

제349호(1/11)

국제공인시험기관인증서

기 관 명 : 한국건설생활환경시험연구원 - 부산 · 울산 · 경남지원

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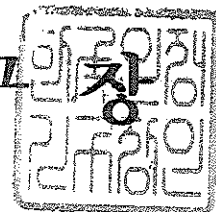
유효 기 간 : 2012년 7월 12일 ~ 2016년 7월 11일

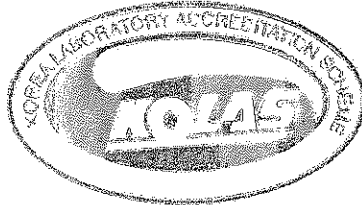
인정분야 및 범위 : 별첨

상기 시험기관을 KS Q ISO/IEC 17025 : 2006 인정요건 및 국가표준기본법 제23조의 규정에 의거하여 국제공인시험기관으로 인정합니다. 또한 ISO-ILAC-IAF 공동성명(2009.1.8)에 언급된 바와 같이 인정된 분야 및 범위에 대한 기술적 능력과 시험기관 품질경영시스템이 적절함을 인정합니다.

2012년 07월 12일

한 국 인 정 기 구



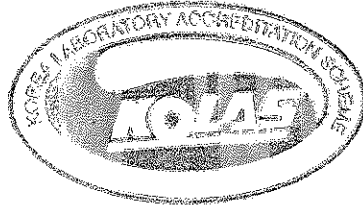


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1. 역학시험

1.001 금속 및 관련제품

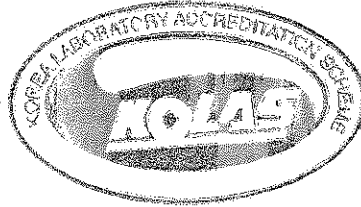
규격번호	규격명		시험범위 또는 검출한계
KS B 0802 : 2003	금속재료 인장시험방법		MAX 1 600 kN
KS B 0804 : 2001	금속 재료 굽힘시험	4.1 받침과 심봉으로 구성된 굽힘장치	육안
KS B 0806 : 2000	로크웰 경도 시험방법		HRC
			HRB
KS B 0810 : 2003	금속 재료 충격시험방법		MAX 235 J (상온 ~ -50℃)
KS D 0249 : 2003	철근 콘크리트용 봉강의 기계식 이음의 검사방법	6.1 겉모양	육안
		6.2 일방향 인장시험	MAX 1 600 kN
		6.4 저사이클 피로시험	MAX 800 kN
		6.6 고사이클 피로시험	MAX 200 kN
KS D 3503 : 2008	일반구조용 압연강재	6. 모양·치수 및 무게	MAX 600 mm, MAX 60 kg
		7. 겉모양	육안
		8.2 기계시험	MAX 1 600 kN
KS D 3504 : 2011	철근 콘크리트용 봉강	7. 겉모양	육안
		9.2.3 인장시험 및 굽힘시험방법	MAX 1 600 kN
		9.3 모양·치수 및 무게측정	MAX 600 mm, MAX 60 kg
KS D 3506 : 2007	용융 아연도금 강판 및 강대	12. 치수	MAX 5 000 mm, MAX 600 mm
		15. 겉모양	육안
		16.2 굽힘시험	육안
		16.3 인장시험	MAX 800 kN
KS D 3507 : 2008	배관용 탄소강관	8. 치수, 무게	MAX 5 000 mm, MAX 60 kg, MAX 600 mm
		9. 겉모양	육안
		11.3 인장시험	MAX 800 kN
		11.4 편평시험	육안



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1.001 금속 및 관련제품

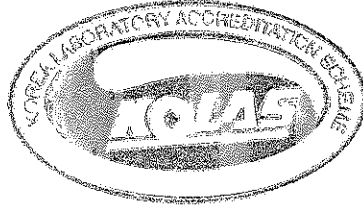
규격번호	규격명		시험범위 또는 검출한계
KS D 3515 : 2008	용접 구조용 압연강재	7. 모양, 치수, 무게	MAX 5 000 mm, MAX 60 kg
		8. 결모양	육안
		10.2 기계시험	MAX 1 600 kN
KS D 3517 : 2008	기계 구조용 탄소강관	7. 결모양	육안
		8. 치수	MAX 5 000 mm, MAX 600 mm
		9.2 인장시험	MAX 800 kN
		9.3 편평시험	육안
KS D 3536 : 2008	기계구조용 스테인리스강 강관	7. 치수	MAX 5 000 mm, MAX 600 mm
		8. 결모양	육안
		9.2 인장시험	MAX 800 kN
		9.3 편평시험	육안
KS D 3552 : 2008	철선	6. 모양, 치수, 무게	MAX 300 mm, MAX 2200 g
		7. 표면상태	육안
		8. 결모양	육안
		11.2 인장시험	MAX 800 kN
		11.3 굽힘시험	육안
KS D 3562 : 2009	압력배관용 탄소강관	7. 결모양	육안
		8. 치수	MAX 600 mm
		9.2 인장시험	MAX 800 kN
		9.3 편평시험	육안



