

**HST WAW-1000E 1000kN Computer Control
Servo Hydraulic Universal Testing Machine (Class 0.5)**



Application:

WAW Series Computer-Controlled Servo-hydraulic Universal Testing Machine is suitable to test various metallic & non-metallic materials for tension, compression, bending and shearing testing.

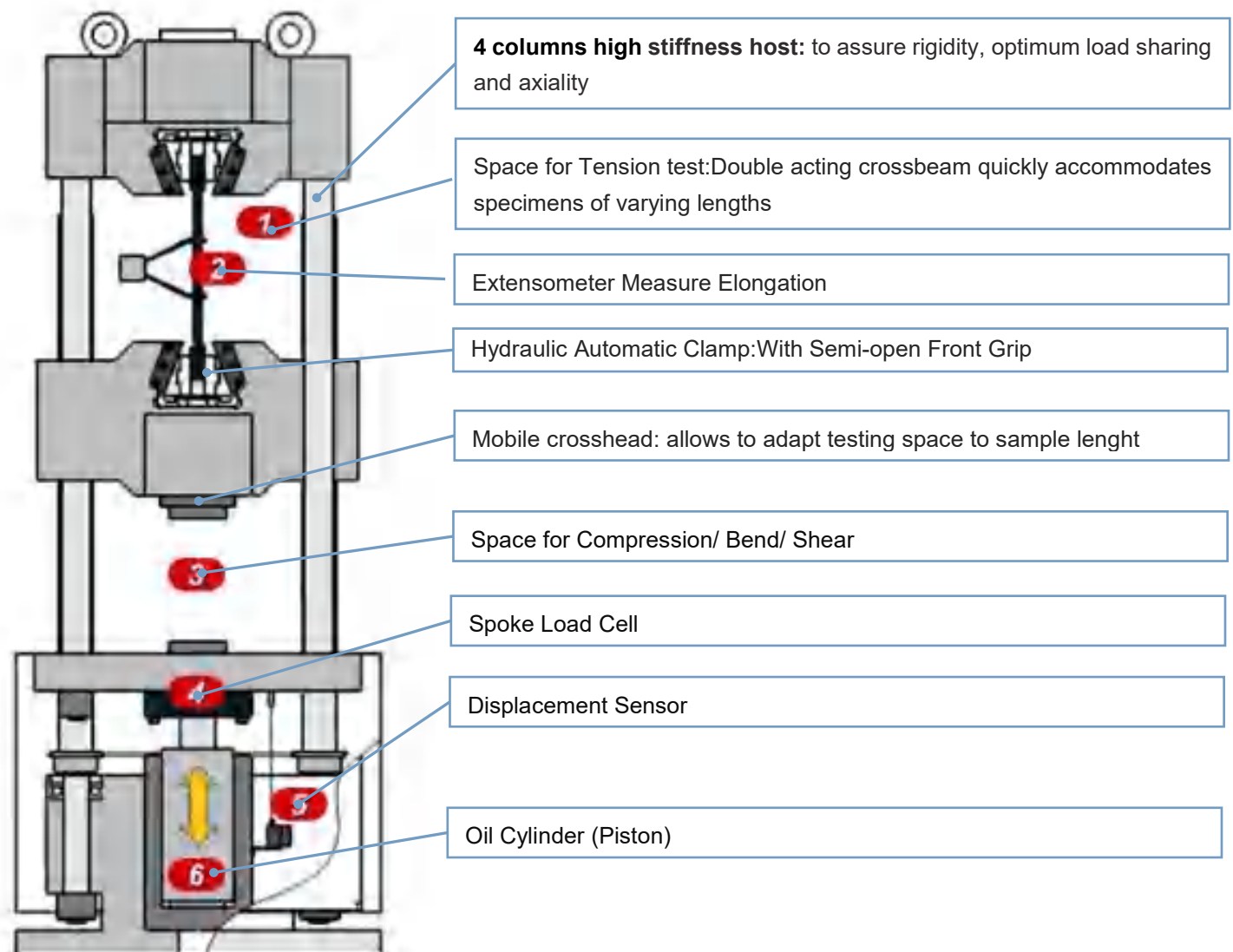
Types of specimens and materials:

1. Metals-(wire, rod, tube, strip, plate, strip) ;
2. Fasteners (tensile, proof, single and double shear) ;
3. Construction materials (reinforcement bar, wire, mesh, folding, compression of concrete and components).,etc.

