ICNDT General Assembly Meeting

Report of ISO/TC 135

27 October 2008

Hajime Hatano

Chairman, TC 135

Takeo Tsuchiya Secretary, TC 135

Contents

page

Structure of ISO/TC 135	1
Membership	2
Contact Information	3
Project Stages and Associated Documents	6
Work Program	7
International Standards	8
Activity Report	11
Message to CEN/TC 138 (March 2007)	13
Comparison of Training Requirements (September 2008)	15
Discussion Between CEN and ISO (June 2008)	16



Plenary meeting of ISO/TC 135, Buenos Aires, October 2007

(Next plenary will be held in Moscow, June 2010)

Structure of ISO/TC 135

ISO/TC 135 (Japan) P-members: 30 O-members: 38

SC 2	(South Africa)	Surface methods
SC 3	(Germany)	Ultrasonic testing
SC 4	(France)	Eddy current methods
SC 5	(Germany)	Radiation methods
SC 6	(Japan)	Leak detection methods
SC 7	(Canada)	Personnel qualification
WG 7	(USA)	Performance based qualification and certification
SC 8	(Korea)	Infrared thermography for non-destructive testing
SC 9	(Brazil)	Acoustic emission testing

<u>Membership</u>

(1) P-members (30)

Argentina (IRAM), Austria (ON), Barbados (BNSI), Belgium (NBN), Brazil (ABNT), Bulgaria (BDS), Canada (SCC), China (SAC), Czech Republic (CNI), France (AFNOR), Germany (DIN), India (BIS), Indonesia (BSN), Iran, Islamic Republic of (ISIRI), Italy (UNI), Japan (JISC), Kazakhstan (KAZMEMST)^(*), Kenya (KEBS) ^(*), Korea, Republic of (KATS), Malaysia (DSM) ^(*),New Zealand (SNZ), Philippines (BPS), Poland (PKN), Portugal (IPQ), Romania (ASRO), Russian Federation (GOST R), South Africa (SABS), Sweden (SIS), United Kingdom (BSI), Venezuela (FONDONORMA)

(*) Participated as P-member since the plenary meeting in October 2005.

(2) O-members (38)

Australia (SA), Belarus (BELST), Bosnia and Herzegovina^(**) (BAS), Colombia (ICONTEC), Croatia (HZN), Cuba (NC), Ecuador (INEN), Egypt (EOS), Estonia (EVS), Finland (SFS), Greece (ELOT), Hong Kong, China (ITCHKSAR), Hungary (MSZT), Iraq (COSQC)^(**), Ireland (NSAI), Israel (SII), Jamaica (BSJ), Korea, Democratic People's Rep. (CSK), Mauritius (MSB), Mexico (DGN), Moldova, Republic of (INSM), Mongolia (MASM), Netherlands (NEN), Norway (SN), Saudi Arabia (SASO), Serbia (ISS), Singapore (SPRING SG), Slovakia (SUTN), Spain (AENOR), Sri Lanka (SLSI), Thailand (TISI), Trinidad and Tobago (TTBS), Tunisia (INNORPI), Turkey (TSE), Ukraine (DSSU)^(**), USA (ANSI)^(**), Viet Nam (TCVN), Zimbabwe (SAZ)

^(**) Participated as O-member since the plenary meeting in October 2005.

Contact Information of ISO/TC 135

	Chairman / Convener	Secretary		
TC 135	Prof. Hajime Hatano Chairman of ISO/TC 135 Tokyo University of Science Department of Applied Electronics 2641 Yamazaki Noda, 278-8510 Japan TEL : +81 4 7122 9646 FAX : +81 4 7122 9831 Email : <u>hatano@te.noda.tus.ac.jp</u>	Mr. Takeo Tsuchiya Secretary of ISO/TC 135 Toshiba Documents Corporation Toshiba Fuchu Complex 1, Toshiba-machi, Fuchu-shi Tokyo 183-8511 Japan TEL : +81 42 333 6850 FAX : +81 42 340 8084 Email : <u>t tsuchiya@tdoc.toshiba.co.jp</u>		
TC 135/ SC 2	Mrs. Amanda Van der Westhuizen Chairman of ISO/TC 135/SC 2 African NDT Centre (Pty) LTD P.O. Box 68253, Highveld, Centurion 0169 14 Pieter Street, Techno Park Centurion, Tshwane South Africa TEL : +27 12 665 3248 FAX : +27 12 665 4749 Email : <u>amanda.vdwesthuizen@andtc.com</u>	Mr Vasen Subroyen Secretary of ISO/TC 135/SC 2 South African Bureau of Standards 1 Dr Lategan Rd, Groenkloof Private Bag X191 ZA-Pretoria 0001 South Africa TEL : +27 12 428 6647 FAX : +27 12 344 1568 Email: <u>subroyv@sabs.co.za</u>		
TC 135/ SC 3	Mr. Udo Schlengermann Chairman of ISO/TC 135/SC 3 European Application Center GE Inspection Technologies GmbH Robert-Bosch-Strasse 3 50354 Hürth Germany TEL : +49 2233 601 550 FAX : +49 2233 601 402 Email : udo.schlengermann@t-online.de	Ms. Michaela Treige-Wegener Secretary of ISO/TC 135/SC 3 DIN Deutsches Institut für Normung e. V. Burggrafenstrasse 6 DE-10787 Berlin Germany TEL : +49 30 2601 2224 FAX : +49 30 2601 42054 Email : <u>michaela.treige-wegener@din.de</u>		
TC 135/ SC 4	Mr. Robert Lévy Chairman of ISO/TC 135/SC 4 76 RUE DES GEMEAUX PARC AFFAIRES SILIC INTERCONTROLE BP 30433 94583 RUNGIS CEDEX France TEL : +33 1 49 78 40 44 FAX : +33 1 49 78 41 66 Email : <u>robert.levy@areva.com</u>	M. Annick GALPIN Secretary of ISO/TC 135/SC 4 Chef de Projet Normalisation Association Française de Normalisation (AFNOR) 11, avenue Francis de Pressensé FR-93571 La Plaine Saint-Denis Cedex France TEL : +33 1 41 62 85 16 FAX : +33 1 49 17 90 00 Email : <u>annick.galpin@afnor.org</u>		

	Chairman / Convener	Secretary
TC 135/ SC 5	Prof. Heinrich Heidt Chairman of ISO/TC 135/SC 5 Federal Institute for Materials Research and Testing (BAM) Unter den Eichen 87 D-12205 Berlin Germany TEL : +49 30 8104 1800 FAX : +49 30 8104 1807 Email : <u>heinrich.heidt@bam.de</u>	Ms. Michaela Treige-Wegener Secretary of ISO/TC 135/SC 5 DIN Deutsches Institut für Normung e. V. Burggrafenstrasse 6 DE-10787 Berlin Germany TEL : +49 30 2601 2224 FAX : +49 30 2601 42054 Email : <u>michaela.treige-wegener@din.de</u>
TC 135/ SC 6	Dr. Norikazu Ooka Chairman of ISO/TC 135/SC 6 The Japan Welding Engineering Society 1-11, Kanda Sakuma-cho, Chiyoda-ku Tokyo 101-0025 Japan TEL : +81 332 57 1522 FAX : +81 332 55 5196 Email : <u>nori-ooka@rio.odn.ne.jp</u>	Mr. Takeo Tsuchiya Secretary of ISO/TC 135/SC 6 Toshiba Documents Corporation Toshiba Fuchu Complex 1, Toshiba-machi, Fuchu-shi Tokyo 183-8511 Japan TEL : +81 42 333 6850 FAX : +81 42 340 8084 Email : <u>t_tsuchiya@tdoc.toshiba.co.jp</u>
TC 135/ SC 7	Dr. Richard Murphy Chairman of ISO/TC 135/SC 7 NRCan/CAMET 568 Booth Street Ottawa, ON K1A 0G1 Canada TEL : +1 613 943 0583 FAX : +1 613 943 8297 Email : <u>rvmurphy@NRCan.gc.ca</u>	Ms. Patricia Wait Secretary of ISO/TC 135/SC 7 Canadian General Standards Board Place du Portage, Phase III, 6B1 11 Laurier Street, Hull, QC K1A 1G6 Canada TEL : +1 819 956 0777 FAX : +1 819 956 5740 Email : <u>patricia.wait@tpsgc-pwgsc.gc.ca</u>
TC 135/ SC 7/ WG 7	Mr. Michael L. Turnbow Convener of ISO/TC 135/SC 7/WG 7 Manager Inspection Services Organization (ISO) Tennessee Valley Authority (TVA) P.O. Box 2000, STC 1I-SQN Igou Ferry Road Soddy Daisy, TN 37379USA TEL : +1 423 843 4303 FAX : + 1 423 843 4266 Email : <u>mlturnbow@tva.gov</u>	Ms. Patricia Wait Secretary of ISO/TC 135/SC 7/WG 7 Canadian General Standards Board Place du Portage, Phase III, 6B1 11 Laurier Street, Hull, QC K1A 1G6 Canada TEL : +1 819 956 0777 FAX : +1 819 956 5740 Email : <u>patricia.wait@tpsgc-pwgsc.gc.ca</u>

