وزارة التخطيط
الهيأة العراقية للاعتماد
IQAS

شـــهـادة اعتـــمـاد

رقم TL 017

يقر نظام الاعتماد العراقي بأن:

مختبر سبارك للفحوصات الهندسية

العراق – البصرة – الخليلية - مقابل مركز ابتسامه البصرة

تم اعتماده وفقا لمتطلبات المواصفة ISO/ IEC 17025:2017
(المتطلبات العامة لاهلية مختبرات الفحص والمعايرة)

في مجال:

- اختبارات المواد الانشائية - اختبارات المواد المعدنية
- اختبارات المواد الكيميائية - اختبارات المواد البلاستيكية
- اختبارات المواد المطاطية
- اختبارات الاجهزة والمعدات الكهربائية والالكترونية

شرط التوافق مع متطلبات المواصفة اعلاه ومتطلبات IQAS الخاصة بالاعتماد
مجال الاعتماد المرفق بالشهادة يعتبر جزءا لايتجزء منها

يمكن الحصول على الاصدار الاحدث من مجال الاعتماد من خلال الموقع الالكتروني
https://iqas.mop.gov.iq

يكون الاعتماد نافذا من ٢٠٢٦/٢/٢٣ الى ٢٠٢٨/٢/٢٢
تاريخ منح الاعتماد لاول مرة
٢٠١٧/١١/٢٩

أ.د. خالد بتال النجم
وزير التخطيط/ وكالة

محمد أيدن عمر
مدير عام الهيأة/ وكالة

Ministry of planning
Iraqi Organization for Accreditation
IQAS

ACCREDITATION CERTIFICATE

No. TL 017

Iraqi Accreditation System Certify that:

Spark Laboratory for Engineering Testing

Iraq – Basra- Al-Khaliliya- opposite of Basra smile center

Is accredited according to the requirements of the standard ISO/IEC 17025:2017
(General Requirements for the Competence of Testing and Calibration Laboratories)

In the field of:

- Construction Materials Testing - Metallurgical Materials Testing
- Chemical Materials Testing - Polymers Materials Testing
- Rubber Materials Testing - Electrical & Electronic Devices Testing

This accreditation is subject to with the above standard & IQAS requirements
The scope of accreditation is attached to the certificate & considered as part of it

The most recent issue of the accreditation scope is available on IQAS website
https://iqas.mop.gov.iq

Accreditation is valid From 23/2/2026 To 22/2/2028
Initial accreditation date
29/11/2017

Mohammed Ayden Omar
Director General of IQAS

Prof. Dr. Khalid Battal Al-Najim
Minister of Planning

	استمارة مجال الاعتماد Scope of Accreditation form	نظام الاعتماد العراقي IQAS
Organization address: **Iraq – Basra- Al-Khaliliya- opposite of Basra smile center**	**Organization name:** **Spark Laboratory for Engineering Testing**	**Accreditation no.:** **TL 017**
Signature: **Abdul Wahid M. Ibrahim** **Deputy General Manager**	**Accreditation is valid:** **From 23/2/2026 To 22/2/2028**	**Issue no.:** **008**