Applied Standards:

Load meets or exceeds the following standards: ASTM E4, ISO7500-1, EN 10002-2, BS1610, DIN 51221.

Strain measurement meets or exceeds the following standards: ASTM E83, ISO 9513, BS 3846 and EN 10002-4.









Specifications:

Product Model	HST WAW-1000E
Number of columns	6 (4 columns and 2 screws)
Load Capacity	1000kN
Load Capacity	100000kgf
Calibration standard	ISO 7500
Calibration standard	Class 0.5
Testing load Accuracy	±0.5%
Load Measuring Range	1%~100%FS
Load Resolution	1/500,000 of FS
Accuracy of Stress Rate Control	±0.5%
Displacement resolution	0.0025mm
Displacement accuracy	≤±0.5% of Indicating Value
Deformation measuring range	1%~100%FS
Deformation resolution	1/±500000FS of the max deformation
Deformation accuracy	≤±0.5% of Indicating Value
Overload Protection	≥5% of Full Range
Main frame parameters	
Max. Tensile Testing Space	820mm
Max. Compression Testing Space	690mm
Distance between two columns	560mm
Column diameter	Φ72mm
Max. Piston stroke	200mm
Piston diameter	Φ230mm
Testing Speeds	0~125mm/min
Cross beam adjustment for max speed	About 220 mm/min
Cross beam moving motor power	0.4KW
Controls parameter	
Control mode	Force closed loop control, deformation closed loop control, displacement closed loop control
Force control controls the speed range	0.001%~5%FS/s






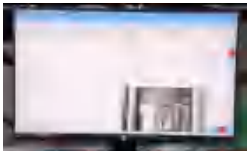



Force control speed control accuracy	When 0.001% ~ 1% FS/s is better than $\leq \pm 0.5\%$; When 1% ~ 5% FS/s better than $\leq \pm 0.2\%$
Force control hold accuracy	$\pm 0.002\% F.S$
Deformation control controls speed range	0.001%~5%FS/s
Deformation control accuracy accuracy	When 0.001% ~ 1% FS/s is better than $\leq \pm 0.5\%$; When 1% ~ 5% FS/s better than $\leq \pm 0.2\%$;
Deformation control hold accuracy	$\leq \pm 0.002\% F.S$
Displacement control speed range	0.1~100mm/min
Displacement control speed accuracy	$\leq \pm 0.2\%$
Displacement control hold accuracy	$\leq \pm 0.02\text{mm}$
Accessory parameters	
Clamping mode	Built-in wedge type hydraulic automatic clamping
Overall dimensions of the jaws	90x90mm
Round specimen clamping range	$\Phi 10-26$, $\Phi 26-45\text{mm}$, Optional: $\Phi 4-10$, $\Phi 45-55\text{mm}$;
Flat specimen clamping thickness	0-30mm, Optional: 30-40mm
Compression plate dimensions	$\Phi 160\text{mm}$
Machine parameter	
Load frame dimension	830x720x2160mm
Oil power dimension	1200x680x750mm
Total weight	2450kg
Power supply	2.75kW, 3 phase, AC380V $\pm 10\%$, 50Hz
Operating Temperature	0 to +38° C (+32 to +100° F)
Humidity Range	10% to 90% non-condensing
NOTE: 1. Extra wide and/or extra height frames are available. 2. Power supply system is completely customizable. 3. Specifications are subject to change without notice.	

