

REGULATIONS and STANDARDISATION

an example from CEN/TC 12



SCOPE of European Technical Committee CEN/TC 12

- ▶ **TITLE:** Materials, equipment and offshore structures for petroleum, petrochemical and natural gas industries
- ▶ **SCOPE:** Standardisation of the materials, equipment and offshore structures used in the drilling, production, transport by pipelines and processing of liquid and gaseous hydrocarbons within the petroleum, petrochemical and natural gas industries, *excluding gas infrastructure from the input of gas into the on-shore transmission network up to the inlet connection of gas appliances (covered by CEN/TC234) and those aspects of offshore structures covered by IMO requirements (ISO/TC8).*

Note : CEN/TC 12 scope is nearly identical to ISO/TC 67 scope.

- ▶ *The standardization within CEN/TC 12 is to be achieved wherever possible by adoption of ISO standards.*

CEN/TC 12

CEN/TC12 is working in Europe according to the goal of the Industry:

GLOBAL STANDARDS USED LOCALLY WORLDWIDE

- ▶ CEN TC12 adopts ISO/TC 67 Standards.
- ▶ Vienna Agreement between ISO and CEN .
- ▶ 3 European countries shall participate to the working groups.
- ▶ Parallel voting of the common standards (or UAP for those standards which excludes gas concerns in Europe).
- ▶ European Standards become National Standards in 31 countries when accepted in CEN.



Global Standards Used Locally Worldwide

ISO TITLE	ISO	API - USA	CEN- EUROPE	GB - CHINA	GOST R - RUSSIA	ST RK - KAZAKHSTAN	GSO - GULF
Petroleum and natural gas industries - Flexible pipe systems for subsea and marine riser applications	ISO 10420:1994 (revised by ISO 13628-11:2007)			GB/T 20661-2006 ISO 10420:1994 IDT			
P&NGI – Drilling and production equipment – Wellhead and Christmas trees equipment	ISO 10423:2009	API Spec 6A 19th ed./ ISO 10423:2003 (MOD) + 2 err + 4 add.	EN ISO 10423: 2009 (2nd edition)	GB/T 22513-2008 ISO 10423:2003 MOD	GOST R ISO 10423:2009	ST RK ISO 10423:2004 (ISO 10423:2003 IDT)	
P&NGI – Rotary drilling equipment – Part 1: Rotary Drill stem elements.	ISO 10424-1:2004	API Spec 7-1 1 st ed. / ISO 10424-1:2004 (IDT)	EN ISO 10424-1:2004			ST RK ISO 10424-1: 2006 (ISO 10424-1: 2004 IDT)	
P&NGI -- Rotary drilling equipment - Part 2: Threading, gauging and testing of rotary shouldered thread connections	ISO 10424-2:2007	API Spec 7-2 1 st ed. / ISO 10424-2:2007 (IDT)	EN ISO 10424-2:2007	GB/T 22512.2-2008 ISO 10424-2:2007 MOD			
