

OVERVIEW ON REFERENCES TO EN 729 AND ISO 3834 BY PRODUCT STANDARDS

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The tables below compile the product standards and drafts, known to me, that refer in any way to EN 729 or ISO 3834. It exemplifies a variety of ways to refer to the different parts ("levels") and which indicates that some activities might be needed to give guidance on making reference to EN 729/ISO 3834, this to provide some uniformity and clarity for the users.

This report is maintained to aid CEN/TC 121/SC 4 and ISO/TC 44/SC 10, to have an overview of relevant standards, their way of referring and also identifying the responsible TCs.

Complementary information and/or comments are appreciated, mathias.lundin@svets.se.

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Table 1 - References to EN 729 by EN product standards

Designation	Title	How reference to EN 729 is made	Committee
prEN 131-2	Ladders - Part 2: Requirements, testing, marking	"Welding of joints is permitted if welding procedures and welding personnel are suitable. EN 719 and EN 729-1 to EN 729-4 have to be observed."	CEN/TC 93
EN 1065:1999	Adjustable telescopic steel props – Product specifications, design and assessment by calculation and tests	"The welding shall be carried out in accordance with EN 729-2."	CEN/TC 53
prEN 1090-2	Execution of steel and aluminium structures - Part 2: Technical requirements for the execution of steel structures	Execution classes 3 and 4 EN 729-2 Execution class 2 EN 729-3 Execution class 1 EN 729-4	CEN/TC 135
prEN 1090-3	Execution of steel and aluminium structures - Part 3: Technical rules for execution of aluminium structures		
prEN 1092-1	Flanges and their joints - Circular flanges for pipes, valves, fittings and accessories, PN designated - Part 1: Steel flanges	No reference in main text. However, EN 729-2 stated in normative references.	CEN/TC 74
EN 1247:2004	Foundry machinery – Safety requirements for ladles, pouring equipment, centrifugal casting machines, continuous and semi continuous casting machines	Vague reference to EN 729-1 only.	CEN/TC 202
EN 1251-2:2000	Cryogenic vessels – Transportable vacuum insulated vessels of not more than 1000 litres volume – Part 2: Design, fabrication, inspection and testing	"Manufacturers of welded vessels shall have a welding quality system in operation, taking into account the quality requirements for welding in accordance with EN 729-2 or EN 729-3 as appropriate."	CEN/TC 268
EN 1915-2:2001	Aircraft ground support equipment – General requirements – Part 2: Stability and strength requirements, calculations and test methods	Lower stressfactor, S, "may be used for welding quality B according to EN 25817 and welds in accordance with EN 729-1 to EN 729-4"	CEN/TC 274
EN 12493:2001	Welded steel tanks for liquefied petroleum gas (LPG) – Road tankers – Design and manufacture	"Welding of the joints of the component parts of a tank shall conform to EN 729-2 ..."	CEN/TC 286
EN 12732:2000	Gas supply systems – Welding steel pipework – Functional requirements	Recommendation (table footnote) or requirement (table head)??? Category A and B => EN 729-4 recommended and EN 729-2 & 3 optional Category C and D => EN 729-2 & 3 recommended and EN 729-4 not recommended	CEN/TC 234

Designation	Title	How reference to EN 729 is made	Committee
EN 12811-2:2004	Temporary works equipment – Part 2: Information on materials	Requirements for EN 729-1 (!!!)	CEN/TC 53
EN 12952-5:2002	Water-tube boilers and auxiliary installations – Part 5: Workmanship and construction of pressure parts of the boiler	Requirements (?) for EN 729-2 (or -3)	CEN/TC 269
EN 13084-1:2000	Free-standing industrial chimneys – Part 1: General requirements	"Steel chimneys may be manufactured only by those manufacturers approved for the compliance with the requirements of EN 729-2, EN 719 and EN 288-1."	CEN/TC 297
EN 13094:2004	Tanks for transport of dangerous goods – Metallic tanks with a working pressure not exceeding 0,5 bar – Design and construction	"A welding quality assurance system shall be operated and maintained that is in accordance with EN 729-1."	CEN/TC 296
EN 13218:2002	Machine tools – Safety – Stationary grinding machines	"The welding process and weld metal shall be selected taking into consideration the parent metal. The welding procedure shall be in accordance with the requirements of EN 288-1 and EN 729-1."	CEN/TC 143
EN 13445-4:2002	Unfired pressure vessels – Part 4: Fabrication	"As a minimum" EN 729-3 According to PED, annex 3, Module D, clause 3.1 a quality system reviewed and accepted by a notified body is required NOTE! no requirement in EN 13480	CEN/TC 54
EN 13814:2005	Fairground and amusement park machinery and structures – Safety	Requirement for manufacturer to be in possession of welding qualifications (!?) according to EN 729-2 and (!?) 729-3.	CEN/TC 152
EN 13941:2003	Design and installation of preinsulated bonded pipe systems for district heating	Project class A => EN 729-1 and 729-4 Project class B or C => EN 729-1 and 729-3 + "The test results shall be documented as specified in EN 729-2."	CEN/TC 107
EN 13981-1:2003	Aluminium and aluminium alloys – Products for structural railway applications – Technical conditions for inspection and delivery – Part 1: Extruded products	Recommendation for "quality requirements for welding in accordance with EN 729-2"	CEN/TC 132
EN 13981-2:2004	Aluminium and aluminium alloys – Products for structural railway applications – Technical conditions for inspection and delivery – Part 2: Plates and sheets		CEN/TC 132

Designation	Title	How reference to EN 729 is made	Committee
EN 14025:2004	Tanks for transport of dangerous goods – Metallic pressure tanks – Design and construction	"Fabricators of welded shells shall have a welding system in operation, which is generally in accordance with the principles of EN 729-1, -2 and -3."	CEN/TC 296
EN 14183:2004	Step stools	"Welding of joints is permitted if welding procedures and welding personnel are suitable. EN 719 and EN 729-1 to EN 729-4 shall be observed."	CEN/TC 93
prEN 15020	Railway applications – Towing coupler – Performance requirements, specific interface geometry and test methods	"Welded parts shall be in accordance with EN 729-2 and EN ISO 5817."	CEN/TC 256
prEN 15085	Welding of railway vehicles	Level 1, 2 & 4 EN 729-3 Level 3 EN 729-4 Indirect 729-certification is implied by requirement for certification to EN 15085	CEN/TC 256/WG 31

Table 2 - References to ISO 3834 by ISO product standards

Designation	Title	How reference to ISO 3834 is made	Committee
ISO/FDIS 5840:2005	Cardiovascular implants – Cardiac valve prostheses	Referenced as "Examples of standards applicable to testing of materials and components of some heart valve substitutes" in connection with "Specifications for high molecular mass polyethylene" <This seems totally inappropriate!!!>	ISO/TC 150
ISO 15590-2:2004	Petroleum and natural gas industries – Induction bends, fittings and flanges for pipeline transportation systems – Part 2: Fittings	"Welding operations shall be conducted in accordance with those elements of ISO 3834-2 decided by agreement and the requirements of this part of ISO 15590."	ISO/TC 67