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1.001 금속 및 관련제품

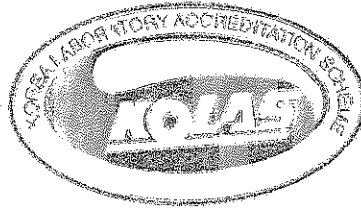
규격번호	규격명		시험범위 또는 검출한계
KS D 3566 : 2012	일반 구조용 탄소 강판	7.1 치수 및 무게	MAX 5 000 mm, MAX 600 mm
		8. 결모양	육안
		9.2 인장시험	MAX 800 kN
		9.3 굽힘시험	육안
		9.4 편평시험	육안
KS D 3609 : 2007	건축용 강재 받침재 (벽, 천정)	7. 부재의 모양, 치수	MAX 5 000 mm, MAX 300 mm
KS D 6008 : 2002	알루미늄 합금 주물	7.2 인장시험	MAX 800 kN
KS D 6759 : 2011	알루미늄 및 알루미늄 합금 압출형재	7.2 인장시험	MAX 800 kN
		7.3 굽힘시험	육안
KS D 7011 : 2002	아연 도금 철선	8. 결모양	육안
		11.2 인장시험	MAX 800 kN
		11.6 선지름	MAX 300 mm
KS D 3505 : 2002	PC강봉	7. 결모양	육안
		9.2.2 인장시험	MAX 800 kN
		9.2.3 치수	MAX 300 mm
KS D 7017 : 2007	용접 철망 및 철근 격자	9. 용접점의 박리	육안
		8. 치수, 무게	MAX 5 000 mm, MAX 300 mm, MAX 2 200 g
		10. 결모양	육안
		11.2 a) 인장시험	MAX 4 000 N
		11.2 b) 연신율	MAX 300 mm
		11.2 c) 굽힘시험	육안
		11.2 d) 용접점 전단강도	MAX 4 000 N



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1.001 금속 및 관련제품

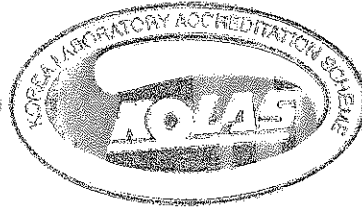
규격번호	규격명		시험범위 또는 검출한계
KS D 7018 : 2002	체인 링크 철망	5. 모양, 치수	MAX 5 000 mm, MAX 300 mm
		8. 겉모양	육안
KS D 7036 : 1996	염화비닐 피복 철선	6.1 피복선 지름, 심선지름	MAX 300 mm
		7. 겉모양	육안
		10.2 인장시험	MAX 4 000 N
		10.5 최소피막 두께	MAX 300 mm
KS F 4601 : 2001	돌망태	6. 치수	MAX 5 000 mm, MAX 1 000 mm, MAX 300 mm
		10. 겉모양	육안
KS F 4604 : 2002	열간 압연 강 널말뚝	8.2 기계시험	MAX 1 600 kN
		7. 겉모양	육안
KS B 0821 : 2007	용착금속의 인장 및 충격시험	6. 인장강도	MAX 800 kN
		6. 항복강도(항복점)	MAX 235 J
		6. 연신율	MAX 300 mm
JIS Z 2241 : 2011	Method of tensile test for metallic materials	10.3.2.6. Tensile strength	MAX 800 kN
		11. Upper yield strength	MAX 800 kN
		12. Lower yield strength	MAX 800 kN
		13. Yield strength (offset method)	MAX 800 kN
		19. Percentage total extension at fracture	MAX 300 mm
		21. Reduction of area	MAX 300 mm
JIS Z 2242 : 2005	Method of Charpy pendulum impact test of metallic materials		MAX 235 J



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1.001 금속 및 관련제품

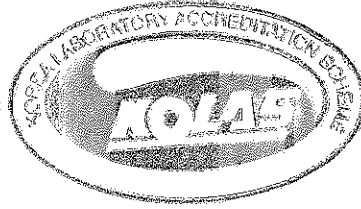
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JIS Z 2245 : 2011	Rockwell hardness test - test method		HRC, HRB
ASTM E8/E8M : 09	Standard Test Method for Tension Testing of Metallic Materials	7.10 Tensile strength	MAX 1 600 kN
		7.7, 7.8 Yield strength (Yield point)	MAX 1 600 kN
		7.11 Elongation	MAX 300 mm
		7.12 Reduction of area	MAX 300 mm
ASTM E 18 : 08b	Standard Test Method for rockwell hardness of metallic materials		HRC, HRB
ASTM E 23 : 07ael	Standard Test Method for notched bar impact testing of metallic materials 9.1 Charpy impact test(Charpy impact absorbed energy)		MAX 235 J
AWS D1.1/D1.1M : 2010	Structural welding code	4.9.3 Mechanical Testing (Bend tests, tension test)	MAX 800 kN
ASTM A 370 : 11	Standard Test Methods and definitions for mechanical testing of steel products	Tesion Test	MAX 800 kN
		Bend Test	MAX 800 kN
		Rockwell Test	HRB, HRC
		Coarpy Impact Testing	MAX 235 J