P&NGI – Cements and materials for well cementing – Part 2: Testing of well cements	ISO 10426-2:2003 (incl. Amd 1:2005 and Corr 1:2006) (In revision)	API RP 10B-21 st ed./ ISO 10426-2:2003 (IDT)	EN ISO 10426-2:2003 (incl.Amd1:2005 and COR 1:2007)(In revision WI 225)				
P&NGI - Casing centralizers - Equipment for well cementing -- Part 1: Casing bow-spring centralizers	ISO 10427-1:2001 (confirmed)	API Spec 10D 6th ed. / ISO 10427-1:2001 (IDT)	EN ISO 10427-1: 2004 (confirmed)	GB/T 19831.1-2005 ISO 10427-1:2001 IDT		ST RK ISO 10427-1: 2004 (ISO 10427-1:2001 IDT)	
P&NGI – Equipment for well cementing - Part 2: Centralizers placement and stop-collar testing	ISO 10427-2:2004	API RP 10D-2 1st ed. / ISO 10427-2:2004 (IDT)	EN ISO 10427-2:2004	GB/T 19831.2-2008 ISO 10427-2:2004 IDT			
P&NGI – Equipment for well cementing - Part 3: Performance testing of cementing float equipment	ISO 10427-3:2003	API RP 10F 3rd ed. / ISO 10427-3: 2003 (IDT)	EN ISO 10427-3:2004	GB/T 20971-2007 ISO 10427-3:2003 IDT		ST RK ISO 10427-3: 2004 (ISO 10427-3:2003 IDT)	
P&NGI – Sucker rods (pony rods, polished rods, couplings and sub-couplings) – Specification	ISO 10428:1993 (Fast Track) (In revision)	API Spec 11B 26th ed. / ISO 10428:1993 (IDT)	Also in progress in CEN/TC 12 (WI 15)			ST RK 1259- 2004 (ISO 10428:1993, NEQ)	
P&NGI – Pumping units – Specification.	ISO 10431:1993 (Fast Track) (NWI cancelled)	API Spec 11E 18th ed. / ISO 10431:1993 (IDT)	prEN ISO 10431 (NWI cancelled)			ST RK 1260-2004 (ISO 10431:1993, NEQ)	
P&NGI – Downhole equipment - Subsurface safety valve equipment	ISO 10432:2004	API Spec 14A 11 th ed. / ISO 10432: 2004 (IDT)	EN ISO 10432:2004 (2 nd edition)			ST RK ISO 10432:2004 (ISO 10432:2004 IDT)	
Bolted bonnet steel gate valves for petroleum, petrochemical and allied industries	ISO 10434:2004 (in revision)	API 600 12 th edition / ISO 10434:2001 (MOD)	EN ISO 10434:2004 (CEN TC 69)	GB/T 12234-2007 ISO 10434:2004 EQV		ST RK ISO 10434:2006 (ISO 10434:2004 IDT)	
Petroleum, petrochemical and natural gas industries – Steam turbine- Special purpose application	ISO 10437:2003 (in revision)	API Std 612 6th edition / ISO 10437:2003	EN ISO 10437:2003 (in revision WI 231)				GSO ISO 10437:2008