Machine Accessories:


NO.	Part Name	Picture	Part Name	Qty.
1. Load frame				
1.1	Universal testing machine host		1000KN, Six columns (4 columns and 2 screws), High intensity testing machine structure and crosshead, high stiffness to assure accuracy;	1set
1.2	Hydraulic automatic Wedge tensile grip		Semi-open front hydraulic wedge clamps for easier loading and allowing rapid loading and unloading of specimens.	1set
			$\Phi 10-26$, $\Phi 26-45\text{mm}$, Optional: $\Phi 4-10$, $\Phi 45-55\text{mm}$;	1set /each
			Flat: $0-30\text{mm}$; Optional: $30-40\text{mm}$ Width of Flat Specimens: $90 \times 90\text{mm}$	
1.3	Compression test attachment		Dimension: $\Phi 160\text{ mm}$	1set
1.4	Bending test attachment		Optional, Bending span: 450mm Roller diameter: $\Phi 30\text{ mm}$ Max width of support roll: 160mm	1set
2. Servo oil power system				

2.1	Servo hydraulic station		Max. Pressure:25MPa Max. Flow:4L/min Oil filter accuracy:10μm Power:2.2KW Oil Tank Capacity:60L	1set
2.2	Oil Pump		ITALY 'MARZOCCHI" pump	1set
2.3	Servo motor and drive system		2.2KW, WNM motor	1set
2.4	Servo valve		Germany-HYTOS servo valve	1set
2.3	Plug valve		The US SUN Valve effectively reduces The probability of oil Leakage in the hydraulic System and improves the Stability of the hydraulic system	1suit
2.5	Hydraulic integrated valve block		10μm, Includes precision oil filter	1set
2.6	Pressure gage		system pressure and clamping pressure	2 set
2.7	Magnetic exchange valve		pressure 31.5Mpa	3 set

3. Measurement and control part

3.1	Load sensor		Class 0.5 Spoke sensor	1set
3.2	Digital displacement sensor		10000 wire , for the best positioning and measuring accuracy.	1set
3.3	Controller		EDCH550, Three closed loop (force, deformation, displacement) control system	1set
3.4	Monitoring system		provides a stable output power. When the power supply is abnormal (missing phase, wrong phase sequence, wrong wiring) the indicator light of the monitoring system will be off.	1set
3.5	Hand-held controller		Can control the rise and fall of moving beams and cylinders, clamping and loosening of jaws	1set
3.6	Measurement and Control Software		Standard English, Can optional English, Russia, Turkish, Spanish, etc	1set
3.7	Computer		HP	1set
3.8	Printer		HP	1set
3.9	Electronic Extensometer		Gauge Length: 50mm; Deformation: 10mm	1set
3.10	Camera (Optional)		can effectively record and play back the entire test experiment process	1set

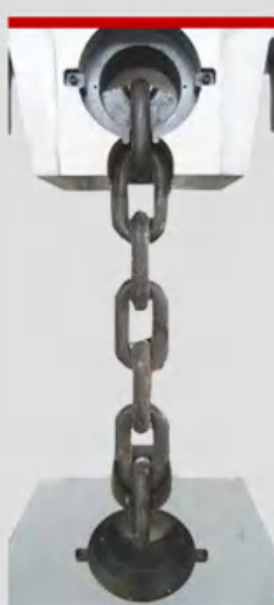
4. Other accessories

4.1	L-shaped anchor bolt		Include the nut	4suit
4.2	Spare sealing element		Compound gasket,OR-GASKET-1SET	1suit

Other tensile grip (optional)



➤Grip of Chain



➤Grip of Chain



➤Grip for Fasteners (Bolt/Stud/Nut)



➤Grip for Welded fabric

Test area for compression /flexural / bending/shear (optional)



Operation Software -Testexpert 9.0

Test process:

Selection a test--Enter the test scheme selection--Input the sample information--Start to test--end of the test

Features:

1. Full digital control

The whole measuring and control system adopts the special controller, which can achieve the digital adjustment of zero point and gain of load, deformation and displacement, and it's easy to operate and possesses the high reliability.

2.Possess the functions of storage, setting and loading for various kinds of parameters, which make it convenient to connect multiple transducers with one load frame.

3.Realize the close-loop control, and show the reference curve during the executive operator adjusting the close-loop parameters, so the user can observe the close-loop effect caused by the parameters.

4.Perfect graphic function to complete the functions of the reappearance, amplification, reduction, self-adaptation, lapping of the curves, display and print the curve at the appointed range, observe the coordinate of the test point.

5.Data processing supports automatic analysis and graphic man-machine mutual processing, which is convenient to check and compare the test results.