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1.003 시멘트 및 관련제품

규격번호	규격명		시험범위 또는 검출한계
KS F 2563 : 2009	콘크리트용 고로 슬래그 미분말	8.2 밀도	(2.01~3.51) g/cm ³
		8.3 비표면적	(2 000~7 000) g/cm ²
		8.4 활성도지수 및 플로값비	MAX 150 kN, (100~250) mm
KS L 5105 : 2007	수경성 시멘트 모르타르의 압축강도 시험방법		MAX 150 kN
KS L 5106 : 2009	공기 투과 장치에 의한 포틀랜드 시멘트의 분말도 시험방법		(2 000~7 000) g/cm ²
KS L 5110 : 2001	시멘트의 비중 시험 방법		(2.01~3.51) g/cm ³
KS L 5201 : 2006	포틀랜드 시멘트	6.c) 분말도	(2 000~7 000) g/cm ²
		6.f) 압축강도	MAX 150 kN
KS L 5210 : 2006	고로 슬래그 시멘트	6.3 분말도	(2 000~7 000) g/cm ²
		6.6 압축강도	MAX 150 kN
KS L 5405 : 2009	플라이 애시	8.4 밀도	(2.01~3.51) g/cm ³
		8.5 분말도	(2 000~7 000) g/cm ²
		8.6 플로값비	(100~250) mm
		8.7 활성도지수	MAX 150 kN
KS F 4002 : 2011	속빈 콘크리트 블록	6.2 치수	MAX 600 mm
		9.3 압축 강도	MAX 800 kN
		9.4 흡수율	MAX 50 %
KS F 4004 : 2011	콘크리트 벽돌	6.2 치수	MAX 300 mm
		9.3 압축 강도	MAX 800 kN
		9.4 흡수율	MAX 50 %
KS F 4006 : 2004	콘크리트 경계 블록	6.1 치수	MAX 5 000 mm
		9.2 휨 강도	MAX 800 kN
		9.4 흡수율	MAX 50 %
KS F 4419 : 2009	보차도용 콘크리트 인터로킹 블록	5.1 치수	MAX 300 mm
		8.2 휨 강도	MAX 800 kN
		8.3 흡수율	MAX 50 %



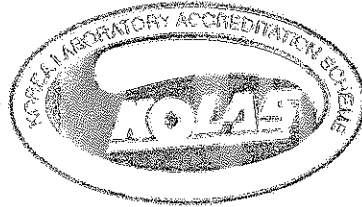
제349호(8/11)

1.003 시멘트 및 관련제품

규격번호	규격명	시험범위 또는 검출한계
KS F 2405 : 2010	콘크리트의 압축강도 시험방법	MAX 1 600 kN
KS F 2408 : 2000	콘크리트의 휨강도 시험방법	MAX 800 kN
KS F 4009 : 2011	레디 믹스트 콘크리트 9.5 강도시험	MAX 1 600 kN

1.006 토질 및 관련제품

규격번호	규격명		시험범위 또는 검출한계
KS F 2306 : 2000	흙의 함수비 시험방법		MAX 500 %
KS F 2308 : 2006	흙의 밀도 시험방법		MAX 4.000 g/cm ³
KS F 3510 : 2004	점토기와	5.1 모양	육안
		6.3 치수	MAX 600 mm
		6.4 휨파괴하중	MAX 5 000 kN
		6.5 흡수율	MAX 15 %
		6.6 내동해성	육안
KS L 1001 : 2010	도자기질 타일	5.1 겉모양	육안
		6.3 치수	MAX 1 000 mm
		6.4 뒤틀림	MAX 5 mm
		6.5 치수의 불규칙도	MAX 5 mm
		6.6 흡수율	MAX 20 %
		6.8 마모시험	MAX 1 g
		6.9 꺾임강도	MAX 500 N/cm
		6.10 접착성시험	육안
		6.11 박리성시험	육안
		6.12 동결융해시험	육안
KS L 4201 : 2008	점토벽돌	7.2 겉모양	육안
		7.3 치수	MAX 200 mm
		7.4 흡수율	MAX 20 %
		7.5 압축강도	MAX 50 N/mm ²



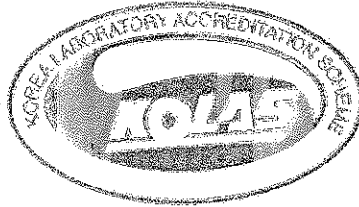
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1.007 유리와 유리제품

규격번호	규격명		시험범위 또는 검출한계
KS L 2002 : 2006	강화유리	8.1 겉모양	육안
		8.2 두께	MAX 20 mm
		8.6.2 파쇄시험	육안
KS L 2003 : 2011	복층유리	9.2 겉모양	육안
		9.3 치수	MAX 40 mm
		9.4 이슬점	육안 MAX -60 ℃
		9.5 봉착의 가속내구성	MAX -25 ℃ MAX 60 ℃ MAX 99 %R.H.