ISO TITLE	ISO	API - USA	CEN- EUROPE	GB - CHINA	GOST R - RUSSIA	ST RK - KAZAKHSTAN	GSO - GULF
P&NGI - Drilling and production equipment - Inspection, maintenance, repair and remanufacture of hoisting	ISO 13534:2000 (in revision)	API RP 8B 7th edition / ISO 13534:2000 (MOD) +Add1 2003 + Add2 2005	EN ISO 13534:2000 (in revision - WI 186)	GB/T 19832-2005 ISO 13534:2000 IDT	GOST R ISO 13534 :2009	ST RK 13534:2004 (ISO 13534:2000 IDT)	
P&NGI - Drilling and production equipment – Hoisting equipment	ISO 13535:2000 (in revision)	API Spec 8C 4 th edition / ISO 13535:2000 (MOD) + Add1 2003 + Add 2 2005	EN ISO 13535:2000 (in revision - WI 187)	GB/T 19190-2003 ISO 13535:2000 IDT	GOST R ISO 13535 confirmed GOST R 53683:2009	ST RK 1263-2004 (ISO 13535:2000, NEQ)	
P&NGI - Drilling and production equipment - Part 1: Design and operation of marine drilling riser	ISO 13624-1:2009		EN ISO 13624-1 : 2009				
P&NGI – Drilling and production equipment – Part 2: Deepwater drilling riser methodologies, operations, and integrity technical report	ISO TR 13624-2:2009						
P&NGI - Drilling and production equipment – Marine drilling riser couplings	ISO 13625:2002	API Spec 16R (1997)	EN ISO 13625:2002			ST RK ISO 13625-2009 (ISO 13625-2002 E, IDT)	
P&NGI - Drilling and production equipment –Drilling and well servicing structures	ISO 13626:2003		EN ISO 13626:2004		GOST R ISO 13626 Plan 2009	ST RK ISO 13626:2006 (ISO 13626:2003 IDT)	
P&NGI - Design and operation of subsea production systems - Part 1:General requirements and recommendations	ISO 13628-1:2005 Amdt 1 & Amdt 2 in progress (in revision)	API RP 17A 4th edition / ISO 13628-1:2005 (IDT)	EN ISO 13628-1:2005 (Amdt 1 WI 215 & WI 238) (in rev. WI 257)		GOST R ISO 13628-1 Plan - 2009	ST RK ISO 13628-1:2009 (ISO 13628-1:2005 IDT)	
P&NGI - Design and operation of subsea production systems - Part 2: Flexible pipe systems for subsea and marine applications	ISO 13628-2:2006 + COR 1: 2009	API Spec 17J 3rd ed. / ISO 13628-2:2006 (IDT)	EN ISO 13628-2:2006 + COR1 :2009	GB/T 21445.2-2008 ISO 13628-2:2000 IDT	GOST R ISO 13628-2 Plan - 2009	ST RK ISO 13628-2:2009 (ISO 13628-1:2006 IDT)	GSO ISO 13628-2:2009
P&NGI - Design and operation of subsea production systems - Part 3: Through flowline (TFL) systems	ISO 13628-3:2000 (confirmed)	API RP 17C 2 nd edition / ISO 13628-3:2000 (IDT)	EN ISO 13628-3:2000 (confirmed)	GB/T 21412.3-2009 ISO 13628-3:2000 IDT	GOST R ISO 13628-3 Plan - 2009		GSO ISO 13628-3:2009
P&NGI - Design and operation of subsea production systems - Part 4:Subsea wellhead and tree equipment	ISO 13628-4:1999 (in revision)	API Spec 17D 2nd edition (National Adoption under committee consideration)	EN ISO 13628-4:1999 (in revision - WI 160)	GB/T 21412.4-2008 ISO 13628-4:1999 IDT	GOST R ISO 13628-4 Plan - 2009		GSO ISO 13628-4:2009
P&NGI –Design and operation of subsea production systems – Part 5: subsea control umbilicals	ISO 13628-5:2009	API Spec 17E 3rd ed. / ISO 13628-5:200 (IDT)	EN ISO 13628-5 : 2009			ST RK ISO 13628-5:2009 (ISO 13628-5:2002 IDT)	GSO ISO 13628-5:2009
P&NGI - Design and operation of	ISO 13628-6:2006 (in	API Spec 17F 2nd ed. /	EN ISO 13628-6:2006 (in	GB/T 21412.6-2009			