	Chairman / Convener	Secretary
TC 135/ SC 8	Dr. Seung-Seok Lee Chairman of ISO/TC 135/SC 8 Center for Environment and Safety Measurement Korea Research Institute of Standards and Science (KRISS) P.O.Box 102, Yuseong, Daejeon, 305-600 Republic of Korea TEL : +82 42 868 5025 FAX : +82 42 868 5027 Email : sslee@kriss re kr	Dr. Man Yong Choi Secretary of ISO/TC 135/SC 8 Smart Measurement Group Korea Research Institute of Standards and Science (KRISS) P.O.Box 102, Yuseong, Daejeon, 305-600 Republic of Korea TEL : +82 42 868 5251 FAX : +82 42 868 5650 Email : mychoi@kriss re kr
TC 135/ SC 9	Mr. Pedro Feres Chairman of ISO/TC 135/SC 9 Physical Acoustics South America R. Joaquim Antunes 574 CEP 05415-001, São Paulo, SP Brazil TEL : +55 11 3082 5511 FAX : +55 11 3064 0713 Email : <u>pedro@pasa.com.br</u>	Mr. Claudio Guerreiro Secretary of ISO/TC 135/SC 9 Coordinator of International Standardization Associação Brasileira de Normas Técnicas (ABNT) Av. 13 de Maio, n° 13, 28° andar BR-20003-901 - Rio de Janeiro-RJ Brazil TEL : +55 21 3974 2329 FAX : +55 21 2220 1762 Email : <u>claudio.guerreiro@abnt.org.br</u>

Project Stages and Associated Documents

Code	Stage
00. * *	Preliminary stage
10. * *	Proposal stage
20. * *	Preparatory stage (WD)
30. * *	Committee stage (CD)
40. * *	Enquiry stage (DIS)
50. * *	Approval stage (FDIS)
60. * *	Publication stage (ISO)
90. * *	Review stage
95. * *	Withdrawal stage

Work Program (10)

SC 2		Surface methods		
Reference	е	Title	CEN Documents	
Stage Date S	Stage			
FDIS 3452-5		Penetrant testing - Part 5: Penetrant testing at temperatures higher	prEN ISO 3452-5	
2008-08-07 5	50.20	than 50 °C		
FDIS 3452-6		Penetrant testing - Part 6: Penetrant testing at temperatures lower	prEN ISO 3452-6	
2008-08-07 5	50.20	than 10 °C		
CD 12706		Terminology - Terms used in penetrant testing.	revised prEN ISO 12706	
2008-08-15 4	40.60			
NP 12707		Terminology - Terms used in magnetic particle testing	EN ISO 1330-7	
2006-10-05 1	10.20			

SC 6	Leak detection methods	
Reference	Title	CEN Documents
Stage Date Stage	The	OEN Documents
Reinstate of AWI 20521	Terminology on leak testing	
00.00		

SC 7/WG	7	Personnel qualification / Performance based qualification and certification	ation
Referen	се	Title	CEN Documents
Stage Date	Stage	Title	CEN Documents
CD 11774		Non-destructive testing personnel - Performance based	
	30.60	qualification	

SC 8	Infrared thermography for non-destructive testing	
Reference	Title	CEN Documents
Stage Date Stage	The	CEN Documents
NP	Standard Guide for Examining Electrical Installations with Infrared	
2007-09-10 10.98	Thermography	
NP	Infrared Thermography in Nondestructive Testing - Characters of	
2007-09-10 10.98	Equipment and System	
WD 10878	Infrared thermography - Vocabulary and terminology	
2008-09-12 20.20		
NP	Standard Guide of Nondestructive Testing with Infrared	
2007-09-10 10.98	Thermography	

International Standards (45)