1.016 건설 및 전자재

규격번호	규격명		시험범위 또는 검출한계
KS F 2337 : 2007	마찰시험기를 사용한 역청 혼합물의 소성흐름에 대한 저항력시험방법	4. 안정도	MAX 40 000 N
		4. 흐름값	MAX 150cm (0.01cm)
KS F 2349 : 2010	포장용 가열아스팔트 혼합물	9.2 아스팔트 혼합물의 안정도, 흐름값	MAX 4 000 N MAX 150cm (0.01cm)
		9.3 아스팔트 혼합물의 공극율	MAX 50 %
		9.4 아스팔트 혼합물의 포화도	MAX 95 %
KS F 2364 : 2002	다져진 역청포장 혼합물의 공극율 시험방법		MAX 50 %
KS F 2367 : 2006	다져진 역청 포장용 혼합물의 시료의 두께(또는 높이)측정 방법		MAX 300 mm
KS F 2446 : 2000	다져진 아스팔트 포장혼합물의 겉보기비중 및 밀도시험방법(표면건조 포화상태의 공시체를 사용한 경우)		(1~5) g/cm ³
KS F 3501 : 2008	역청포장용 채움재	4.3.1 수분함량	MAX 50 %
		4.3.7 비중	1.5~5



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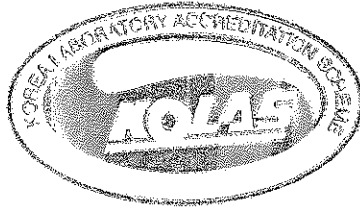
2. 화학시험

2.001 철강

규격번호	규격명	시험범위 또는 검출한계
KS D 1652 : 2007	철 및 강의 스파크 방전 원자 방출 분광 분석방법	C (0.001~5.5) % Si (0.002~6) % Mn (0.003~30) % P (0.000 5~1) % S (0.000 2~0.5) % Mo (0.001~10) % Cu (0.001~6) % Cr (0.002~40) % Ni (0.002~40) %

2.004 광산 및 요업 관련제품

규격번호	규격명		시험범위 또는 검출한계
KS F 2563 : 2009	콘크리트용 고로 슬래그 미분말	8.7 강열감량	MAX 10 %
KS L 5120 : 2004	포틀랜드 시멘트의 화학 분석 방법	8. 강열 감량의 정량 방법	MAX 10 %
KS L 5201 : 2006	포틀랜드 시멘트	6.b) 화학성분 (강열감량)	MAX 10 %
KS L 5210 : 2006	고로 슬래그 시멘트	6.2 화학성분 (강열감량)	MAX 10 %
KS L 5405 : 2009	플라이 애시	8.2 수분	MAX 10 %
		8.3 강열감량	MAX 10 %

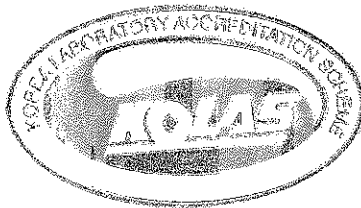


제349호(11/11)

2. 014 페인트

규격번호	규격명		시험범위 또는 검출한계
KS M 5000 : 2009	도료 및 관련 원료 시험방법	2122 주도	(49~135) KU
		2141 연화도	(10~80) μ m
KS M ISO 2811-1 : 2007	도료와 바니시 - 밀도 측정 방법		(0.50~2.50) g/mL
KS M ISO 3251 : 2011	도료와 바니시 - 도료, 바니시 및 도료와 바니시 결합제의 불휘발분 함량 측정법		(5~99) %
KS M ISO 14680-2 : 2007	도료와 바니시 - 안료 함량 측정법		(5~90) %
ASTM D 562-01 : 10	Standard Test Method for Consistency of Paints Measuring Krebs Unit(KU) Viscosity Using a Stormer-Type Viscometer	Method B	(49~135) KU

끝.