Multilevel identity management

Multilevel identity management, different identity has different functions, which not only makes the operation quick by ordinary operator, but also protect the system effectively.

6.Multi controlling channels: Displacement, force control, deformation, control, stress control, strain control, constant stress, constant strain etc.

7.Test standard: provide users with the necessary applications to the test, covering GB, ASTM, DIN, JIS, BS ... and other testing standard specification.

Multi measurement units

Load can be displayed in kN, lbf or kgf as selected by the operator.

8.Record video:

optional DV Customers can

add cameras, the software has a recording function: can effectively record and play back the entire test experiment process

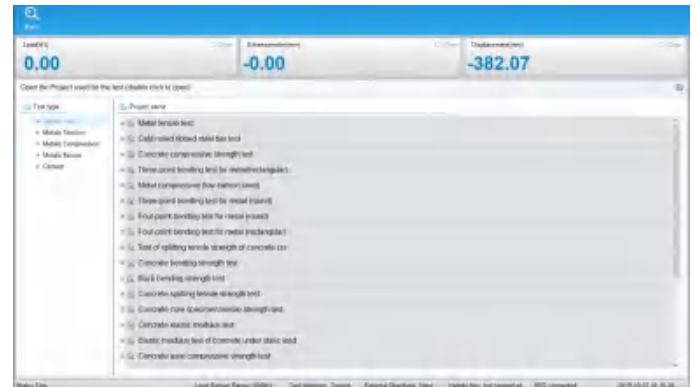


Fig.1 Test Selection Interface

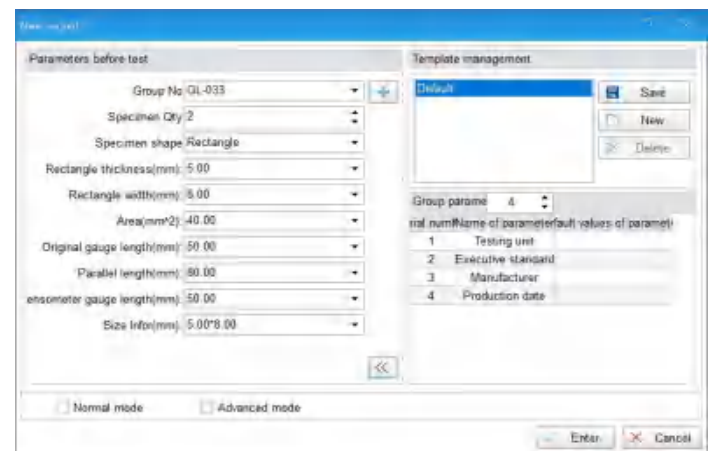