Reference Publication DateTitleCEN DocumentsISO/TS 18173:2005 2005-01-15General terms and definitions2005-01-1590.60Fraining guidelinesWG 2Training guidelinesCEN DocumentsPublication DateStageCEN NO/TR150/TR 25107:2006 2006-07-01Guidelines for NDT training syllabusesCEN ISO/TR2006-07-0160.60Guidelines for NDT personnel training organizationsCEN ISO/TR2008-07-1180.60Metallographic replica techniques of surface examination25108:2006SO 3057:1998Alds to visual inspection - Selection of low-power magnifiers1998-03-1590.20ISO 3059:2001Penetrant testing and magnetic particle testing - Viewing conditionsEN ISO 3059ISO 3452:1998Penetrant testing - Part 1: General principlesEN ISO 3452-22006-09-0160.60EN SO 3452-3EN ISO 3452-3ISO 3452:2006Penetrant testing - Part 2: Testing of penetrant materialsEN ISO 3452-32093-02-1590.00111ISO 3452:31998/CortPenetrant testing - Part 3: Reference test blocks - Technical Corrigendum 111200	WG 1		General terms and definitions	
Publication Date Stage Title CEN Documents ISO/TS 18173:2005 Genal terms and definitions 2005-01-15 90.60 WG 2 Training guidelines CEN Documents Reference Buildelines for NDT training syllabuses CEN ISO/TR 2006-07-01 60.60 Guidelines for NDT personnel training organizations CEN ISO/TR 2006-07-01 60.60 Guidelines for NDT personnel training organizations CEN ISO/TR 2006-07-01 60.60 SC 2 Surface methods Efference Reference Title CEN Documents ISO 3057:1998 Metallographic replica techniques of surface examination 1998-03-15 90.20 ISO 3058:1998 Aids to visual inspection - Selection of low-power magnifiers 1998-03-15 90.20 ISO 3452:1920H*** Penetrant testing and magnetic particle testing - Viewing conditions EN ISO 3059 2001-11-01 90.60 EN 571-1 S0.3052:1924** Penetrant testing - Part 1: General principles EN ISO 3452-2 2006-08-15 60.60 EN 571-1 S0.3452-2:31998 EN ISO 3452-3 S0.3452-3:31998/Cr	Reference		Title	CEN Documents
ISO/TS 18173:2005 General terms and definitions 2005-01-15 90.60 WG 2 Training guidelines Reference Training syllabuses 2006-07-01 60.60 ISO/TR 25107:2006 Guidelines for NDT training syllabuses 2006-07-01 60.60 SO/TR 25108:2006 Guidelines for NDT personnel training organizations CEN ISO/TR 2006-07-01 60.60 Scr 2 Surface methods Reference Title CEN Documents Publication Date Stage Aids to visual inspection - Selection of low-power magnifiers 1998-03-15 90.20 Metallographic replica techniques of surface examination EN ISO 3059 1003 058:1998 Aids to visual inspection - Selection of low-power magnifiers EN ISO 3059 1998-03-15 90.20 Penetrant inspection - General principles EN ISO 3059 150 3052:2001 Penetrant inspection - General principles EN ISO 3452-2 2006-08-15 150 3452:13084** Penetrant testing - Part 1: General principles(Revision of ISO EN ISO 3452-2 2006-08-15 60.60 EN ISO 3452-3 EN ISO 3452-3 1998-12:15 90.20	Publication Date	Stage	The	CEN Documents
2005-01-15 90.60 WG 2 Training guidelines Reference Publication Date Stage Title CEN Documents ISO/TR 25107:2006 Guidelines for NDT training syllabuses CEN ISO/TR 25107:2006 CEN ISO/TR 25107:2006 ISO/TR 25108:2006 Guidelines for NDT personnel training organizations CEN ISO/TR 25108:2006 SC 2 Surface methods CEN Documents Reference Publication Date Stage Metallographic replica techniques of surface examination 1998:03-15 1998:03-15 90.20 Penetrant testing and magnetic particle testing - Viewing conditions EN ISO 3059 1050:3059:2001 Penetrant testing - Part 1: General principles EN ISO 3059 EN ISO 3059 1050:3452:1984** Penetrant testing - Part 2: Testing of penetrant materials EN ISO 3452-2 EN ISO 3452-2 1050:3452:1984 Penetrant testing - Part 3: Reference test blocks EN ISO 3452-3 EN ISO 3452-3 1098-12-15 90.20 Penetrant testing - Part 3: Reference test blocks EN ISO 3452-3 1098-12-15 90.20 Penetrant testing - Part 4: Equipment EN ISO 3452-3 1098-12-15 90.20	ISO/TS 18173:2	005	General terms and definitions	
WG 2 Training guidelines Reference Publication Date Training guidelines Reference 2006-07-01 Guidelines for NDT training syllabuses CEN ISO/TR 25107:2006 SO/TR 25108:2006 Guidelines for NDT personnel training organizations CEN ISO/TR 25108:2006 SC 2 Surface methods CEN Documents Reference Publication Date Stage Title CEN Documents SC 3057:1998 Metallographic replica techniques of surface examination EN ISO 3059: 1998-03-15 Penetrant testing and magnetic particle testing - Viewing conditions EN ISO 3059 ISO 3059:2001 Penetrant testing - Part 1: General principles (SO 3452:1984** Penetrant testing - Part 2: Testing of penetrant materials EN ISO 3452:2 EN ISO 3452:2:2006 EN ISO 3452:2 EN ISO 3452:2:2006 Penetrant testing - Part 3: Reference test blocks EN ISO 3452:2 EN ISO 3452:3:1998 Penetrant testing - Part 3: Reference test blocks - Technical Corrigendum 1:2001 EN ISO 3452:3 EN ISO 3452:3:1998 Penetrant testing - Part 4: Equipment 1:2001 EN ISO 3452:4 EN ISO 3452:4 EN ISO 3452:4 EN ISO 3452:4 1998-12:15 90.20 Fonetrant testing - Part 3: Reference test blocks - Technical Corrigendum 1:2001 EN ISO 3452:4 1998-12:15 90.20 Fonetrant testing - Part 4: Equipme	2005-01-15	90.60		
WG 2 Training guidelines Reference Publication Date Stage Title CEN Documents ISO/TR 25107:2006 Guidelines for NDT training syllabuses CEN ISO/TR 25107:2006 25107:2006 25107:2006 SO/TR 25108:2006 Guidelines for NDT personnel training organizations CEN ISO/TR 25108:2006 25107:2006 SC 2 Surface methods CEN Documents 25108:2006 SC 3 Surface methods CEN Documents ISO 3057:1998 Metallographic replica techniques of surface examination 1998-03-15 90.20 ISO 3059:2001 Penetrant testing and magnetic particle testing - Viewing conditions EN ISO 3059 2003-059:2001 Penetrant testing - Part 1: General principles EN ISO 3452:1984** Viewdrawn 95.99 Penetrant testing - Part 2: Testing of penetrant materials EN ISO 3452:2 2006-08-15 60.60 Penetrant testing - Part 3: Reference test blocks EN ISO 3452:3 1998-31:1998/ Penetrant testing - Part 3: Reference test blocks EN ISO 3452:3 1998-31:1998/ Penetrant testing - Part 3: Reference test blocks EN ISO 3452:3 10:33452:3:1998/ Penetrant				
Reference Publication DateCEN DocumentsSO/TR 25107:2006Guidelines for NDT training syllabusesCEN ISO/TR 25107:2006SO/TR 25108:2006Guidelines for NDT personnel training organizationsCEN ISO/TR 25108:2006SC 2Surface methodsCEN DocumentsReference Publication DateStageTitleCEN DocumentsISO 3057:1998Metallographic replica techniques of surface examinationCEN Documents1998-03-1590.20Penetrant testing and magnetic particle testing - Viewing conditionsEN ISO 3059ISO 3059:2001Penetrant testing - Part 1: General principles (Revision of ISOEN 571-12008-09-0160.60Penetrant testing - Part 2: Testing of penetrant materialsEN ISO 3452-3ISO 3452-1:2008Penetrant testing - Part 3: Reference test blocksEN ISO 3452-31998-12-1590.20Penetrant testing - Part 3: Reference test blocks - Technical Corrigendum 1:2001-02-01For the string - Part 4: Equipment1050 3452-4:1998Penetrant testing - Part 4: EquipmentEN ISO 3452-41998-12-1590.2090.20For the string - Part 3: Reference test blocks - Technical Corrigendum 1:200112001-02-0160.60For the string - Part 4: EquipmentEN ISO 3452-41998-12-1590.20Penetrant testing - Part 4: EquipmentEN ISO 3452-41998-12-1590.20For the string - Part 4: EquipmentEN ISO 3452-41998-12-1590.20Penetrant testing - Part 4: EquipmentEN ISO 3452-41998-12-1590.20For the string - Part 1: Gener	WG 2		Training guidelines	
Publication DateStageTitleCEN DocumentsISO/TR 25107:2006Guidelines for NDT training syllabusesCEN ISO/TR2006-07-0160.60Guidelines for NDT personnel training organizationsCEN DocumentsISO 3057:1998Metallographic replica techniques of surface examination198-03-1590.20ISO 3057:1998Aids to visual inspection - Selection of low-power magnifiersEN ISO 30591998-03-1590.20Penetrant testing and magnetic particle testing - Viewing conditionsEN ISO 30592001-11-0190.60Penetrant inspection - General principlesWithdrawnS5.992003-05160.60Fonetrant testing - Part 1: General principles(Revision of ISOEN 571-12008-09-0160.60Fonetrant testing - Part 2: Testing of penetrant materialsEN ISO 3452-22006-08-1560.60Fonetrant testing - Part 3: Reference test blocksEN ISO 3452-31998-12-1590.20Penetrant testing - Part 3: Reference test blocksEN ISO 3452-41998-12-1590.20Fonetrant testing - Part 4: EquipmentEN ISO 3452-41200111Fonetrant testing - Part 4: EquipmentEN ISO 3452-412001-02-0160.60Fonetrant testing - Part 1: General principlesEN ISO 9934-112	Referenc	e	Title	CEN Documents
ISO/TR 25107:2006 Guidelines for NDT training syllabuses CEN ISO/TR 25107:2006 2006-07-01 60.60 Guidelines for NDT personnel training organizations CEN ISO/TR 25107:2006 2006-07-01 60.60 SC 2 Surface methods 25108:2006 SC 2 Surface methods CEN ISO/TR 25108:2006 SC 2 Surface methods Reference Publication Date[Stage Metallographic replica techniques of surface examination 1998:03-15 90.20 ISO 3057:1998 Metallographic replica techniques of surface examination 1998:03-15 90.20 ISO 3058:1998 Aids to visual inspection - Selection of low-power magnifiers 1998:03-15 90.20 ISO 3052:001 Penetrant testing and magnetic particle testing - Viewing conditions EN ISO 3059 2001-11-01 90.60 Penetrant testing - Part 1: General principles (Revision of ISO EN 571-1 2008-09-01 60.60 Penetrant testing - Part 2: Testing of penetrant materials EN ISO 3452-2 2006-08-15 60.60 Penetrant testing - Part 3: Reference test blocks EN ISO 3452-3 1998-12-15 90.20 Penetrant testing - Part 3: Reference test blocks - Technical Corrigendum 1 1 10001 1	Publication Date	Stage	The	CEN Documents
2006-07-0160.6025107:2006ISO/TR 25108:2006Guidelines for NDT personnel training organizationsCEN ISO/TR 25108:2006SC 2Surface methodsCEN DocumentsReference Publication Date StageMetallographic replica techniques of surface examinationCEN Documents1998-03-1590.20Iso 3057:1998Aids to visual inspection - Selection of low-power magnifiersEN ISO 30591998-03-1590.20Penetrant testing and magnetic particle testing - Viewing conditionsEN ISO 3059150 3059:2001Penetrant testing - Part 1: General principlesEN ISO 30592001-11-0190.6090.60EN 571-1ISO 3452:1984**Penetrant testing - Part 2: Testing of penetrant materialsEN ISO 3452-22006-08-1560.60Penetrant testing - Part 3: Reference test blocksEN ISO 3452-31998-12-1590.20Penetrant testing - Part 3: Reference test blocks - Technical Corrigendum 1:2001EN ISO 3452-41998-12-1590.20Penetrant testing - Part 4: EquipmentEN ISO 3452-41998-12-1590.20Penetrant testing - Part 4: EquipmentEN ISO 3452-41998-12-1590.20Penetrant inspection - Means of verificationEN ISO 9934-12001-12-0106.01Magnetic particle testing - Part 2: Detection mediaEN ISO 9934-22002-12-0190.60Magnetic particle testing - Part 2: Detection mediaEN ISO 9934-2	ISO/TR 25107:2	2006	Guidelines for NDT training syllabuses	CEN ISO/TR
