

Leak-Test -Seskion GmbH-

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Version:	(1.0) 20.04.2022 – Creation

Leak-Test



General

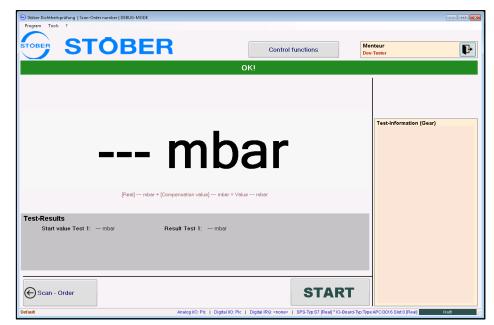
The testing software was developed for a customer to test gears/motors regarding their tightness. Initially, this was written in C++ with the Microsoft Visual Studio and the Microsoft Foundation Class Framwork. The current version has been completely revised and re-implemented in C# (.NET framework) and the Microsoft Visual Studio 2013.

The software retrieves order data with the help of an **interface to the database (MS-SQL)** implemented by us and compares it with the current test data or test results. Furthermore, there is constant communication via the **PLC**, which in turn communicates with the sensor system and forwards its values. In the current version, direct communication with the sensor system has been transferred to the PLC, as this enables a much faster sampling rate.

For the **Quality Management** it is necessary that the installer logs in. When comparing the current test results with the database, this name is always logged as well.



The main window provides an overview of all data important for the test procedure. This includes the current test values and the status of the hardware (I/O card, PLC).



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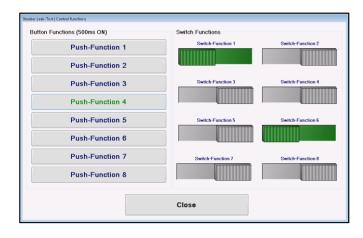
Control functions

The push function and switch functions are freely configurable digital outputs (Addi-Data Digital I/O card) or freely configurable bits on the PLC.

The push button sets the respective output to 1 for 500ms.

The Switch button lets the user switch an input between 1 and 0 for any length of time.

Push-Function 1 Switch-Function 2 Push-Function 2 Switch-Function 2 Push-Function 3 Switch-Function 3 Push-Function 4 Switch-Function 5 Push-Function 6 Switch-Function 7 Push-Function 7 Switch-Function 7	Button Functions (500ms ON)	Switch Functions	
Push-Function 3 Switch-Function 3 Push-Function 4 Switch-Function 5 Push-Function 5 Switch-Function 5 Push-Function 6 Switch-Function 7 Switch-Function 7 Switch-Function 8	Push-Function 1	Switch-Function 1	Switch-Function 2
Push-Function 4 Push-Function 5 Switch-Function 6 Push-Function 7 Switch-Function 7	Push-Function 2		
Push-Function 5 Switch-Function 5 Switch-Function 6 Push-Function 7 Switch-Function 7 Switch-Function 8	Push-Function 3	Switch-Function 3	Switch-Function 4
Push-Function 6 Push-Function 7 Switch-Function 7	Push-Function 4		
Push-Function 7 Switch-Function 8	Push-Function 5	Switch-Function 5	Switch-Function 6
	Push-Function 6		
Push-Function 8	Push-Function 7	Switch-Function 7	Switch-Function 8
	Push-Function 8		
		Close	



The Digital/Analog I/O Info can be used to quickly check a state of an input/output, or the value of a specific address in the PLC.

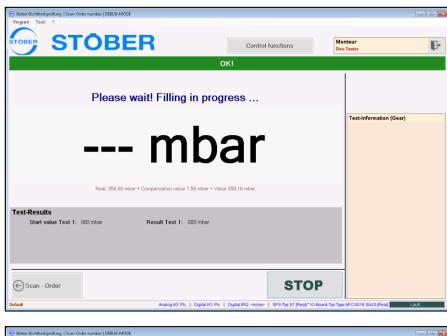
APCI3016-0 D-IN	b00 b01 b02 b03		•
APCI3016-0 D-OUT	b00 b01 b02 b03		
08111.0800 IATASET_DATADOUBLEWORD	_Analog\álue	3,566000 [58-39-64-40] Analog Value (D	BD)
B111.DBD4 ATASET_DATADOUBLEWORD	_Reserve_1	0,000000 [00-00-00] Reserve 1 (DBD)
B112.DBB0 ATASET_DATABYTE_DBxxx_D	188x 0	00 [0x00] b7 b6 b5 b4 b3 b2 b1 b0 DB112.DBB0	
DB112.DBB1 NATASET_DATABYTE_DBxxx_D		00 [0x00] b7 b6 b5 b4 b3 b2 b1 b0 D8112.D881	
DB112.DBB2 NATASET_DATABYTE_DBxxx_D	-	00 [0x00] b7 b6 b5 b4 b3 b2 b1 b0 D8112.D882	
08112.0883 IATASET_DATABYTE_DBxxx_D		00 [0×00] b7 b6 b5 b4 b3 b2 b1 b0 DB112.DBB3	
DB112.DBB4 NATASET DATABYTE DBxxx D	-	00 [0x00] b7 b6 b5 b4 b3 b2 b1 b0 DB112.DB84	
DEN		00 [0×00] b7 b6 b5 b4 b3 b2 b1 b0 DB112.DB85	
B112.DBB116 ATASET_DATABYTE_DBxxx_D		32 [0x20] b7 b6 b5 b4 b3 b2 b1 b0 DB112.DBB116	
B112.DBB6 ATASET_DATABYTE_DBxxx_D		00 [0×00] b7 b6 b5 b4 b3 b2 b1 b0 DB112.DB86	
DB112.DBB7 NATASET DATABYTE DBxxx D		00 [0x00] b7 b6 b5 b4 b3 b2 b1 b0 DB112.DBB7	
DENTED	-	04 [0x04] b7 b6 b5 b4 b3 b2 b1 b0 DB112.DBB100	
DB112.DBB101 NATASET DATABYTE DBxxx D		00 [0x00] b7 b6 b5 b4 b3 b2 b1 b0 DB112.DBB101	
DB112.DBB102 NATASET DATABYTE DBxxx D	-	00 [0x00] b7 b6 b5 b4 b3 b2 b1 b0 DB112.DBB102	

SESKION

Leak-Test

Execution

In the first step, the PLC is used to insert the set amount of oil into the component to be tested.



In the second step, the software automatically performs the leak test with the help of the PLC.

Stöber Dichtheitsprüfung Scan-Order number DEBUG-MODE		
Program Tools ?		
STOBER	Control functions	Monteur Dev-Tester
	ок!	
Leak test in progress	·	
		Test-Information (Gear)
357 mk		
Test-Results Start value Test 1: 357 mbar Result Test 1: 000 mbar		
Scan - Order	STOP	

In the third step the result is displayed.







Configuration

All key parameters can be set via the configuration. This configuration is password protected, so that no one can change the parameters except the authorized person.

General	Allgemein	
zvents External I/O Jatabase Fest-Volumes Filling Plugins Jser rights management Framework	Basic settings Name test site Testing-Type Is Active - Gear/Motor Scan Return if test successful Splash screen auto-close activated Constants Constant length - order number Constant length - motor serial number Constant length - gearbox serial number	LT1 Gear False True True 12 18 18 List Control-Functions ScanSingleOrderPart
	Name test site Der Name es Prüfplatzes!	