No. 349 (1/11)

CERTIFICATE OF ACCREDITATION

Name of Laboratory :Korea Conformity Laboratories Busan, Ulsan and Gyeongnam Branch

Representative :Song Jae Bin

Address of Headquarters459-28 Gasan-dong, Geumcheon-gu, Seoul, Korea
:

Address of Laboratory1276, Jisa-Dong, Gangseo-Gu, Busan, Korea
:

Duration :July 12, 2012 ~ July 11, 2016

Scope of Accreditation

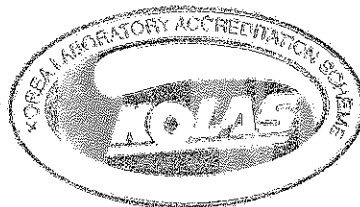
(Scope of Accreditation is described in the accompanying Annex)

This testing laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025 : 2005. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated 8 January 2009).

July 12, 2012

Administrator,

Korea Laboratory Accreditation Scheme(KOLAS)

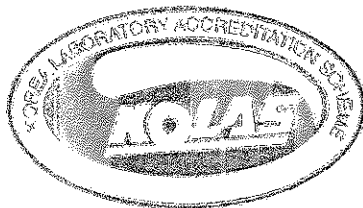


No. 349 (2/11)

1. Mechanical Test

1.001 Metals and Related Products

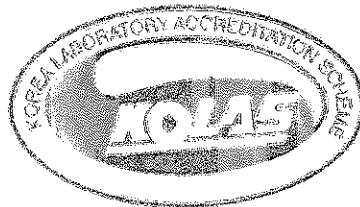
Test method	Standard designation		Test range or Limits of detection
KS B 0802 : 2003	Method of tensile test for metallic materials		MAX 1 600 kN
KS B 0804 : 2001	Metallic materials – Bend test	4.1 Alternate Roller - Equipped Guided Bend Test Jig	Sensory
KS B 0806 : 2000	Metallic materials - Test method of rockwell hardness		HRC HRB
KS B 0810 : 2003	Method of impact test for metallic materials		MAX 235 J (room temperature ~ -50℃)
KS D 0249 : 2003	Method of inspection for mechanical splicing joint of bars for concrete reinforcement	6.1 Appearance	Sensory
		6.2 Tensile test	MAX 1 600 kN
		6.3 Low Cycle Fatigue Test	MAX 800 kN
		6.4 High Cycle Fatigue Test	MAX 200 kN
KS D 3503 : 2008	Rolled steels for general structure	6. Shape · Size and Weight	MAX 600 mm, MAX 60 kg
		7. Appearance	Sensory
		8.2 mechanical Test	MAX 1 600 kN
KS D 3504 : 2011	Steel bars for concrete reinforcement	7. Appearance	Sensory
		9.2.3 Tensile test and Bend test method	MAX 1 600 kN
		9.3 Shape · Size and Weight	MAX 600 mm, MAX 60 kg
KS D 3506 : 2007	Hot-dip zinc-coated steel sheets and coils	12. Size	MAX 5 000 mm, MAX 600 mm
		15. Appearance	Sensory
		16.2 Bend test	Sensory
		16.3 Tensile test	MAX 800 kN
KS D 3507 : 2008	Carbon steel pipes for ordinary piping	8. Size, Weight	MAX 5 000 mm, MAX 60 kg, MAX 600 mm
		9. Appearance	Sensory
		11.3 Tensile test	MAX 800 kN
		11.4 Flattening test	Sensory



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1.001 Metals and Related Products

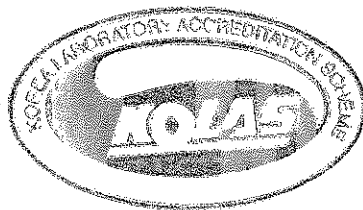
Test method	Standard designation		Test range or Limits of detection
KS D 3515 : 2008	Rolled steels for welded structures	7. Shape · Size and Weight	MAX 5 000 mm, MAX 60 kg
		8. Appearance	Sensory
		10.2 mechanical Test	MAX 1 600 kN
KS D 3517 : 2008	Carbon steel tubes for machine structural purposes	7. Appearance	Sensory
		8. Size	MAX 5 000 mm, MAX 600 mm
		9.2 Tensile test	MAX 800 kN
		9.3 Flattening test	Sensory
KS D 3536 : 2008	Stainless steel pipes for machine and structural purposes	7. Size	MAX 5 000 mm, MAX 600 mm
		8. Appearance	Sensory
		9.2 Tensile test	MAX 800 kN
		9.3 Flattening test	Sensory
KS D 3552 : 2008	Low carbon steel wires	6. Shape · Size and Weight	MAX 300 mm, MAX 2200 g
		7. Surface state	Sensory
		8. Appearance	Sensory
		11.2 Tensile test	MAX 800 kN
		11.3 Bend test	Sensory
KS D 3562 : 2009	Carbon Steel Pipes for Pressure Service	7. Appearance	Sensory
		8. Size	MAX 600 mm
		9.2 Tensile test	MAX 800 kN
		9.3 Flattening test	Sensory



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1.001 Metals and Related Products