Testing field	Type of test	Test object or product	Reference to standardized method
Physical	Consolidation Test	Soil test	ASTM D 2435-11
Physical	Direct Shear Test	Soil test	ASTM DASTM D080-11
Mechanical	Determination of compressive strength	Concrete cube	Iraq Guide No. 348-2017
Mechanical	Determination of compressive strength	Concrete	BS EN 12390-3:2009
Mechanical	Determination of density	Concrete	Iraq Guide No.274-1992
Physical	Determination of density	Concrete	BS EN 12390-7:2009
Mechanical	Determination of compressive strength	Clay building brick	IQS 24/1988
Physical	Determination of sieve analysis	Coarse aggregate (gravel)	ASTM 33/03
Physical	Gravel of finer than 0.075mm	Coarse aggregate (gravel)	ASTM 33/03
Physical	Determination of grading sieve	Fine aggregate (sand)	ASTM 33/03
Physical	Gravel of finer than 0.075mm	Fine aggregate (sand)	ASTM 33/03
Physical	Determination of setting time	Cement	ASTM C191
Physical	Determination of type and shape	Concrete masonry units	ASTM C140
Physical	Determination of concrete masonry dimensions	Concrete masonry units	ASTM C140
Physical	Determination of water absorption	Concrete masonry units	ASTM C140
Physical	Bulk specific gravity	Asphalt	ASTM D2726/M
Physical	Marshal stability and flow of asphalt mixture	Soil	ASTM D6927-15
Physical	Lab. Compaction using Modify effort (2,700 KN m/m^3)	Concrete masonry units	ASTM D1557-12
Physical	Density in place by the drive- cylinder method	Soil Sub base	ASTM D2937-17
Physical	Density and unit weight of soil in	Soil	ASTM D1556-15

	place **By sand cone**	**Sub base**	
Physical	**Determination of SO_3 Content**	**Coarse aggregate (gravel)**	**Iraq Guide 500/2011**
Physical	**Determination of SO_3 Content**	**Fine aggregate (sand)**	**Iraq Guide 500/2011**
Mechanical	**Determination of tensile strength**	**Reinforcing steel bar**	**ASTM A370:2021** **ASTM A615:2020**
Mechanical	**Determination of yield strength**	**Reinforcing steel bar**	**ASTM A370:2021** **ASTM A615:2020**
Mechanical	**Determination of elongation**	**Reinforcing steel bar**	**ASTM A370:2021** **ASTM A615:2020**
Non-Destruction Tests (NDT)	**UT**	**Welding**	**ASMI V. Article 4 & 5**
Non-Destruction Tests (NDT)	**PT**	**Welding**	**ASMI V. Article 6**
Physical	**Standard specification for performance-graded asphalt binder**	**Polymerized bitumen Asphalt**	**ASTM D6373**
Physical	**Determination of the melt mass-flow rate (MFR) and melt volume of low rate (MVR) of thermoplastics**	**Plastic**	**ISO 1133-1**
Physical	**Standard test method for melt flow rates of thermoplastics by extrusion plastometer**	**Plastic**	**ASTM D1238**
Electrical	**Electrical conductivity**	**Cable**	**EC 60502-1**
Mechanical	**DSR**	**Polymerized Bitumen**	**ASTM D6373**
Mechanical	**PAUT**	**Welding defects**	**ASME B31.1** **ASME B31.3** **ASME BPVC**

Mechanical	**VT**	**Welding defects**	**ASME B31.1** **ASME B31.3** **ASME BPVC**
Non-Destructive	**MT**	**Piping pipeline structures**	**ASME B31.1** **API 1104** **AWS D1.1**
Non-Destructive	**RT**	**Piping pipeline structures**	**ASME B31.1** **API 1104** **AWS D1.1**
Physical	**Hardness test**	**Pipe**	**ASTM D2240,** **ASTM D785**
Chemical	**Chloride Content of hardened concrete (Cl)**	**Concrete cube**	**BS. 1881-124:2015**
Chemical	**Sulphate Content of hardened concrete (SO_3)**	**Concrete cube**	**BS. 1881-124:2015**
Physical	**Sieve analysis for hot mix asphalt**	**Asphalt**	**ASTM D 5444:2015**
Physical	**Surface regularity of pavement**	**Asphalt**	**SORB R9**
Physical	**Standard Test Mothed for Determining the Flexural Creep Stiffness Using the Bending Beam Rheometer**	**Asphalt binder**	**ASTM D6648** **SORB-R9**
Physical	**Standard Test Mothed for Determining the Rheological Properties Using a Dynamic**	**Asphalt binder**	**AASHTO TP5**
Physical	**Determining of water (Moisture) content by microwave oven heating**	**Aggregate**	**ASTM D4643-17**
Physical	**Determining specific gravity and water absorption rate of cross aggregate and fine aggregate**	**Aggregate**	**IQS: 31/1981** **ASTM C128** **ASTM C127**
Physical	**Standard test mothed for resistance to degradation of small-size coarse aggregate by abrasion and impact in the Los Angeles Machine**	**Aggregate**	**ASTM C131**