Fig 2. Input the sample information

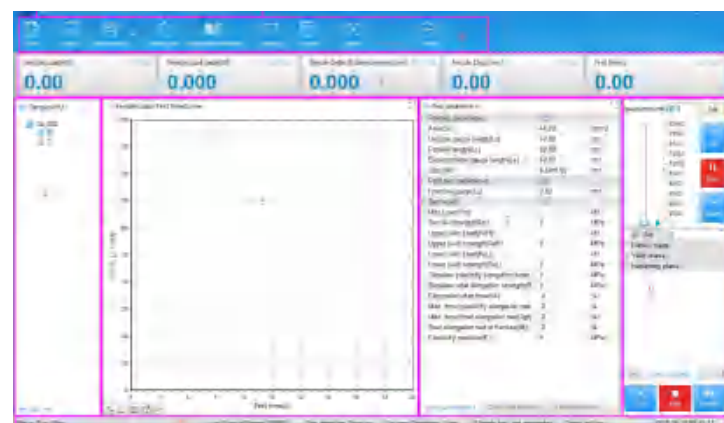


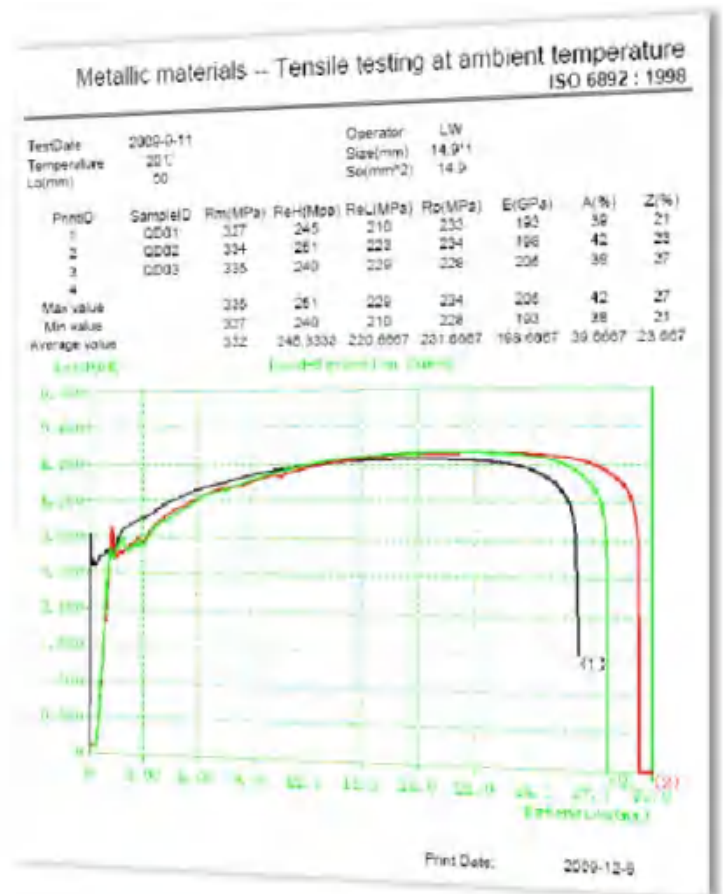
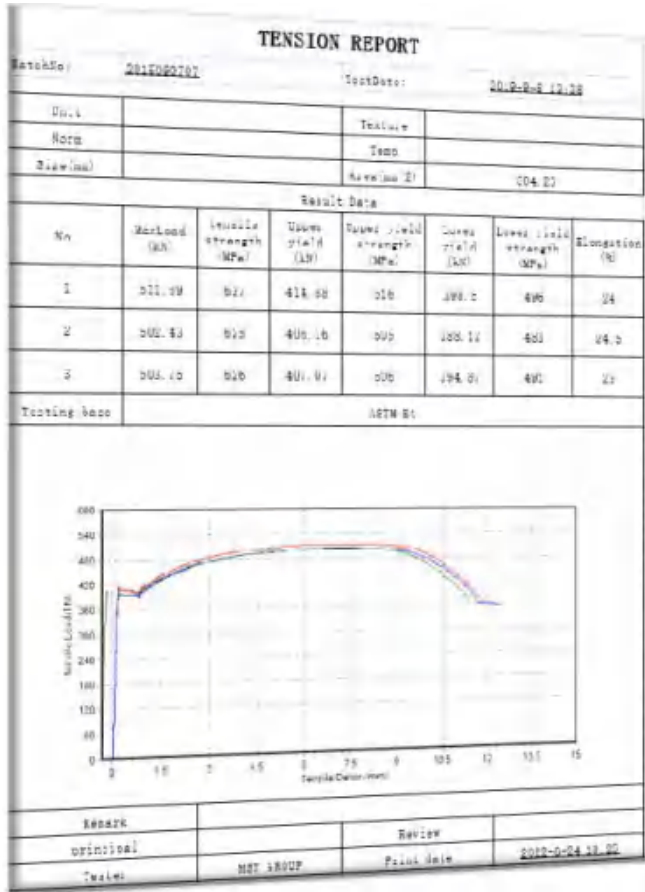
Fig 3. Start to test



Fig 4. Record video

Test Report

Output and print report: Excel, word, template test report, can be edited customize To show test information, including test person, test standard, test curve, test max load etccan add your company LOGO and company name,easy to edit.



Why Choose -Fast delivery time-within 7 days

Global Reach, Delivered Locally

With six international offices, a network of over 100 distributors, and a dedicated team of highly experienced product specialists, support is always close at hand. We have the global reach to give you access to the relevant technical expertise, pre-and post-sales technical support and training to ensure you get maximum lifetime value from your investment, wherever you are in the world.