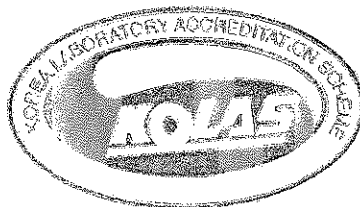
Test method	Standard designation		Test range or Limits of detection
KS D 3566 : 2012	Carbon steel tubes for general structural purposes	7.1 Size and Weight	MAX 5 000 mm, MAX 600 mm
		8. Appearance	Sensory
		9.2 Tensile test	MAX 800 kN
		9.3 Bend test	Sensory
		9.4 Flattening test	Sensory
KS D 3609 : 2007	Steel furrings for wall and ceiling in buildings	7. Shape and Size	MAX 5 000 mm, MAX 300 mm
KS D 6008 : 2002	Aluminium alloy castings	7.2 Tensile test	MAX 800 kN
KS D 6759 : 2011	Aluminium and aluminium alloy extruded shapes	7.2 Appearance	MAX 800 kN
		7.3 Tensile test	Sensory
KS D 7011 : 2002	Zinc-coated low carbon steel wires	8. Appearance	Sensory
		11.2 Tensile test	MAX 800 kN
		11.6 Diameter	MAX 300 mm
KS D 3505 : 2002	Steel bars for prestressed concrete	7. Appearance	Sensory
		9.2.2 Tensile test	MAX 800 kN
		9.2.3 Size	MAX 300 mm
KS D 7017 : 2007	Welded steel wire and bar fabrics	8. Size and Weight	Sensory
		9. Welded point exfoliation	MAX 5 000 mm, MAX 300 mm, MAX 2 200 g
		10. Appearance	Sensory
		11.2 a) Tensile test	MAX 4 000 N
		11.2 b) Elongation	MAX 300 mm
		11.2 c) Bend test	Sensory
		11.2 d) Welded point Shear strength	MAX 4 000 N



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1.001 Metals and Related Products

Test method	Standard designation		Test range or Limits of detection
KS D 7018 : 2002	Chain link wire netting	5. Shape and Size	MAX 5 000 mm, MAX 300 mm
		8. Appearance	Sensory
KS D 7036 : 1996	Polyvinyl Chloride Coated Color Steel Wires	6.1 Coated wire diameter, Core wire diameter	MAX 300 mm
		7. Appearance	Sensory
		10.2 Tensile test	MAX 4 000 N
		10.5 Minimum film thickness	MAX 300 mm
KS F 4601 : 2001	Gabion	6. Size	MAX 5 000 mm, MAX 1 000 mm, MAX 300 mm
		10. Appearance	Sensory
KS F 4604 : 2002	Hot rolled steel sheet piles	7. Appearance	MAX 1 600 kN
		8.2 mechanical Test	Sensory MAX 800 kN
KS B 0821 : 2007	Methods of tension and impact tests for deposited metal	6. Tensile strength	MAX 235 J
		6. Yield strength (Yield point)	MAX 300 mm
		6. Elongation	MAX 800 kN
JIS Z 2241 : 2011	Method of tensile test for metallic materials	8. Tensile strength (Yield point)	MAX 800 kN
		8. Yield strength	MAX 800 kN
		8. Elongation	MAX 800 kN
		8. Reduction of area	MAX 300 mm
JIS Z 2242 : 2005	Method of Charpy pendulum impact test of metallic materials		MAX 300 mm



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1.001 Metals and Related Products

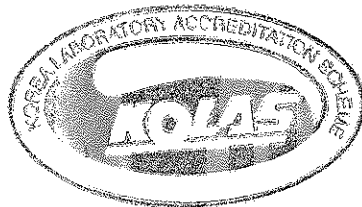
Test method	Standard designation		Test range or Limits of detection
JIS Z 2245 : 2011	Rockwell hardness test - test method		HRC, HRB
ASTM E8/E8M : 09	Standard Test Method for Tension Testing of Metallic Materials	7.10 Tensile strength	MAX 1 600 kN
		7.7, 7.8 Yield strength (Yield point)	MAX 1 600 kN
		7.11 Elongation	MAX 300 mm
		7.12 Reduction of area	MAX 300 mm
ASTM E 18 : 08b	Standard Test Method for rockwell hardness of metallic materials		HRC, HRB
ASTM E 23 : 07ael	Standard Test Method for notched bar impact testing of metallic materials 9.1 Charpy impact test(Charpy impact absorbed energy)		MAX 235 J
AWS D1.1/D1.1M : 2010	Structural welding code	4.9.3 Mechanical Testing (Bend tests, tension test)	MAX 800 kN
ASTM A 370 : 11	Standard Test Methods and definitions for mechanical testing of steel products	Tesion Test	MAX 800 kN
		Bend Test	MAX 800 kN
		Rockwell Test	HRB, HRC
		Coarpy Impact Testing	MAX 235 J



No. 349 (7/11)