ISO/TR 25108:2006 2006-07-01Guidelines for NDT personnel training organizationsCEN ISO/TR 25108:2006SC 2Surface methodsCEN DocumentsReference Publication DateMetallographic replica techniques of surface examination 1998-03-15CEN Documents150 3057:1998 150 3058:1998 1998-03-15Metallographic replica techniques of surface examination 1998-03-15Penetrant testing and magnetic particle testing - Viewing conditionsEN ISO 3059150 3052:1998 150 3052:001 2001-11-01Penetrant testing and magnetic particle testing - Viewing conditionsEN ISO 3059150 3452:12008 150 3452:21:2008 2006-08-15Penetrant testing - Part 1: General principles Penetrant testing - Part 2: Testing of penetrant materials 2006-08-15EN ISO 3452-2150 3452:2:2006 150 3452:2:2006 2006-08-15Penetrant testing - Part 3: Reference test blocksEN ISO 3452-3105 3452:3:1998 1:2001 2:001-02-01Penetrant testing - Part 3: Reference test blocks - Technical Corrigendum 1:2001 1EN ISO 3452-4105 3452:4:12998 1:2001 2:001-02-01Penetrant testing - Part 4: Equipment 1EN ISO 3452-4105 3452:4:1998 1:003 4452:4:1998 1:001-02-01Penetrant testing - Part 1: General principlesEN ISO 3452-4105 3452:4:12001 1:001-02-01Magnetic particle testing - Part 1: General principlesEN ISO 3452-4105 3452:4:1203 2:002-12-01Magnetic particle testing - Part 2: Detection mediaEN ISO 9934-11001-12:01 2:001-12:01 2:001-12:01Magnetic particle testing - Part 2: Detection mediaEN ISO 9934-2	2006-07-01	60.60		25107:2006
2006-07-01 60.60 25108:2006 SC 2 Surface methods CEN Documents Publication Date Stage CEN Documents ISO 3057:1998 Metallographic replica techniques of surface examination 1 1998-03-15 90.20 Aids to visual inspection - Selection of low-power magnifiers 1 15O 3059:2001 Penetrant testing and magnetic particle testing - Viewing conditions EN ISO 3059 15O 3452:1984** Penetrant testing - Part 1: General principles EN ISO 3452-2 15O 3452-1:2008 Penetrant testing - Part 2: Testing of penetrant materials EN ISO 3452-2 15O 3452-2:2006 Penetrant testing - Part 3: Reference test blocks EN ISO 3452-3 1998-12-15 90.20 Penetrant testing - Part 3: Reference test blocks - Technical Corrigendum 1:2001 1 1 1 1:2001 1 1 1 1:2001 1 1 1 1:2001 1 1 1 1:2001 1 1 1 1:2001 1 1 1 1:2001	ISO/TR 25108:2	2006	Guidelines for NDT personnel training organizations	CEN ISO/TR
SC 2 Surface methods Reference Title CEN Documents Publication Date Stage Metallographic replica techniques of surface examination 1988-03-15 90.20 ISO 3057:1998 Metallographic replica techniques of surface examination 1988-03-15 90.20 ISO 3058:1998 Aids to visual inspection - Selection of low-power magnifiers 1988-03-15 90.20 ISO 3059:2001 Penetrant testing and magnetic particle testing - Viewing conditions EN ISO 3059 2001-11-01 90.60 Penetrant testing - Part 1: General principles EN ISO 3452-12008 ISO 3452-1:2008 Penetrant testing - Part 2: Testing of penetrant materials EN ISO 3452-2 2006-08-15 60.60 EN ISO 3452-3 1998-12-15 90.20 ISO 3452-3:1998 Penetrant testing - Part 3: Reference test blocks EN ISO 3452-3 1998-12-15 90.20 Penetrant testing - Part 4: Equipment EN ISO 3452-4 1998-12-15 90.20 Iso 3452-4:1998 Penetrant testing - Part 4: Equipment EN ISO 3452-4 1998-12-15 90.20 Iso 3452-3:1984* Liquid penetrant inspection - Means of verification <td< td=""><td>2006-07-01</td><td>60.60</td><td></td><td>25108:2006</td></td<>	2006-07-01	60.60		25108:2006
Reference Publication DateStageTitleCEN DocumentsISO 3057:1998 1998-03-15Metallographic replica techniques of surface examination1988-03-1590.20Aids to visual inspection - Selection of low-power magnifiers1998-03-1590.20Penetrant testing and magnetic particle testing - Viewing conditionsEN ISO 30592001-11-0190.60Penetrant testing - Part 1: General principlesEN ISO 3059150 3452-1:2008 2006-09-01Penetrant testing - Part 1: General principlesEN ISO 3452-2:2006-08-1560.60Penetrant testing - Part 2: Testing of penetrant materialsEN ISO 3452-2:150 3452-3:1998 150 3452-3:1998Penetrant testing - Part 3: Reference test blocksEN ISO 3452-3:150 3452-3:1998 150 3452-3:1998 150 3452-3:1998Penetrant testing - Part 3: Reference test blocks - Technical Corrigendum 1EN ISO 3452-3:150 3452-3:1998 150 3452-15Penetrant testing - Part 4: Equipment 1EN ISO 3452-4150 3452-15 190.20150 3452-1590.20150 3452-1590.20150 3452-101150 3452-101 190.60150 3452-101150 3452-101EN ISO 9934-1150 9934-1:2001 2001-12-01150 9934-2:2002 100.60150	SC 2		Surface methods	
Publication DateStageIntelCEN DocumentsISO 3057:1998Metallographic replica techniques of surface examination1998-03.1590.20ISO 3058:1998Aids to visual inspection - Selection of low-power magnifiers1998-03.1590.20ISO 3059:2001Penetrant testing and magnetic particle testing - Viewing conditionsISO 3452:1984**Penetrant inspection - General principlesWithdrawn95.992001-11-0160.60ISO 3452-1:2008Penetrant testing - Part 1: General principles(Revision of ISO2006-08-1560.60ISO 3452-2:2006Penetrant testing - Part 2: Testing of penetrant materials2006-08-1560.60ISO 3452-3:1998Penetrant testing - Part 3: Reference test blocks1003 452-3:1998Penetrant testing - Part 3: Reference test blocks - Technical Corrigendum1:200111:200111:200111:30 3452-4:1998Penetrant testing - Part 4: Equipment1:200111:30 3452-4:1998Penetrant testing - Part 4: Equipment1:200111:30 3452-4:1998Penetrant testing - Part 1: General principles1:30 3452-4:1998Penetrant testing - Part 1: General principles1:30 3452-4:1998Penetrant testing - Part 2: Detection media1:30 3452-1:2001Magnetic particle te	Referenc	e		
ISO 3057:1998 Metallographic replica techniques of surface examination 1998-03-15 90.20 ISO 3058:1998 Aids to visual inspection - Selection of low-power magnifiers 1998-03-15 90.20 ISO 3059:2001 Penetrant testing and magnetic particle testing - Viewing conditions EN ISO 3059:2001 Penetrant testing and magnetic particle testing - Viewing conditions ISO 3452:1984** Penetrant inspection - General principles Withdrawn 95.99 ISO 3452:12008 Penetrant testing - Part 1: General principles(Revision of ISO ISO 3452:2:2006 Penetrant testing - Part 2: Testing of penetrant materials ISO 3452-3:1998 Penetrant testing - Part 3: Reference test blocks ISO 3452-3:1998 Penetrant testing - Part 3: Reference test blocks - Technical Corrigendum 1:2001 1 2001-02-01 60.60 ISO 3452-3:1998 Penetrant testing - Part 4: Equipment 1:2001 1 2001-02-01 60.60 ISO 3452-1998 Penetrant testing - Part 4: Equipment 1:2001 1 2001-02-01 60.60 ISO 3453:1984* Liquid penetrant inspection - Means of verification Wi	Publication Date	Stage	litie	CEN Documents
1998-03-1590.20ISO 3058:1998Aids to visual inspection - Selection of low-power magnifiers1998-03-1590.20ISO 3059:2001Penetrant testing and magnetic particle testing - Viewing conditions2001-11-0190.60ISO 3452:1984**Penetrant inspection - General principlesWithdrawn95.99ISO 3452-1:2008Penetrant testing - Part 1: General principles(Revision of ISO2008-09-0160.60ISO 3452-2:2006Penetrant testing - Part 2: Testing of penetrant materials2006-08-1560.60ISO 3452-3:1998Penetrant testing - Part 3: Reference test blocks1050 3452-3:1998/CorPenetrant testing - Part 3: Reference test blocks - Technical Corrigendum112001-02-0160.60ISO 3452-4:1998Penetrant testing - Part 4: Equipment1998-12-1590.20ISO 3452-4:1998Penetrant testing - Part 4: Equipment100111112001-12-0190.60ISO 934-1:2001Magnetic particle testing - Part 1: General principlesISO 9934-1:200190.60	ISO 3057:1998		Metallographic replica techniques of surface examination	
ISO 3058:1998 Aids to visual inspection - Selection of low-power magnifiers 1998-03-15 90.20 ISO 3059:2001 Penetrant testing and magnetic particle testing - Viewing conditions EN ISO 3059 2001-11-01 90.60 ISO 3452:1984** Penetrant inspection - General principles EN ISO 3059 Withdrawn 95.99 Penetrant testing - Part 1: General principles(Revision of ISO EN 571-1 2008-09-01 60.60 Penetrant testing - Part 2: Testing of penetrant materials EN ISO 3452-2 2006-08-15 60.60 Penetrant testing - Part 3: Reference test blocks EN ISO 3452-3 1998-12-15 90.20 Penetrant testing - Part 3: Reference test blocks - Technical Corrigendum 1 1 12001-02-01 60.60 Penetrant testing - Part 4: Equipment EN ISO 3452-4 1998-12-15 90.20 Penetrant testing - Part 4: Equipment EN ISO 3452-4 1998-12-15 90.20 Iso 3453:1984* Liquid penetrant inspection - Means of verification EN ISO 3452-4 1998-12-15 90.20 Iso 3453:1984* Liquid penetrant inspection - Means of verification EN ISO 9934-1 1SO 3934-1:2001 Magnetic particle testing - Part 1: General principles EN ISO 9934-1	1998-03-15	90.20		
1998-03-1590.20EN ISO 3059ISO 3059:20019enetrant testing and magnetic particle testing - Viewing conditionsEN ISO 30592001-11-0190.609enetrant inspection - General principlesEN ISO 3059ISO 3452:1984**Penetrant inspection - General principlesPenetrant inspection - General principlesEN 571-12008-09-0160.60Penetrant testing - Part 1: General principles(Revision of ISOEN 571-1ISO 3452-2:2006Penetrant testing - Part 2: Testing of penetrant materialsEN ISO 3452-22006-08-1560.60Penetrant testing - Part 3: Reference test blocksEN ISO 3452-31998-12-1590.20Penetrant testing - Part 3: Reference test blocks - Technical Corrigendum 112001-02-0160.60Penetrant testing - Part 4: EquipmentEN ISO 3452-41998-12-1590.20Iso 3452-4:1998Penetrant testing - Part 4: EquipmentEN ISO 3452-41998-12-1590.20Iso 3453:1984*Liquid penetrant inspection - Means of verificationEN ISO 3452-41998-12-1590.20Iso 3453:1984*Liquid penetrant inspection - Means of verificationEN ISO 9934-12001-12-0190.6090.60Iso 9934-2:2002EN ISO 9934-1ISO 9934-2:2002Magnetic particle testing - Part 2: Detection mediaEN ISO 9934-22002-12-0190.60Iso 9934-2:2002Iso 9934-2:2002	ISO 3058:1998		Aids to visual inspection - Selection of low-power magnifiers	
ISO 3059:2001 Penetrant testing and magnetic particle testing - Viewing conditions EN ISO 3059 2001-11-01 90.60 Penetrant inspection - General principles EN ISO 3059 Withdrawn 95.99 Penetrant testing - Part 1: General principles(Revision of ISO EN 571-1 2008-09-01 60.60 Fenetrant testing - Part 2: Testing of penetrant materials EN ISO 3452-2 ISO 3452-2:2006 Penetrant testing - Part 3: Reference test blocks EN ISO 3452-3 1908-12-15 90.20 Penetrant testing - Part 3: Reference test blocks - Technical Corrigendum 1:2001 1 1 EN ISO 3452-4: 2001-02-01 60.60 Penetrant testing - Part 4: Equipment EN ISO 3452-4: 1:2001 1 1 EN ISO 3452-4: 2001-02-01 60.60 Penetrant testing - Part 4: Equipment EN ISO 3452-4: 1:2001 1 1 EN ISO 3452-4: EN ISO 3452-4: 1:2001 1 1 EN ISO 3452-4: EN ISO 3452-4: 1:203452:31984* Liquid penetrant inspection - Means of verification EN ISO 9934-1: 1:20934:1:2001 Magnetic particle testing - Part 1: General principles EN ISO 9934-1: <	1998-03-15	90.20		