(Mexico) Industria Ltd
SIMIL CUERO PLYMOUTH SA DE CV
Dirceu Gomes
Núcleo Empresarial Huechuraba
Facultad de Ciencias Químicas (FCQ)
Casagrande Motori Ltda
Engº Douglas Kœch Branco
Fulcrum SP Materials Ltd.
A K UNICARGO INTERNATIONAL

African Industries Group
RTC TEC Couplings Technology
Hayat Communications
Team General Trading LLC
Ahmed alsarraj sons company
TARKHIS KARANE NOANDISH
RID DOOEL SKOPJE
Estonia Logistics Ltd.
ООО Дека-С

Quality Standards & Accreditation

ISO:9001 and CE accredited and an active member of all the main international standard organizations, including GB, ISO, EN, ASTM, AASHTO and AWRG, we are also involved in steering future Standards' development so they are written with practical operation and application in mind for the benefit of the end-users.



Customer use site




OUR factory



OUR Certificate



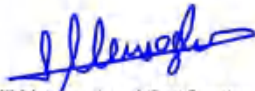


MACHINERY DIRECTIVE ATTESTATION OF CONFORMITY

Technical file of the company mentioned below has been inspected and audit has been completed successfully.

2006/42/EC Machinery Directive Annex VIII has been taken as references for these processes.

Company Name	: JINAN HENSGRAND INSTRUMENT CO., LTD.
Company Address	: NO.4915, WEST JINGSHI ROAD, JINAN, CHINA
Related Directives and Annex	: 2006/42/EC Machinery Directive/Annex VIII
Related Standards	: EN ISO 12100:2010, EN 60204-1:2018
Product Name	: TESTING MACHINE
Report No and Date	: TCF-JHIC230128-MD
Product Brand/Model/Type	: WDS-1, WDS-2, WDS-3, WDS-5, WDS-10, WDS-20, WDS-30, WDS-50, WDS-100, WDS-200, WDS-300, WDS-500, WDW-1, WDW-2, WDW-3, WDW-5, WDW-10, WDW-20, WDW-30, WDW-50, WDW-100, WDW-200, WDW-300, WDW-500, WDW-600, WDW-1000, WE-300, WE-600, WE-1000, WE-2000, WEW-300, WEW-600, WEW-1000, WEW-2000, WAW-300, WAW-600, WAW-1000, WAW-2000, WAW-3000, WAW-5000, WAW-6000, LAW-1000, JB-300B, JBS-300, JBW-300, JB-500B, JBS-500, JBW-500, JBW-750, CST-50, VU-2Y, VU-1S, DWC-40, DWC-60, DWC-80, DWC-100, DWC-196, YES-2000, YES-300, YAW-1000, YAW-300, YAW-2000, YAW-3000, YAW-5000, NDS-200, NDS-500, NDS-1000, NDS-2000, NDW-200, NDW-500, NDW-1000, NDW-2000, NDW-3000, NDW-5000, NDW-10000, HEZ-3, HEZ-6, HEZ-10, JWJ-10, TLS, TLW, HST-P50, HST-P100, HST-P200, HST-P300, RDJ, NDT, DWTT, GBW-60, GW-50, HST, XNR-400

Certificate Number	: M.2023.206.C81366	 UDEM International Certification Auditing Training Centre Industry and Trade Inc. Co.
Initial Assessment Date	: 31.01.2023	
Registration Date	: 01.02.2023	
Reissue Date/No	: -	
Expiry Date	: 31.01.2028	

The validity of the certificate can be checked through www.udem.com.tr. Upon compliance of EC declaration of conformity it is used solely at the manufacturer's responsibility. The certificate remains the property of UDEM International Certification Auditing Training Centre Industry and Trade Inc. Co. to whom a note for unusual upon request. The client named they must keep a copy of the certificate for 15 years from the registration of certificate. But certificate only covers the product(s) stated above and UDEM must be notified in case of any changes on the product(s).

Address: Mutlukent Mahallesi 2073 Sokak (Eski 93 Sokak) No:10 Çankaya - Ankara - TÜRKİYE
Phone: +90 0312 443 03 90 **Fax:** +90 0312 443 03 76
E-mail: info@udem.com.tr - www.udem.com.tr

