

GTB4R //X

Gasoline System Test Bench

CloudX

The Optimum Gasoline Specialists GDi Solution. The Professional's Service Station for All Types and Makes GDI systems.



INNOVATION DRIVEN



Engineering Forward Mobility Solutions!



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Gasoline System
Test Bench

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#carbonzappXseries

The Optimum Gasoline Specialists GDi Solution. The Professional's Service Station for All Types and Makes GDI systems.

The New GTB4R-X is a unique Standalone Gasoline Direct Injector Test Bench capable to thoroughly Test, Service and Code every possible GDi in the market today.

The machine's Innovative technology is already in compliance with all EU6 standards and requirements, meantime is prepared for future upgrades.

Overview of the New GTB.4R-X

Precise, repeatable and rapid Gasoline Injectors Testing

[4] Injectors Testing & Coding*

- 5-7 minutes testing and coding* time for 4 injectors
- GDi injectors (All Brands and Types)
- Conventional Gasoline EFi Injectors
- Capable for all EU6 technologies
- Coding Capable for all Types of GDi's (Energy Controlled or Volume Metering types)
- · Flushing and Servicing options for GDi injectors
- External Control and Measurement for GDi High Pressure Pumps operating on a Conventional Test Bench**



1200 Bar

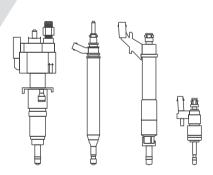
4 GDi Injectors. Capable for all EU6 Technologies

SPECIALISTS

CRDi - EUi/EUP - HEUi - CRP ENGINE - GDi - EFi - GDi Pumps



GDi Pump testing on a conventional bench as an external control & measurement [Optional



EU6 Technologies

future update]

A Revolution in GDi Test Benches

Our qualified team, know-how and pioneering thinking developed the New Powerful GTB.4R-X

^{**:} Future upgrade expected Q3/2025



GTB4R /X → Points

> 01.

Working Area

Ergonomic & easily accessible illuminated working space. Fast mounting for all types of Injectors.

= 02.

Easily Accessible Filters & Waste Area

Quick access to all inline filters for fast check-up and replacement located within your working area. A mess-free compartment to work at, continuously draining to the waste tank.

.....

= 03

Machine Interface

New CloudX based AZOv3 software features speed, connectivity and expandability in a user friendly environment.

.....

≥ 04

Easily accessible drawer and connection ports.

(View detailed image on page 30)

= 05.

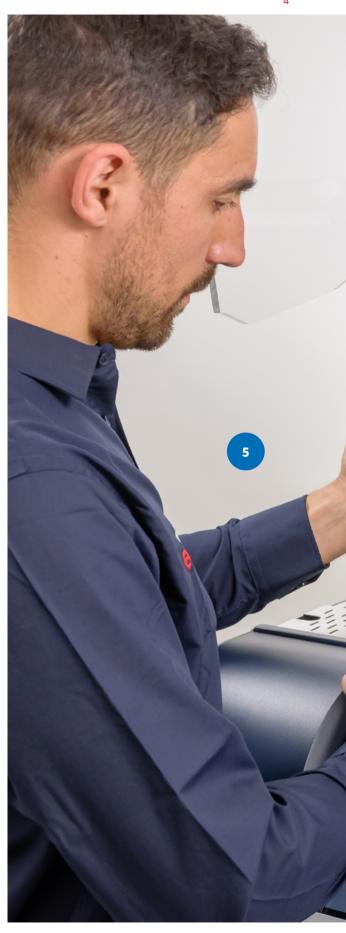
Functional use of test oil tank enhances maintenance.

Tank extends to fill-up, drain and clean.

(View detailed image on page 30)



Actual Dynamic measurement of the injector overflow



5 GASOLINE SYSTEM TEST BENCH







AZO SOFTWARE



GTB.4r-X		Test: CFL.01				B=== + + -		
				Sui et ·	Stat #2 ·	Stor #3	Det 64	
RORD ORLH			RSP	- v	- v	- Y	-	
OUR								
		8	4.0					
			DI Maria					
			0.0					
NM.04 B RSP				2.0	2.0	21	2.1	
ii ~								
Conditioning test Stop								
			S 4			cp		

Applications

Gasoline Passenger cars

Gasoline Light Duty vehicles

Gasoline Outboard motors

Alternative Fuels engines

--- Features

Xtremely Fast Testing Times without any Compromise

New Design for every Service Station

Optimized Working Area to reduce

Injector Set-up Times

1200Bar Capable Test Bench

EU6 Systems Testing and Coding

CloudX Capabilities

Gasoline GDi testing and coding

Ergonomic, Fast and Easy Injector Clamping device to minimize mounting times.

Fully Adjustable height for all types of GDi and EFi injectors.

Utilizes a spring-loaded injector holder to ease the operation of the user.

Quick access to all inline filters for fast check-up and replacement located within your working area.

A messfree compartment to work at, continuously draining to the waste tank.

Advanced Testing capability for all brands and types available in the market today. Bosch, Denso, Delphi, Continental /VDO, Hitachi-HTC, Magneti Marelli and more added every day...

Coding capability for Siemens/ VDO and for the newer* generation EU6 available in the market today.