2001-11-0190.60Penetrant inspection - General principlesWithdrawn95.99Penetrant inspection - General principlesEN 571-1ISO 3452-1:2008 2008-09-01Penetrant testing - Part 1: General principles(Revision of ISO 2008-09-01EN 571-1ISO 3452-2:2006 2006-08-15Penetrant testing - Part 2: Testing of penetrant materialsEN ISO 3452-2ISO 3452-3:1998 1998-12-15Penetrant testing - Part 3: Reference test blocksEN ISO 3452-3ISO 3452-3:1998/Cor 1:2001Penetrant testing - Part 3: Reference test blocks - Technical Corrigendum 11ISO 3452-3:1998/Cor 1:2001Penetrant testing - Part 4: EquipmentEN ISO 3452-4ISO 3452-4:1998 1998-12-15Penetrant testing - Part 4: EquipmentEN ISO 3452-41001-02-0160.60IIISO 3452-112001 2001-02-01Liquid penetrant inspection - Means of verificationEN ISO 9934-11SO 9934-1:2001 2001-12-01Magnetic particle testing - Part 1: General principlesEN ISO 9934-11SO 9934-2:2002 2002-12-01Magnetic particle testing - Part 2: Detection mediaEN ISO 9934-2	ISO 3059:2001		Penetrant testing and magnetic particle testing - Viewing conditions	EN ISO 3059
ISO 3452:1984**Penetrant inspection - General principlesWithdrawn95.99Penetrant inspection - General principlesEN 571-12008-09-0160.60Penetrant testing - Part 1: General principles(Revision of ISOEN 571-12008-09-0160.60Penetrant testing - Part 2: Testing of penetrant materialsEN ISO 3452-22006-08-1560.60Penetrant testing - Part 3: Reference test blocksEN ISO 3452-31998-12-1590.20Penetrant testing - Part 3: Reference test blocks - Technical Corrigendum1120011112001-02-0160.60Penetrant testing - Part 4: EquipmentEN ISO 3452-41998-12-1590.20Penetrant testing - Part 4: EquipmentEN ISO 3452-41998-12-1590.201ISO 3452-4:1998Penetrant testing - Part 4: EquipmentEN ISO 3452-41998-12-1590.201Iso 3452-4:1998Penetrant testing - Part 4: EquipmentEN ISO 3452-41998-12-1590.201Iso 3452-1:1998EN ISO 3934-11001-12-0190.601Iso 9934-1:1998EN ISO 9934-11001-12-0190.601Iso 9934-2:1998EN ISO 9934-21002-12-0190.601Iso 9934-2:1998EN ISO 9	2001-11-01	90.60		
Withdrawn95.99Penetrant testing - Part 1: General principles(Revision of ISOEN 571-12008-09-0160.60Penetrant testing - Part 2: Testing of penetrant materialsEN ISO 3452-22006-08-1560.60Penetrant testing - Part 3: Reference test blocksEN ISO 3452-21SO 3452-3:1998Penetrant testing - Part 3: Reference test blocksEN ISO 3452-31998-12-1590.20Penetrant testing - Part 3: Reference test blocks - Technical Corrigendum1120011112001-02-0160.60Penetrant testing - Part 4: EquipmentEN ISO 3452-41SO 3452-4:1998Penetrant testing - Part 4: EquipmentEN ISO 3452-41SO 3453:1984*Liquid penetrant inspection - Means of verificationEN ISO 9934-1Withdrawn95.99Magnetic particle testing - Part 1: General principlesEN ISO 9934-12001-12-0190.60Magnetic particle testing - Part 2: Detection mediaEN ISO 9934-2	ISO 3452:1984*	*	Penetrant inspection - General principles	
ISO 3452-1:2008 2008-09-01Penetrant testing - Part 1: General principles(Revision of ISOEN 571-12008-09-0160.60Penetrant testing - Part 2: Testing of penetrant materialsEN ISO 3452-22006-08-1560.60Penetrant testing - Part 3: Reference test blocksEN ISO 3452-31998-12-1590.20Penetrant testing - Part 3: Reference test blocks - Technical Corrigendum 1Penetrant testing - Part 3: Reference test blocks - Technical Corrigendum 11112001-02-0160.60Penetrant testing - Part 4: EquipmentEN ISO 3452-41998-12-1590.20Penetrant testing - Part 4: EquipmentEN ISO 3452-41998-12-1590.20Penetrant testing - Part 4: EquipmentEN ISO 3452-41998-12-1590.20Iso 3452-3:1984*Liquid penetrant inspection - Means of verificationEN ISO 3452-41908-12-1090.60Magnetic particle testing - Part 1: General principlesEN ISO 9934-12001-12-0190.60Magnetic particle testing - Part 2: Detection mediaEN ISO 9934-2	Withdrawn	95.99		
2008-09-0160.60EN ISO 3452-2:ISO 3452-2:2006Penetrant testing - Part 2: Testing of penetrant materialsEN ISO 3452-22006-08-1560.60Penetrant testing - Part 3: Reference test blocksEN ISO 3452-31998-12-1590.20Penetrant testing - Part 3: Reference test blocks - Technical CorrigendumISO 3452-3:1998/Cor1:20011Penetrant testing - Part 3: Reference test blocks - Technical Corrigendum12001-02-0160.60Penetrant testing - Part 4: EquipmentEN ISO 3452-41998-12-1590.20Penetrant testing - Part 4: EquipmentEN ISO 3452-41998-12-1590.20Iso 3453:1984*Liquid penetrant inspection - Means of verificationEN ISO 3452-4Withdrawn95.99Magnetic particle testing - Part 1: General principlesEN ISO 9934-12001-12-0190.60Magnetic particle testing - Part 2: Detection mediaEN ISO 9934-22002-12-0190.60Ponetrant inspection - Means of verificationEN ISO 9934-2	ISO 3452-1:200	8	Penetrant testing - Part 1: General principles(Revision of ISO	EN 571-1
ISO 3452-2:2006Penetrant testing - Part 2: Testing of penetrant materialsEN ISO 3452-22006-08-1560.6060.60EN ISO 3452-3ISO 3452-3:1998Penetrant testing - Part 3: Reference test blocksEN ISO 3452-31998-12-1590.2090.20Penetrant testing - Part 3: Reference test blocks - Technical Corrigendum1:2001112001-02-0160.60Fenetrant testing - Part 4: EquipmentEN ISO 3452-41998-12-1590.20Penetrant testing - Part 4: EquipmentEN ISO 3452-41998-12-1590.2090.41EN ISO 3452-41998-12-1590.20Penetrant inspection - Means of verificationEN ISO 3452-41908-12-1090.60Magnetic particle testing - Part 1: General principlesEN ISO 9934-12001-12-0190.60Magnetic particle testing - Part 2: Detection mediaEN ISO 9934-2	2008-09-01	60.60		
2006-08-1560.60EN ISO 3452-3ISO 3452-3:1998Penetrant testing - Part 3: Reference test blocksEN ISO 3452-31998-12-1590.20Penetrant testing - Part 3: Reference test blocks - Technical Corrigendum11200160.601ISO 3452-4:1998Penetrant testing - Part 4: EquipmentEN ISO 3452-41998-12-1590.20Penetrant testing - Part 4: EquipmentEN ISO 3452-41998-12-1590.20Iso 3453:1984*Liquid penetrant inspection - Means of verificationEN ISO 3452-41SO 3453:1984*Liquid penetrant inspection - Means of verificationEN ISO 9934-1Withdrawn95.99Magnetic particle testing - Part 1: General principlesEN ISO 9934-12001-12-0190.60Magnetic particle testing - Part 2: Detection mediaEN ISO 9934-22002-12-0190.60Fenetrant 2: Detection mediaEN ISO 9934-2	ISO 3452-2:200	6	Penetrant testing - Part 2: Testing of penetrant materials	EN ISO 3452-2
ISO 3452-3:1998Penetrant testing - Part 3: Reference test blocksEN ISO 3452-31998-12-1590.20Penetrant testing - Part 3: Reference test blocks - Technical Corrigendum112001112001-02-0160.60Penetrant testing - Part 4: EquipmentEN ISO 3452-41998-12-1590.20Penetrant testing - Part 4: EquipmentEN ISO 3452-41998-12-1590.20Iso 3453:1984*Liquid penetrant inspection - Means of verificationEN ISO 9934-21SO 3934-1:2001Magnetic particle testing - Part 1: General principlesEN ISO 9934-12001-12-0190.60Magnetic particle testing - Part 2: Detection mediaEN ISO 9934-22002-12-0190.60Ponetrant inspection - Means of verificationEN ISO 9934-2	2006-08-15	60.60		
1998-12-15 90.20 ISO 3452-3:1998/Cor Penetrant testing - Part 3: Reference test blocks - Technical Corrigendum 1:2001 1 2001-02-01 60.60 ISO 3452-4:1998 Penetrant testing - Part 4: Equipment 1998-12-15 90.20 ISO 3453:1984* Liquid penetrant inspection - Means of verification Withdrawn 95.99 ISO 9934-1:2001 Magnetic particle testing - Part 1: General principles 2001-12-01 90.60 ISO 9934-2:2002 Magnetic particle testing - Part 2: Detection media 2002-12-01 90.60	ISO 3452-3:199	8	Penetrant testing - Part 3: Reference test blocks	EN ISO 3452-3
ISO 3452-3:1998/Cor Penetrant testing - Part 3: Reference test blocks - Technical Corrigendum 1:2001 1 2001-02-01 60.60 ISO 3452-4:1998 Penetrant testing - Part 4: Equipment 1998-12-15 90.20 ISO 3453:1984* Liquid penetrant inspection - Means of verification Withdrawn 95.99 ISO 9934-1:2001 Magnetic particle testing - Part 1: General principles 2001-12-01 90.60 ISO 9934-2:2002 Magnetic particle testing - Part 2: Detection media 2002-12-01 90.60	1998-12-15	90.20		
1:2001 1 2001-02-01 60.60 ISO 3452-4:1998 Penetrant testing - Part 4: Equipment 1998-12-15 90.20 ISO 3453:1984* Liquid penetrant inspection - Means of verification Withdrawn 95.99 ISO 9934-1:2001 Magnetic particle testing - Part 1: General principles 2001-12-01 90.60 ISO 9934-2:2002 Magnetic particle testing - Part 2: Detection media 2002-12-01 90.60	ISO 3452-3:199	8/Cor	Penetrant testing - Part 3: Reference test blocks - Technical Corrigendum	
ISO 3452-4:1998 Penetrant testing - Part 4: Equipment EN ISO 3452-4 1998-12-15 90.20 ISO 3453:1984* Liquid penetrant inspection - Means of verification Withdrawn 95.99 90.20 ISO 9934-1:2001 Magnetic particle testing - Part 1: General principles ISO 9934-2:2002 Magnetic particle testing - Part 2: Detection media EN ISO 9934-2 2002-12-01 90.60 Magnetic particle testing - Part 2: Detection media EN ISO 9934-2	1:2001	60.60	1	
130 3452-4, 1998 Penetrant testing * Part 4: Equipment Etv 130 3452-4 1998-12-15 90.20 ISO 3453:1984* Liquid penetrant inspection - Means of verification Withdrawn 95.99 90.20 ISO 9934-1:2001 Magnetic particle testing - Part 1: General principles Etv 150 9934-1 1SO 9934-2:2002 Magnetic particle testing - Part 2: Detection media Etv 150 9934-2 2002-12-01 90.60 Magnetic particle testing - Part 2: Detection media Etv 150 9934-2	2001-02-01	00.00	Penetront testing Port 4: Equipment	EN ISO 2452 4
ISO 3453:1984* Liquid penetrant inspection - Means of verification Withdrawn 95.99 ISO 9934-1:2001 Magnetic particle testing - Part 1: General principles EN ISO 9934-2:2002 Magnetic particle testing - Part 2: Detection media EN ISO 9934-2:2002 Magnetic particle testing - Part 2: Detection media	1008-12-15	0	renetiant testing - rait 4. Equipment	EN 130 3452-4
Withdrawn 95.99 ISO 9934-1:2001 Magnetic particle testing - Part 1: General principles EN ISO 9934-2:2002 Magnetic particle testing - Part 2: Detection media EN ISO 9934-2:2001 EN ISO 9934-2:2002 ISO 9934-2:2001 Magnetic particle testing - Part 2: Detection media EN ISO 9934-2:2002 EN ISO 9934-2:2002	ISO 3453-1984*	90.20	Liquid penetrant inspection - Means of verification	
ISO 9934-1:2001 Magnetic particle testing - Part 1: General principles EN ISO 9934-1 2001-12-01 90.60 ISO 9934-2:2002 Magnetic particle testing - Part 2: Detection media 2002-12-01 90.60 EN ISO 9934-2	Withdrawn	95 99		
2001-12-01 90.60 ISO 9934-2:2002 Magnetic particle testing - Part 2: Detection media 2002-12-01 90.60	ISO 9934-1.200	1	Magnetic particle testing - Part 1: General principles	EN ISO 9934-1
ISO 9934-2:2002 Magnetic particle testing - Part 2: Detection media EN ISO 9934-2 2002-12-01 90.60	2001-12-01	90.60		
2002-12-01 90.60	ISO 9934-2.200	2	Magnetic particle testing - Part 2: Detection media	EN ISO 9934-2
	2002-12-01	90.60		1.1.00 00012
ISO 9934-3:2002 Magnetic particle testing - Part 3: Equipment EN ISO 9934-3	ISO 9934-3:200	2	Magnetic particle testing - Part 3: Equipment	EN ISO 9934-3
2002-07-15 90.60	2002-07-15	90.60		
ISO 9935:1992* Penetrant flaw detectors - General technical requirements	ISO 9935:1992*		Penetrant flaw detectors - General technical requirements	
Withdrawn 95.99	Withdrawn	95.99		
* Withdrawn March 2007, ** Withdrawn August 2008	* Withdrawn Ma	arch 200	7, ** Withdrawn August 2008	-