1.003 Cement and Related Products

Test method	Standard designation		Test range or Limits of detection
KS F 2563 : 2009	Ground granulated blast-furnace slag for use in concrete	8.2 Density	(2.01~3.51) g/cm ³
		8.3 Fineness	(2 000~7 000) g/cm ²
		8.4 Activity index & Flow ratio	MAX 150 kN, (100~250) mm
KS L 5105 : 2007	Testing Method for Compressive Strength of Hydraulic Cement Mortar		MAX 150 kN
KS L 5106 : 2009	Testing Method for fineness of portland cement by air permeability apparatus		(2 000~7 000) g/cm ²
KS L 5110 : 2001	Testing Method for specific gravity of hydraulic cement		(2.01~3.51) g/cm ³
KS L 5201 : 2006	Portland cement	6.c) Fineness	(2 000~7 000) g/cm ²
		6.f) Compressive Strength	MAX 150 kN
KS L 5210 : 2006	Blast furnace slag cement	6.3 Fineness	(2 000~7 000) g/cm ²
		6.6 Compressive Strength	MAX 150 kN
KS L 5405 : 2009	Fly ash	8.4 Density	(2.01~3.51) g/cm ³
		8.5 Fineness	(2 000~7 000) g/cm ²
		8.6 Flow ratio	(100~250) mm
		8.7 Activity index	MAX 150 kN
KS F 4002 : 2011	Hollow concrete blocks	6.2 Size	MAX 600 mm
		9.3 Compressive strength	MAX 800 kN
		9.4 Absorption	MAX 50 %
KS F 4004 : 2011	Concrete brickks	6.2 Size	MAX 300 mm
		9.3 Compressive strength	MAX 800 kN
		9.4 Absorption	MAX 50 %
KS F 4006 : 2004	Concrete curbs	6.1 Size	MAX 5 000 mm
		9.2 Flexural strength	MAX 800 kN
		9.4 Absorption	MAX 50 %
KS F 4419 : 2009	Concrete interlocking block for side walk and road	5.1 Size	MAX 300 mm
		8.2 Flexural strength	MAX 800 kN
		8.3 Absorption	MAX 50 %



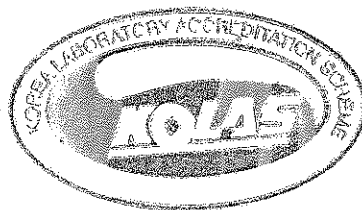
No. 349 (8/11)

1.003 Cement and Related Products

Test method	Standard designation		Test range or Limits of detection
KS F 2405 : 2010	Method of test for compressive strength of concrete		MAX 1 600 kN
KS F 2408 : 2000	Method of test for flexural strength of concrete		MAX 800 kN
KS F 4009 : 2011	Ready-mixed concrete	9.5 Compressive strength	MAX 1 600 kN

1.006 Soils and Related Products

Test method	Standard designation		Test range or Limits of detection
KS F 2306 : 2000	Test method for water content of soils		MAX 500 %
KS F 2308 : 2006	Test method for density of soil particles		MAX 4.000 g/cm ³
KS F 3510 : 2004	Clay roof tiles	5.1 Appearance	Sensory
		6.2 Measurement of Dimensions	MAX 600 mm
		6.3 Bending Test	MAX 5 000 kN
		6.4 Water absorption Test	MAX 15 %
		6.5 Freezing Damage Resistance Test	Sensory
KS L 1001 : 2010	Ceramic Tiles	5.1 Appearance	Sensory
		6.3 Measurement of Dimensions	MAX 1 000 mm
		6.4 Measurement of Warp	MAX 5 mm
		6.5 Measurement of Crook	MAX 5 mm
		6.6 Water absorption Test	MAX 20 %
		6.8 Abrasion Test	MAX 1 g
		6.9 Bending Test	MAX 500 N/cm
		6.10 Adhesion Test	Sensory
		6.11 Peel Ability Test	Sensory
KS L 4201 : 2008	Clay Brick	6.12 Freezing Damage Resistance Test	Sensory
		7.2 Appearance	Sensory
		7.3 Measurement of Dimensions	MAX 200 mm
		7.4 Water absorption Test	MAX 20 %
		7.5 Compressive strength	MAX 50 N/mm ²



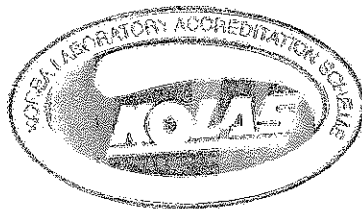
No. 349 (9/11)

1.007 Glass and glass products

Test method	Standard designation		Test range or Limits of detection
KS L 2002 : 2006	Tempered glass	8.1 Appearance	Sensory
		8.2 Measurement of Thickness	MAX 20 mm
		8.6.2 Broken piece of glass	Sensory
KS L 2003 : 2011	Pair glass	9.2 Appearance	Sensory
		9.3 Measurement of Dimensions	MAX 40 mm
		9.4 Due point Test	Sensory MAX -60 °C
		9.5 Accelerated durability Test	MAX -25 °C MAX 60 °C MAX 99 %R.H.