Advanced water-cooling or air-cooling system to optimize long term nonstop operation at all environmental conditions.

Live Response Time Measurement at every test plan

Adaptability for every type of Gasoline Injectors in the market

Continuous Database updates and new Software capabilities to meet the market needs.

Android Powered 15.6' HMI with unlimited flexibility and connectivity competencies.

GTB4R //X

SPECIALISTS

Gasoline System Test Bench

CRDi - EUi/EUP - HEUi - CRP ENGINE - GDi - EFi - GDi Pumps

GTB4R //X → SPECIFICATIONS

	DESCRIPTION		UNIT	GTB.4RX-A (CZ-008737)	GTB.4RX-W (CZ-008787)	
Machine	Ler	igth	mm	770	770	
Dimensions	Wi	dth	mm	800	800	
Dimensions	Hei	ght	mm	1650	1650	
Weight			kg	250	252	
НМІ	Tablet Touchscreen		Inches	15	15	
Internet Update	WiFi / E	Ethernet	-	YES / YES	YES / YES	
Pressure Source	Ту	pe	Motor Driven High Pressure CR Pump			
Test Oil	Ту	pe	(GxL-ISO) Calibration Oil			
Test Oil Tank	Cap	acity	Liters	30	30	
Max Pressure	Pressure		Bar	1200	1200	
Max RPM	Max Revolutions Per Minute		RPM	2000	2000	
Max Pumps	Diesel	Pumps	Slots	-	-	
Mux I ullips	Gasolin	e Pumps	Slots	1	1	
Max Injectors	Test Injectors		Slots	4	4	
LP Pump	Supply Pressure		Bar	0.1 - 5.4	0.1 - 5.4	
Air Supply	Pres	sure	Bar	-	-	
All Supply	Air l	low	Lt/ Min	-	-	
	Pho	1000	Number	1P	1P	
Main	Phases		TYPE	P+N / PE	P+N / PE	
Power	Voltage		VAC	220-240	220-240	
Supply	Frequ	Frequency		50/60	50/60	
Supply	Cur	rent	Ampere	16	16	
	Max Con	sumption	kVA (220V/240V)	3.52 -3.84	3.52 -3.84	
	Mo	del	TYPE	AK100L-4	AK100L-4	
	RPM		RPM 50 / 60Hz	1420 / 1700	1420 / 1700	
Motor			KW 50 / 60Hz	3 / 3.6	3 / 3.6	
1-10101	POWER		HP 50 / 60Hz	4 / 4.8	4 / 4.8	
	TOWER	Connection Y	Ampere (50HZ)	400 V:6.56 A	380 V: 6.89 A	
			Ampere (60HZ)	480 V:6.56 A	460 V: 6.89 A	
	Max Inpu	t pressure	Bar	-	4	
	Max Outp	ut Pressure	Bar	-	1Bar< Input Pressure	
	Min Input T	emperature	Celsius	-	5	
	Max Input 1	emperature	Celsius	-	15	
		/Out Water Hose	mm	-	10	
	Water Tan	k Capacity	Liters	-	10	
Water Supply	Max Wo	iter Flow	Lt / Min (4Bar)	-	4	
Trate: Supply	Min Water Out	out Temperature	Celsius	-	5	
	Max Water Out	out Temperature	Celsius	-	65	
	Del	ta T	Celsius	-	0-50	
	Max Cooling E	ficiency "Debit"	Tank Cycles	-	2	
	[20 liters of 5°	C water in order				
	to Cool Down the	Test Oil from 43° C				
	to 36° C (21	ank cycles)]				
Operating Temperature	Min / Max Roo	m Temperature	Celsius	6 / 23	6/30	
IVM Sensors	Measurem	ent Sensors	Type / Quantity	XKM / 4 *	XKM / 4 *	
	Ficasarcin		. , , 50 , 50001.0109		, .	

AFFICATION3
Light Duty: Volumes up to 200mm3/H
Medium Duty: Volumes up to 300mm3/H
Heavy Duty: Volumes up to 650mm3/H

MEASUREMENT SENSORS XKM [Dynamic Meas. Sensor]: High Accuracy: ± 0,1%, Exceptional Repeatability ±0,05%, Measur Range: 1-1000ml/min

PRESSURE SOURCES
Mator: Mator Division High Pressure CR Pump
Electr Pump: Fuel Injection system or Industrial Application Electrical Pump 12VDC







CloudX is Carbon Zapp loT 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.

9 INTRODUCTION



IoT Cloud Platform Industry 4.0

Remote Operation and Status Report of Client Bench

Generating remote reports for handling, printing, filing and organizing from machine database Multiple machines management

Instant Activation of Features on a pay-as-you-go basis

Notifications on Client smart devices for machine maintenance tasks like Oils, Filters, Service, and more Complete machine cloud back-up

Instant troubleshooting via CX-Connex directly from CZ Factory

Live Online Updates of Database and supporting new requests from clients



EXPANDING CAPABILITIES

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



Extras



MTBR-X & PTBR-X









02. Hydraulic Hose Side Panel Pocket with Drain



Ultrasonic Shelf



for GTBR-X, ITBR-X,







11 **EXPANDING CAPABILITIES**



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)









VIEW CZ Digital Product Catalog



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