SC 3		Ultrasonic testing	
Referenc	e	Title	CEN Documents
Publication Date	Stage		CEN Documents
ISO 2400:1972*	*	Welds in steel Reference block for the calibration of equipment for	
1972-06-15	90.93	ultrasonic examination	
ISO 5577:2000		Ultrasonic inspection - Vocabulary	EN 1330-4
2000-05-01	90.93		
ISO 7963:2006***		Ultrasonic testing - Specification for calibration block No. 2	
2006-09-15	60.60		
ISO 10375:1997		Ultrasonic inspection - Characterization of search unit and sound field	EN 12268-2
1997-04-15	90.93		
ISO 12710:2002	2	Ultrasonic inspection - Evaluating electronic characteristics of ultrasonic	
2002-09-15	90.93	test instruments	
ISO 12715:1999)	Reference blocks and test procedures for the characterization of contact	EN 12223
1999-08-15	90.93	search unit beam profiles	
ISO 18175:2004	1	Non-destructive testing - Evaluating performance characteristics of	
2004-03-15	90.93	ultrasonic pulse-echo testing systems without the use of electronic	

*** Transferred from ISO/TC 44/SC 5

SC 4		Eddy current methods								
Referenc	е	Title	CEN Documents							
Publication Date	Stage	nue	CEN Documents							
ISO 12718		Eddy current testing - Terminology	EN ISO 12718							
2008-08-15	60.60									
ISO 15548-1		Equipment for eddy current examination - Part 1: Instrument characteristics	EN ISO 15548-1							
2008-09-15 60.60		and verification								
ISO 15548-2		Equipment for eddy current examination - Part 2: Probe characteristics and	EN ISO 15548-2							
2008-09-15 60.60		verification								
ISO 15548-3		Equipment for eddy current examination - Part 3: System characteristics	EN ISO 15548-3							
2008-09-15 60.60		and verification								
ISO 15549		Eddy current examination - General principles								
2008-08-01	60.60									