Chemical	**Determining of SO_3 content**	**Aggregate**	**BSEN 1744-1:2009+ A1:2012** **BS EN 1377-3**
Chemical	**Determining of Cl content**	**Aggregate**	**BSEN 1744-1:2009+ A1:2012** **BS EN 1377-3**
Physical	**Soil investigation** **Thin- walled tube sampling of soil for geotechnical purposes**	**Soil**	**ASTM D1587:2012**
Physical	**Soil investigation** **Determining sub surface liquid level in a borehole or monitoring**	**Soil**	**ASTM D4750**
Physical	**Soil investigation** **Wet preparation of soil samples for particle size analysis and determination of soil constants**	**Soil**	**ASTM D2217**
Physical	**Soil investigation** **Soil exploration and sampling by auger boring**	**Soil**	**ASTM D1452**
Physical	**Soil investigation** **Sieve analysis**	**Soil**	**ASTM C136, C117**
Physical	**Soil investigation density of site**	**Soil**	**ASTM D1556, D2937**
Mechanical	**Soil investigation** **Standard penetration test (SPT) and spilt –barrel sampling**	**Soil**	**ASTM D1586**
Physical	**Liquid limit, plastic limit and plasticity index**	**Soil**	**ASTM D4318**
Physical	**Cone penetration test**	**Soil**	**ASTM D 5778**
Physical	**Soil resistivity test**	**Soil**	**ASTM G57**
Physical	**Plate load test**	**Soil**	**ASTM D1195**
Physical	**Standard Test for mechanical cone penetration test of soil**	**Soil**	**ASTM D3441**
Mechanical	**Standard test method for California bearing ration**	**Soil**	**ASTM D1883** **ASTM D4429**

Physical	**Standard test method for maximum index density and unit weight using a vibratory table**	**Soil**	**ASTM D4253 ASTM D4254**
Physical	**Standard test method for repetitive static plate**	**Soil**	**ASTM D1195 ASTM D1196**
Mechanical	**Determination of external loading characteristics**	**GRP pipe**	**ASTM D2412**
Physical	**Determination of wall thickness**	**GRP pipe**	**ASTM D3517 ASTM D3567**
Physical	**Determination of diameter**	**GRP pipe**	**ASTM D3517 ASTM D3567**
Physical	**Determination of Absorption**	**Clay brick**	**IQS: 24, IQS: 25**
Physical	**Determination of Dimension**	**Clay brick**	**IQS: 24, IQS: 25**
Physical	**Determination of efflorescence**	**Clay brick**	**IQS: 24, IQS: 25**
Physical	**Determination of modulus of rupture**	**Concrete tile**	**IQS: 1043:1987 IQS: 1107:1988**
Physical	**Determination of absorption**	**Concrete tile**	**IQS: 1043:1987 IQS: 1107:1988**
Mechanical	**Determination of modulus of rupture**	**Concrete flags**	**IQS: 1107:1988**
Physical	**Determination of absorption**	**Concrete flags**	**IQS: 1107:1988**
Physical	**Determination of Penetration**	**Bituminous**	**ASTM D5:2013**
Physical	**Determination of Ductility**	**Bituminous**	**ASTM D113:2007**
Physical	**Determination of Softening**	**Bituminous**	**ASTM D36:2014, AASHTO T53**
Physical	**Say bolt Viscosity**	**Bituminous**	**ASTM D88**
Physical	**Determination of flash point**	**Bituminous**	**IQS: 134/ 1987, AASSHTO T48**
Physical	**Determination of loss in heating**	**Bituminous**	**ASTM D1754**
Physical	**Sampling compacted bituminous mixtures**	**Bituminous mixtures**	**ASTM D5361, SORB/R9**
Physical	**Density**	**Bituminous felt (water proof)**	**IQS: 4/1988, SORB/R9**
Physical	**Fire fighting**	**Bituminous felt (water**	**IQS: 4/1988, SORB/R9**

