max. 2 pcs per trolley)





## **CloudX is CarbonZapp IoT Cloud computing Platform**

Powerful innovations at your fingertips  
with CZ CloudX computing Platform

CZ CloudX computing technology Platform as a service (PaaS) is a complete environment in the cloud, with resources that enable clients the full control of their Bench with cloud based Apps access them over a secure Internet connection. With middleware, development tools, business intelligence (BI) services, database management systems and more.

CloudX allows clients to access live online updates of database, remote operation and status report of their bench. Generate remote reports for handling, printing, filling and organizing from machine database. Instant activation of features on a pay-as-you-go basis. Multiple machines management support. Complete machine cloud back-up and instant trouble shooting via X-Connect directly from CZ factory. Receive notifications on your smart devices for machine maintenance tasks like Oils, Filters, Service, and more.

**Explore today new powerful innovations at your fingertips with CZ CloudX computing Platform.**

## **CloudX Features**

- IoT Cloud computing Platform. Industry 4.0 Complaint
- Live Online Updates of Database and supporting new requests from clients
- Remote Operation and Status Report of Client Bench
- Generating remote reports for handling, printing, filling and organizing from machine database
- Instant Activation of Features on a pay-as-you-go basis
- Multiple machines management
- Complete machine cloud back-up
- Instant troubleshooting via X-Connect directly from CZ Factory
- Notifications on Client smart devices for machine maintenance tasks like Oils, Filters, Service, and more



Scan CZ Digital  
Product Catalog

**Headquarters & Production**  
364 Varis-Koropiou Ave. Koropi  
194 42 Athens, Greece

**German Branch**  
A.I.S. GmbH  
75438 Knittlingen, Germany

**email** [contact@carbonzapp.com](mailto:contact@carbonzapp.com)  
**tel** +30 210 9856110  
**fax** +30 210 9928655

**carbonzapp.com**