SC 5		Radiation methods									
Reference	e	Title	CEN Documents								
Publication Date	Stage	The	CEN Documents								
ISO 5576:1997		Industrial X-ray and gamma-ray radiology - Vocabulary	EN 1330-3								
1997-08-01	90.93										
ISO 5579:1998		Radiographic examination of metallic materials by X- and gamma rays -	EN 444								
1998-07-01	90.20	Basic rules									
ISO 5580:1985		Industrial radiographic illuminators Minimum requirements									
1985-03-15	90.93										
ISO 11537:1998	3	Thermal neutron radiographic testing - General principles and basic rules									
1998-07-15	90.20										
ISO 11699-1:19	98****	Industrial radiographic films Part 1: Classification of film systems for									
Withdrawn	95.99	industrial radiography									
SO 11699-1:200	8	Industrial radiographic film — Part 1: Classification of film systems	EN 584-1								
2008-09-15	60.60	for industrial radiography (Revision of ISO 11699-1:1998)									
ISO 11699-2:19	98	Industrial radiographic films - Part 2: Control of film processing by means	EN 584-2								
1998-07-01	90.20	of reference values									
ISO 12721:2000)	Thermal neutron radiographic testing - Determination of beam L/D ratio									
2000-04-15	90.93										
ISO 14096-1:200	05	Qualification of radiographic film digitisation systems - Part 1: Definitions,	EN 14096-1								
2005-06-15	90.93	quantitative measurements of image quality parameters, standard reference									
180 14006 2:20	05	Itilm and qualitative control	EN 14006 2								
2005-06-15	00 03	Qualification of radiographic finite digitisation systems - r art 2. Withinton	EN 14050-2								
2005-06-15 90.93		Padiation methods - Computed tomography - Part 1: Principles									
2002-06-01	02	Radialion memous - computed tomography - rait 1. rindpies									
190 15708-2.20	02	Padiation methods - Computed tomography - Part 2: Examination practices									
2002-07-01	02	Radiation methods - computed temography - r art 2. Examination practices									
ISO 19232-1.20	∩4	Image quality of radiographs - Part 1: Image quality indicators (wire type) -	FN 462-1								
2004-07-01		Determination of image quality value									
ISO 19232-1:20	04	Image quality of radiographs - Part 1: Image quality indicators (wire type) -									
/Cor 1:2007	0.	Determination of image guality value - Technical Corrigendum 1									
2007-07-15	60.60										
ISO 19232-2:20	04	Image quality of radiographs - Part 2: Image guality indicators (step/hole	EN 462-2								
2004-07-01	90.93	type) - Determination of image quality value									
ISO 19232-2:20	04	Image quality of radiographs - Part 2: Image quality indicators (step/hole									
/Cor 1:2007		type) - Determination of image quality value - Technical Corrigendum 1									
2007-07-15	60.60										
ISO 19232-3:20	04	Image quality of radiographs - Part 3: Image quality classes for ferrous	EN 462-3								
2004-07-01	90.93	metals									
ISO 19232-4:20	04	Image quality of radiographs - Part 4: Experimental evaluation of image	EN 462-4								
2004-07-01	90.93	quality values and image quality tables									
ISO 19232-5:20	04	Image quality of radiographs - Part 5: Image quality indicators (duplex wire	EN 462-5								
2004-07-01	90.93	type) - Determination of image unsharpness value									
ISO/TS 21432:2	005	Test methods for determining residual stresses by neutron diffraction	CEN ISO TS 21432								
2005-07-15	90.20										
ISO/TS 21432:2	005	Test methods for determining residual stresses by neutron diffraction -									
/Cor 1:2008		Technical Corrigendum 1									
2008-01-15	60.60										

**** Withdrawn September 2008

SC 6		Leak detection methods							
Referenc	e	Title	CEN Documents						
Publication Date	Stage	The	CEN Documents						
ISO 3530:1979		Vacuum technology - Mass-spectrometer-type leak-detector calibration							
1979-09-01	90.60								

SC 7		Personnel qualification								
Referenc	е	Title	CEN Documents							
Publication Date	Stage	Title								
ISO 9712:2005		Qualification and certification of personnel	EN 473:2000							
2005-02-15	90.60									
ISO 9712:2005		Qualification and certification of personnel - Technical Corrigendum 1								
/Cor 1:2006										
2006-11-01	60.60									
ISO 20807:2004		Qualification of personnel for limited application of non-destructive testing								
2004-03-01	90.93									

|--|

Reference	Title	CEN Documents				
Publication Date Stage	Title	CEN Documents				
ISO/TS 22809:2007	Discontinuities in specimens for use in qualification examinations	CEN/TS 15053				
2007-11-15 60.60						

SC 9		Acoustic emission testing					
Referenc	е	Title	CEN Decumente				
Publication Date	Stage	The	CEN Documents				
ISO 12713:1998	;	Acoustic emission inspection - Primary calibration of transducers					
1998-07-15	90.93						
ISO 12714:1999		Acoustic emission inspection - Secondary calibration of acoustic emission					
1999-07-15	90.93	sensors					
ISO 12716:2001		Acoustic emission inspection - Vocabulary					
2001-06-15	90.93						

Activity Report

1. 16th Plenary Meeting of ISO/TC 135

ISO/TC 135 held its 16th plenary meeting in Buenos Aires on October 26, 2007. In the plenary, the following were reported:

- (1) Replacement of TC 135 Chairman and Secretary The former TC 135 Secretary, Prof. Hatano, was nominated for the new chairman of TC 135 by JISC in February 2007 and was approved by ISO/CS. Mr. Tsuchiya was appointed new secretary.
- (2) Division of SC3 and Change of its Secretariat SC 3 was divided into two SCs, namely SC 3 Ultrasonic testing (secretariat; DIN/Germany) and SC 9 Acoustic emission testing (secretariat; ABNT/Brazil).
- (3) Revision of EN473 The progress of revision work of EN 473 was reported with the account on discrepancy between ISO 9712 and EN 473.
- (4) Revision of ISO 11484

ISO/TC 135 opposed to the plan to expand the scope of ISO 11484 Steel tubes for pressure purposes - Qualification and certification of non-destructive testing (NDT) personnel that was prepared by TC 17 Steel. The objection to the draft ISO 11484 was accepted by TC 17/SC 19 and the draft was amended.

(5) New Work Item Proposal by VAMAS

The Versailles Project on Advanced Materials & Standards: Technical Working Area 26 – Full Field Optical Stress and Strain Measurements (VAMAS TWA26), circulated a letter to TC 135 proposing their two pre-standards on calibration of optical stress and strain gauge as the draft international standards. Their proposal was transferred to TC 135/SC 2 *Surface methods.* SC 2 has been examining the contents of VAMAS standards and will ballot for NWI handled by SC 2.

- (6) Cooperation with Other Organizations on NDT The cooperation with the organization external from ISO (CEN/TC 138, ICNDT, and EFNDT) and their brief contents were reported.
- (7) Next TC 135 Plenary Meeting

It was also reported that ISO/TC 135 was invited by ChSNDT to hold TC 135 plenary in Shanghai in conjunction with 17WCNDT in 2008. However, TC 135 had to decline the invitation as TC 135 has just held its plenary and already decided to hold the next plenary in Moscow in June 2010. Instead of TC 135 plenary, SC 7/WG 7 and SC 8 will hold their meeting in Shanghai in October 2008.

(8) Publication of CEN ISO/TR 25107 and 25108

Concerning CEN ISO/TR 25107 Guidelines for NDT training syllabuses and CEN ISO/TR 25108 Guidelines for NDT personnel training organizations that were prepared by ISO/TC 135/WG 2 Training guidelines (Convener Dr. Kozlowski) in cooperation with CEN/TC 138, it was reported that these were published on 2006/07/01 after parallel voting by ISO and CEN.



At AFNOR, June 2008

2. Settlement of the discrepancy between ISO 9712 and EN 473

The discrepancy observed between ISO 9712 and EN 473 is a main concern for most people involved in NDT. In connection with this point the ISO/TC 135 chair and secretary had a discussion with the CEN/TC 138 chair and secretary at AFNOR, on the way from the ISO Chairs' Meeting in Geneva, in June 2008. Several measures with basic policy were talked among them but specific method for settlement needs further discussion. ISO/TC 135 and CEN/TC 138 will continue to solve this problem.