		proof)	
Physical	Heating loss	Bituminous felt (water proof)	IQS: 4/1988, SORB/R9
Mechanical	Determination of Compressive strength	Cement	Iraqi guide: 198: 1990 ASTM C150
Physical	Determination of Consistency	Cement	Iraqi guide: 198: 1990
Chemical	Determination of Sulphate	Concrete	IQS 448:1994
Chemical	Measurement of Solids Content	Mixing water in ready mixed concrete	ASTM C1603:2016
Chemical	Determination of pH	Mixing water in ready mixed concrete	ASTM C1603:2016, ISO 4316
Mechanical	Determination of compressive strength	Inter locking paver block	IQS: 1606/2006
Physical	Determination of Absorption	Inter locking paver block	IQS: 1606/2006
Physical	Determination of Dimensions	Inter locking paver block	IQS: 1606/2006
Physical	Determination of Abrasion	Inter locking paver block	IQS: 1606/2006
Physical	Standard test method for compressive strength of cylindrical concrete specimens	Concrete cylinder	ASTM C39
Mechanical	Determination of compressive strength	Block	ASTM C140/ C140M-15
Mechanical	Determination of modulus of rupture	Curbstone	IQS: 1106/1987
Physical	Determination of Absorption	Curbstone	IQS: 1106/1987
Mechanical	Determination of modulus of rupture	Thermstone	IQS: 1441/2000
Physical	Determination of Absorption	Thermstone	IQS: 1441/2000
Mechanical	Ultrasonic test compressive strength	Concrete	ASTM C597
Mechanical	Schmidt hammer test compressive strength	Concrete	ASTM C805
Physical	Concrete core compressive strength	Concrete	ASTM C42

	استمارة مجال الاعتماد Scope of Accreditation form	نظام الاعتماد العراقي IQAS
Organization address: **Iraq – Basra- Al-Khaliliya- opposite of Basra smile center**	**Organization name:** **Spark Laboratory for Engineering Testing**	**Accreditation no.:** **TL 017**
Signature: **Abdul Wahid M. Ibrahim** **Deputy General Manager**	**Accreditation is valid:** **From 23/2/2026 To 22/2/2028**	**Issue no.:** **008**

Physical	**Standard test method for slump of hydraulic –cement Concrete**	**Concrete**	**ASTM C143**
Physical	**Standard test method for deep foundation element under static axial compressive load**	**Pile**	**ASTM D1143**
Physical	**Standard test method for deep foundation element under static axial tensile load**	**Pile**	**ASTM D3689**
Mechanical	**Standard test method for High-strain Dynamic testing of deep foundation**	**Pile**	**ASTM D4945**
Mechanical	**Standard test method for low-strain impact integrity testing of deep foundation**	**Pile**	**ASTM D5882**
Mechanical	**Standard test method for deep foundation element under static lateral load**	**Pile**	**ASTM D3966**
Mechanical	**Galvanized**	**Steel reinforcing bars**	**ASTM A123**
Chemical	**Standard test method and practices for chemical analysis of steel products**	**Steel reinforcing bars**	**ASTM A751: 2021**
Mechanical	**Determination of ultimate tensile strength**	**Plate**	**ASTM a36, A123**
Mechanical	**Determination of elongation**	**Plate**	**ASTM a36, A123**
Chemical	**Standard test method and Practices for Chemical Analysis of steel products**	**Plate**	**ASTM a36, A123**
Mechanical	**Determination of ultimate tensile strength**	**Anchor bolt**	**ASTM F1554-04**
Mechanical	**Determination of elongation**	**Anchor bolt**	**ASTM F1554-04**
Non-Destructive	**Magnetic particle test**	**Piping pipeline structures**	**ASME B31.1 API 1104 AWS D1.1**
Non-Destructive	**Radiographic test**	**Piping pipeline structures**	**ASME B31.1 API 1104 AWS D1.1**
Physical	**Hardness test**	**Pipe**	**ASTM D2240, ASTM**