CEN/TC 12 WORK PROGRAM

- **59 Work Items**
- Already published standards:
 - 121 EN ISO (Identical) published standards**
(in 2009, 16 EN standards have been published)
 - + 6 EN (ISO modified) standards**
(exclusion of gas infrastructure industries)
 - + 1 CEN TR 15549 (piping + ASME B31-3 + PED)**

Conclusion : A large number of technical matters for our industry are covered by CEN/TC12 standards.

REGULATIONS in Europe

- ▶ 27 countries are a member of European Union.
- ▶ Each country has its National set of regulations (laws, decrees, etc.).
- ▶ For historical reasons, they were all initially different.

- ▶ At a higher level are the European regulations called « Directives ».
- ▶ Each country has a duty to adapt its National regulations to be in accordance with European regulations.

Examples of 'New approach' directives

- ▶ Low Voltage (D-2-3)
- ▶ Simple Pressure Vessels (D-2-4)
- ▶ Construction products (D-2-5)
- ▶ Electromagnetic compatibility (EMC) (D-2-8)
- ▶ Machinery (D-2-1)
- ▶ Personal protective equipment (PPE) (D-2-6)
- ▶ Equipment explosive atmospheres (ATEX) (D-2-7)
- ▶ Lifts (D-2-9)
- ▶ Pressure equipment (D-2-2)

European directives concerning the protection of workers

- ▶ Framework directive (D-3)
- ▶ Workplaces Directive (D-3-1)
- ▶ Use of work equipment Directive (D-3-2)
- ▶ Use of personal protective equipment (D-3-3)
- ▶ Work with display screen equipment (D-3-4)
- ▶ Manual handling of loads Directive (D-3-5)
- ▶ The Personal Protective Equipment Directive (D-3-11)
- ▶ Mineral-extracting industries (drilling) (D-3-6)
- ▶ Minimum health and safety requirements on temporary and mobile sites (D-3-10)
- ▶ Exposure to Chemical agents (D-3-7)
- ▶ Physical agents – noise (D-3-8)
- ▶ Organisation of Working time (D-3-9)
- ▶ Safety and Health Signs at Work (D-3-12)

Role of CEN/TC 12 experts regarding regulations

- ▶ A new edition of the **European Project Leader (EPL) Manual** has now been published.
- ▶ It includes an updated list of European Directives, a chapter on environmental issues, and a number of links.
- ▶ This valuable tool is available on CEN/TC 12 website, and we encourage everyone to use it.



CEN/TC 12 "Materials, equipment and offshore structures for petroleum, petrochemical and natural gas industries"

EPL MANUAL

EUROPEAN PROJECT LEADER MANUAL

January 2010

HelpDesk : CEN/TC 12 secretariat

Valérie MAUPIN Tél: +33 1 41 62 87 02
valerie.maupin@afnor.org

Marie BOURBIGOT (Support)
Tél: +33 1 41 62 87 20
marie.bourbigot@afnor.org

<https://ecom.afnor.org/livelink-en/livelink.exe/open/cen12>

Version 2

CEN/TC 12 AH4

- ▶ **1- INTRODUCTION**
- ▶ **2- CEN/TC12'S EXPECTATIONS OF EUROPEAN PROJECT LEADERS**
- ▶ **3 – EPL'S CHECKING OF EUROPEAN DIRECTIVES**
- ▶ **4. GUIDANCE ON EUROPEAN MODIFICATIONS (IF UNAVOIDABLE)**
- ▶ **5. CONSIDERATION OF ENVIRONMENTAL ASPECTS IN CEN/TC 12 STANDARDS**
- ▶ **ANNEX A : CEN/TC 12 AND ADOPTION PROCESS**
- ▶ **ANNEX B : ADVICE FOR DRAFTING CEN/TC 12 STANDARDS**
- ▶ **ANNEX C: EXAMPLE OF CHECK LIST FOR EUROPEAN PROJECT LEADERS**
- ▶ **ANNEX D : DIRECTIVES**
- ▶ **ANNEX E : BUSINESS PLAN** (link)
- ▶ **ANNEX F : CEN/TC 12 PROGRAMME OF WORK** (link)
- ▶ **ANNEX G : LIST OF RESOLUTIONS ADOPTED BY CEN/TC 12** (link)
- ▶ ANNEX H : CEN/TCs which have a relation with CEN/TC 12 work ;
- ▶ ANNEX I : INFORMATION ACCESS GUIDE
- ▶ **ANNEX J : DOC ISO/TC 67 N 435rev8 ISO/TC 67 Policies and Procedures Guide** (Link)
- ▶ ANNEX K : OTHERS USEFUL DOCUMENTS (ISO Guides)
- ▶ ANNEX L : List of Acronyms used in standardization;
- ▶ **ANNEX M : Environmental Checklist**

Role of the EPL

- ▶ Within the working group of a given item, one of the European experts (designated as EPL) has the duty to check that the content of the standard being drafted is not in contradiction with European regulations.
- ▶ This is done from the very beginning of standardisation work so that any problem can be detected as soon as possible.
- ▶ Same applies for Environmental issues.

CEN/TC 12

THANK YOU FOR YOUR ATTENTION

gilles.trican@total.com