- 3. New and Possible Liaisons
 - (1) Liaison with ISO/TC 108/SC 5

TC 135/SC 7, 8 and 9 have established a liaison with ISO/TC 108/SC 5 "Mechanical vibration and shock/condition monitoring and diagnostics of machines". The main purpose of these liaisons is the cooperation in the field of application of acoustic and thermal methods to preventive maintenance.

(2) Liaison with INLAC

INLAC (Latino American Institute for Quality Assurance) proposed ISO/TC 135 to establish a liaison. This proposal will be ballot (Committee Internal Ballot) inside TC 135.

Message to CEN/TC 138 (March2007)

ISO/TC 135 N 310

	Transmission						
	Our Date	07-03-19					
	Our Ref.	07L003					
	Number of	pages: 2 (Incl. this page)					
To: Chairman of CEN/TC 138	From: ISC	0/TC 135 Secretariat					
Secretary of CEN/TC 138	Japanese Society for						
Cc: ISO Central Secretariat	Non-Destructive Inspection						
Conveners of ISO/TC 135/SC 7/WGs	MB	R99 Bldg., 67 Kanda-sakumagashi					
Chairman of ICNDT	Chi	yoda-ku, Tokyo, 101-0026 Japan					
President of EFNDT	Pho	one:+81358215101					
President of APCNDT	Fax	: +81 3 3863 6524					
	Em	ail : iso@jsndi.or.jp					

Subject: Revision of EN 473:2000

Dear Mr. Kozlowski and Mr. Chapelain:

Thank you for the document N 870 Result of electronic balloting for CEN enquiry of prEN 473 Non destructive testing - Qualification and certification of NDT personnel - General principles.

We are still concerned about the current revision of EN 473:2000, since, as we explained before (please refer to ISO/TC 135 N 305), the proposed changes could cause substantial divergence between EN 473 and ISO 9712:2005: Non-destructive testing - Qualification and certification of personnel. We are afraid that the revision could put ISO/TC 135 members, including of course, European members, in a difficult position regarding qualification and certification of NDT personnel.

As per the role of a special liaison to comply with the Vienna agreement, we would like to propose at the minimum, that the fundamental parameters such as training hours, should be either unchanged from EN 473:2000 or aligned with ISO 9712:2005, provided that this subject is reviewed during the next revision of ISO 9712. For your consideration, a table of training requirements is attached. In the table, training hours of ISO 9712 are converted to those exclusive of level1 or level 2 for comparison with EN 473.

We would appreciate it if our proposal be considered at the next CEN/TC 138 meeting scheduled for April 2007 in Paris, and we look forward to seeing you there.

Best Regards,

Hajime Hatano Chairman, ISO/TC 135

Takeo Tsuchiya Secretary, ISO/TC 135 *Richard V. Murphy* Chairman, ISO/TC 135/SC 7

Patricia A. Dolhan Secretary, ISO/TC 135/SC 7

Training requirements

			Leve (hour	l 1 ˈs)			Leve (hour	l 2 ˈs)		Level 3 (hours)				
	NDT Method	EN	1 473 ¹⁾	ISO 9712 ¹⁾		EN	1 473 ²⁾	ISO 9)712 ³⁾	EN	1 473 ²⁾	ISO 9712 ³⁾		
		2000	Propose Revision	2005	1999	2000	Propose Revision	2005	1999	2000	Propose Revision	2005	1999	
AT		40	40	40		64	40	64			40	46		
ΕT		40	40	40	40	40	40	64	40		40	46		
LT	A - Basic knowledge	8	8	8		16	8				8	12		
	B - Pressure method	14	16	14		28	24	31			24	21		
	C - Tracer gas method	18	16	18		36	32	36			32	24		
MT		16	16	16	16	24	24	24	24		32	20		
ΡT		16	16	16	16	24	24	24	24		24	20		
RT		40	72	40	40	80	80	80	80		72	40		
UT		40	72	40	40	80	80	80	80		72	40		
VT		16	16	16		24	24	24			24	24		

Notes: ¹⁾ Minimum requirements. ²⁾ Minimum requirements, exclusive of level 1 or level 2. ³⁾ Minimum requirements, converted to those exclusive of level 1 or level 2.

Comparison of training requirements (As of September 2008)

		Level 1 (hours)							Level 2 (hours)						Level 3 (hours)				
	NDT Method		l 473 ¹⁾	CEN ISO TR 25107		ISO 9712 ¹⁾		EN 473 ²⁾		CEN ISO TR 25107		ISO 9712 3)		⁾ EN 473 ²⁾		CEN ISO TR 25107		ISO 9712 ³⁾	
			2008	E ⁴⁾	P ⁵⁾	2005	1999	2000	2008	E ⁴⁾	P ⁵⁾	2005	1999	2000	2008	E ⁴⁾	P ⁵⁾	2005	1999
AT		40	64	38.5	24.0	40		64	64	36.0	23.0	64			48	44.5	4.0	46	
ΕT		40	40	19.0	19.0	40	40	40	40	25.0	23.0	64	40		40	29.5	14.0	46	
LT	A - Basic knowledge	8	8	7.0		8		16	8	10.0		16			8	11.0		12	
	B - Pressure method	14	16	13.5		14		28	24	29.0		31			24	22.5		21	
	C - Tracer gas method	18	16	18.5		18		36	32	37.0		36			32	28.5		24	
MT		16	16	18.5	10.0	16	16	24	24	27.0	12.5	24	24		32	31.0	3.0	20	
PT		16	16	9.0	8.0	16	16	24	24	16.0	11.0	24	24		24	20.0	3.0	20	
RT		40	72	40.5	32.5	40	40	80	80	83.0	20.0	80	80		72	91.5	31.0	40	
UT		40	64	38.0	24.0	40	40	80	80	57.0	38.0	80	80		72	54.5	28.0	40	
VT		16	16	11.0	10.0	16		24	24	17.5	7.75	24			24	21.0	4.0	24	

Notes: ¹⁾ Minimum requirements. ²⁾ Minimum requirements. Exclusive of level 1 or level 2. ³⁾ Minimum requirements. Figures were converted to exclude training hours of level 1 or level 2. ⁴⁾ Educational training time. ⁵⁾ Practical training time.

Discussion Between CEN and ISO ISO/TC 135 N 334 (June 2008) Transmission ISO JSNDI Our Date 08-07-17 Our Ref. 08L009 Number of pages: 5 (Incl. this page) To: ISO Central Secretariat From: ISO/TC 135 Secretariat P-members of ISO/TC 135 Japanese Society for O-members of ISO/TC 135 Non-Destructive Inspection Chairmen of ISO/TC 135/SCs MBR99 Bldg. Secretaries of ISO/TC 135/SCs 67 Kanda-sakumagashi Chiyoda-ku Chairman of CEN/TC 138 Tokyo, 101-0026 Japan Secretary of CEN/TC 138 TC Secretariats in Liaison Phone: +81 3 5821 5101

Subject: Discussion on the solution of discrepancy between ISO 9712 and EN 473

Fax

: +81 3 3863 6524

Email : iso@jsndi.or.jp

Dear Sir or Madam,

This is to inform you of the recent discussion held between ISO/TC 135 and CEN/TC 138.

On our return from ISO TC/SC Chairs' Conference 2008 held in Geneva, Chairman and Secretary of TC 135 visited AFNOR to discuss with CEN/TC 138 to solve the recent discrepancies between ISO 9712 and EN 473. Formerly in September 2007, Mr. Kozlowski, the Chairman of CEN/TC 138, proposed to establish Joint WG between ISO and CEN.

However, this proposal could not be discussed in previous TC 135 plenary in Buenos Aires in October 2007 because of his absence due to health problem but only introduced to the participants to the plenary. In order to start the discussion on their proposal in SC 7 meeting in Shanghai this October, the outline of establishment of Joint WG needs to be discussed between ISO and CEN in advance. For this purpose Chairman and Secretary visited AFNOR.

In the meeting TC 135 Chairman expressed that the proposal of joint WG was too late taking the revision of EN 473 into account because that the revision of EN 473 has been completed already (see attached CEN/TC 138 N976), and that the establishment of Joint WG will become meaningless without revision of EN 473.

Responding to this, Mr. Kozlowski expressed the basic idea on the conformity between ISO 9712 and EN 473 (see attached CEN/TC 138 N977). His opinion was to start the discussion by Joint WG prior to the revision of systematic review of ISO 9712 for its effective review. He also expressed to participate in SC 7 meeting in Shanghai to discuss this matter.

TC 135's response to this subject will be discussed by TC 135/SC 7, as the main subject is to solve the discrepancies between ISO 9712 and EN 473.

However, all SCs of ISO/TC 135 are also related to this subject to some extent and requested to watch the progress from the viewpoint of each SC.

Sincerely,

Hajime Hatano

Chairman, ISO/TC 135

Takeo Tsuchiya

Secretary, ISO/TC 135