1.016 Construction Materials

Test method	Standard designation		Test range or Limits of detection
KS F 2337 : 2007	Testing methods for resistance to plastic flow of bituminous mixtures using marshall apparatus	4. Degree of stability	MAX 40 000 N, 1 N
		4. Flow value	MAX 150cm (0.01cm)
KS F 2349 : 2010	Hot-mix Asphalt mixtures for pavement	9.2 Degree of stability and Flow value of asphalt mixtures	MAX 4 000 N MAX 150cm (0.01cm)
		9.3 Porosity of asphalt mixtures	MAX 50 %
		9.4 Saturation of asphalt mixtures	MAX 95 %
KS F 2364 : 2002	Test method for percent air voids in compacted dense and open bituminous paving mixtures		MAX 50 %
KS F 2367 : 2006	Testing method for thickness or height of compacted asphalt paving mixture specimens		MAX 300 mm
KS F 2446 : 2000	Standard method of test for bulk specific gravity and density of compacted bituminous mixtures using saturated surfacedry specimens		(1~5) g/cm ³
KS F 3501 : 2008	Filler for bituminous paving mixtures	4.3.1 Water capacity	MAX 50 %
		4.3.7 Specific gravity	1.5~5



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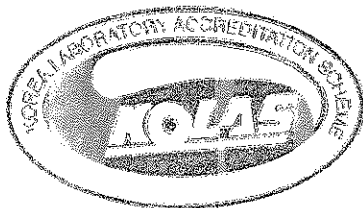
2. Chemical Test

2.001 Iron and Steel

Test method	Standard designation	Test range or Limits of detection
KS D 1652 : 2007	Iron and steel—Method for spark discharge atomic emission spectrometric analysis	C (0.001~5.5) % Si (0.002~6) % Mn (0.003~30) % P (0.000 5~1) % S (0.000 2~0.5) % Mo (0.001~10) % Cu (0.001~6) % Cr (0.002~40) % Ni (0.002~40) %

2.004 Mine and Ceramic Related Products

Test method	Standard designation		Test range or Limits of detection
KS F 2563 : 2009	Ground granulated blast-furnace slag for use in concrete	8.7 Loss on ignition	MAX 10 %
KS L 5120 : 2004	Methods for chemical analysis of cements	8. Loss on ignition	MAX 10 %
KS L 5201 : 2006	Portland cement	6.b) Chemical composition (Loss on ignition)	MAX 10 %
KS L 5210 : 2006	Blast furnace slag cement	6.2 Chemical composition (Loss on ignition)	MAX 10 %
KS L 5405 : 2009	Fly ash	8.2 Water capacity	MAX 10 %
		8.3 Loss on ignition	MAX 10 %

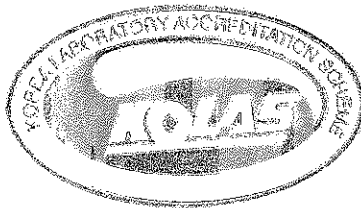


No. 349 (11/11)

2.014 Paint

Test method	Standard designation		Test range or Limits of detection
KS M 5000 : 2009	Testing method for organic coatings and their related materials	2122 Testing method of consistency for pigmented material (Krebs-stormer viscosimeter)	(49~135) KU
		2141 Testing method for fineness of grind	(10~80) μm
KS M ISO 2811-1 : 2007	Paints and varnishes—Determination of density—Part 1 : Pyknometer method		(0.50~2.50) g/mL
KS M ISO 3251 : 2011	Paints and varnishes—Determination of non-volatile matter of paints, varnishes and binders for paints and varnishes		(5~99) %
KS M ISO 14680-2 : 2007	Paints and varnishes—Determination of pigment content—Part 2 : Ashing method		(5~90) %
ASTM D 562-01 : 10	Standard Test Method for Consistency of Paints Measuring Krebs Unit(KU) Viscosity Using a Stormer-Type Viscometer	Method B	(49~135) KU

End.



No. 349 (1/11)

CERTIFICATE OF ACCREDITATION

Name of Laboratory :Korea Conformity Laboratories Busan, Ulsan and Gyeongnam Branch

Representative :Song Jae Bin

Address of Headquarters459-28 Gasan-dong, Geumcheon-gu, Seoul, Korea
:

Address of Laboratory1276, Jisa-Dong, Gangseo-Gu, Busan, Korea
:

Duration :July 12, 2012 ~ July 11, 2016

Scope of Accreditation

(Scope of Accreditation is described in the accompanying Annex)

This testing laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025 : 2005. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated 8 January 2009).

July 12, 2012

Administrator,

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