			D785
Mechanical	**Determination of external loading characteristics**	**Plastic pipe**	**ASTM D2412**
Physical	**Determination of wall thickness**	**Plastic pipe and fitting**	**ASTM D2412** **ASTM D2122**
Physical	**Determination of diameter**	**Plastic pipe and fitting**	**ASTM D2412** **ASTM D2122**
Chemical	**Standard Practices for Identification of Crystalline Compounds in Water – Formed Deposits by X-Ray Diffraction**	**Epoxy**	**ASTM D934**
Physical	**Test of expansion joint**	**Bridge expansion joint**	**ASTM D4014**
Mechanical	**Test of rubber bade**	**Bridge rubber bade**	**ASTM D4014, ASTM D412,** **ASTM D395, ASTM D2240,** **ASTM D1149**
Physical	**Determination of Dimensions**	**Tubular Steel Poles (ST-52)**	**Ministry of Electricity / Technical Specification D22-2019 &** **DIN-17100**
Physical	**Determination of Dimensions**	**Lattice Steel Poles (ST-52)**	**Ministry of Electricity / Technical Specification D46-2012 &** **DIN-17100**
Electrical	**Determination of Diameter of Conductor**	**Electrical Cable Test with Cross Sectional Area (0.5-630) mm² & Electrical Resistance (0.0238-36) Ω/km**	**IEC 60502-1:2004** **IEC 60502-2:2005** **Ministry of Electricity / Technical Specification D03:13 & D04:13**
	Determination of cross-Sectional Area		
	Determination of Insulator thickness		
	Determination of Number of Cores		
	Determination of Stranding		
	Determination of Copper Screen area		

	استمارة مجال الاعتماد Scope of Accreditation form	نظام الاعتماد العراقي IQAS
Organization address: **Iraq – Basra- Al-Khaliliya- opposite of Basra smile center**	**Organization name:** **Spark Laboratory for Engineering Testing**	**Accreditation no.:** **TL 017**
Signature: **Abdul Wahid M. Ibrahim** **Deputy General Manager**	**Accreditation is valid:** **From 23/2/2026 To 22/2/2028**	**Issue no.:** **008**

	Determination of Sheath Thickness		
	Determination of Filler type		
	Determination of Armour type		
	Determination of Armour Thickness		
	Determination of Color of Outer Sheath		
	Determination of Water prove		
	Determination of electrical resistance		
Electrical	**Determination of diameter of one wire**	**Wire**	**IEC 60228:2004** **MOE(D47:17)**
	Determination of cross- sectional area		
	Determination of stranding		
	Determination of electrical resistance		
Mechanical & physical	**Hydrostatic test**	**HDPE Pipe**	**ISO 1167-1,2**
	Determination of wall thickness		
	Determination of diameter		
Asphalt testing	**PAV**	**Polymerized Bitumen**	**ASTM D2872**
	VDO		**ASTM D2041** **ASTM D2726**
	BBR		**ASTM D6648**
Chemical	**Determination of Sulphate**	**Water**	**BS EN 1008**
	Determination of Chloride		
	Determination of TDS		
Electrical	**Lighting System Installation**	**Electrical Instilation**	**IEC 60598-1** **IEC LM-79**
	Straight Through Junction	**Electrical Instilation**	**IEC 60670**
	Miniature Circuit Breaker (MCB)	**Electrical Instilation**	**IEC 60898** **IEC 60947**
	Low Voltage Distribution Pillar No.1	**Electrical Instilation**	**IEC 60439-1**
	Routine Test	**Transformers**	**IEC 60076** **IEC 61558** **IEC 60204**
Physical	**Determination of diameter**	**Concrete Pipe**	**IQ No. 1432/1989**