

# Current survey of standards for fusion welding

Quality requirements for fusion welding		Non destructive examinations		Acceptance criteria for NDT		Terms, definitions											
DIN EN ISO 3834-1 bis -5, DIN FB CEN ISO/TR 3834-6		Qualification personel <input type="text" value="DIN EN ISO 9712"/> Rules for NDT <input type="text" value="DIN EN ISO 17635"/>		<b>Steel</b> VT <input type="text" value="DIN EN ISO 5817"/> <input type="text" value="DIN EN ISO 10042"/> RT <input type="text" value="DIN EN ISO 10675-1"/> <input type="text" value="DIN EN ISO 10675-2"/> UT <input type="text" value="DIN EN ISO 11666 , DIN EN ISO 23279, DIN EN ISO 22825, DIN EN ISO 15626"/> PT <input type="text" value="DIN EN ISO 23277"/> MT <input type="text" value="DIN EN ISO 23278"/> HT <input type="text" value="DIN EN ISO 18265"/>		Symbolic representation <input type="text" value="DIN EN ISO 2553"/> Processes and numbers <input type="text" value="DIN EN ISO 4063"/> Terms metal welding <input type="text" value="DIN EN 14610; ISO 857-2"/> Terms & definitions <input type="text" value="DIN FB CEN/TR 14599, DIN FB ISO/TR 25901-1, -2, -3, -4"/> Multilingual desingations with illustrations <input type="text" value="DIN EN 1792, DIN EN ISO 17659"/> Weldings positions <input type="text" value="DIN EN ISO 6947"/> Welding tolerances <input type="text" value="DIN EN ISO 13920"/>											
Arc welding		Destructive examination		Welding consumables		Further standards											
<b>Steel</b> Grouping of materials <input type="text" value="DIN CEN ISO/TR 15608, 20172, 20173, 20174"/> Recommendations for welding <input type="text" value="DIN EN 1011-1 (ISO/TR 17671-1)"/> <input type="text" value="DIN EN 1011-2, -3"/> <input type="text" value="DIN EN 1011-4"/> Temperature measurements <input type="text" value="DIN EN ISO 13916"/> Welders qualification <input type="text" value="DIN EN ISO 9606-1, -2, -4, DIN SPEC 35234"/> Operator qualification <input type="text" value="DIN EN ISO 14732"/> Welding coordination <input type="text" value="DIN EN ISO 14731; DIN SPEC 35236"/> Welding procedure specification <input type="text" value="DIN EN ISO 15609-1, -2, -6"/> Welding procedure qualification <input type="text" value="DIN EN ISO 15607, 15610, 15611, 15612, 15613"/> <input type="text" value="DIN EN ISO 15614-1"/> <input type="text" value="DIN EN ISO 15614-2, -4"/> Calibration, validation, verification <input type="text" value="DIN EN ISO 17662; ISO/TR 18491"/> Heat treatment <input type="text" value="DIN EN ISO 17663, DIN EN ISO 4885"/>		Transverse tensile test <input type="text" value="DIN EN ISO 4136"/> Longitudinal tensile test <input type="text" value="DIN EN ISO 5178"/> Crosstrain testing <input type="text" value="DIN EN ISO 9018"/> Bend test <input type="text" value="DIN EN ISO 5173"/> Fracture test <input type="text" value="DIN EN ISO 9017"/> Impact test <input type="text" value="DIN EN ISO 148-1, 9016"/> Hardness test <input type="text" value="DIN EN ISO 9015-1, -2"/> Micro- and macroscopic examination <input type="text" value="DIN EN ISO 17639"/> Etching for micro- and macroscopic examination <input type="text" value="DIN CEN ISO/TR 16060; DIN SPEC 8548"/> Hot cracking tests <input type="text" value="DIN EN ISO 17641-1, -2, -3"/> Cold cracking tests <input type="text" value="DIN EN ISO 17642-1, -2, -3, DIN FB ISO/TR 17844"/> Determination of ferritic content <input type="text" value="DIN EN ISO 8249"/>		General product <input type="text" value="DIN EN 13479"/> Quality requirements for manufacturing <input type="text" value="DIN EN 12074"/> Technical delivery conditions <input type="text" value="DIN EN ISO 544"/> Guidelines for procurements <input type="text" value="DIN EN ISO 14344"/> Testing and quality <input type="text" value="DIN EN 14532-1, -2, -3"/> <input type="text" value="DIN EN ISO 15792-1, -2, -3"/> Testing methodes <input type="text" value="DIN EN ISO 15792-1,-2,-3, DIN EN ISO 6847, 14372, 8249, 3690, DIN EN 22401"/> Tungsten electrodes <input type="text" value="DIN EN ISO 6848"/> Consumables for hard facing <input type="text" value="DIN EN 14700"/> Consumables for cast iron <input type="text" value="DIN EN ISO 1071"/>		Welder qualification copper <input type="text" value="DIN EN ISO 9606-3"/> Welder qualification nickel <input type="text" value="DIN EN ISO 9606-4"/> Welder qualification titan <input type="text" value="DIN EN ISO 9606-5"/> Welder qual. iron cast <input type="text" value="DIN EN 287-6"/> Imperfections hybrid-welding <input type="text" value="DIN EN ISO 12932"/> Qualification test steel+nickel <input type="text" value="DIN EN ISO 15614-1"/> Qualification test iron cast <input type="text" value="DIN EN ISO 15614-3"/> Qualification test titan <input type="text" value="DIN EN ISO 15614-5"/> Qualification test copper <input type="text" value="DIN EN ISO 15614-6"/> Qual. test overlay welding <input type="text" value="DIN EN ISO 15614-7"/> Qual. test tube to tube-plate <input type="text" value="DIN EN ISO 15614-8"/> Qual. test hybrid processes <input type="text" value="DIN EN ISO 15614-14"/> Qual. test production welding of cast iron <input type="text" value="DIN EN ISO 11970"/> Recommendation for welding claddeed steel <input type="text" value="DIN EN 1011-5"/> Recommendation for welding cast iron <input type="text" value="DIN EN 1011-8"/> Methods for assessing imperfections in metallic structures <input type="text" value="DIN FB CEN/TR 15235"/>											
Imperfections, weld edge preparation		Non alloy + fine grain steels		High strength steels		Creep resisting steels		Stainless steels		Nickel and nickel alloys		Copper and copper alloys		Aluminium and Al-alloys		Titan and titan alloys	
Levels fusion welding <input type="text" value="DIN EN ISO 5817"/> <input type="text" value="DIN EN ISO 10042"/> Levels beam welding <input type="text" value="DIN EN ISO 13919-1"/> <input type="text" value="DIN EN ISO 13919-2"/> Thermal cutting <input type="text" value="DIN EN ISO 9013"/> Recommendation joint preparation <input type="text" value="DIN EN ISO 9692-1, -2, -4"/> <input type="text" value="DIN EN ISO 9692-3"/> Basic weld joint details <input type="text" value="DIN EN 1708-1, DIN EN 1708-2, DIN EN 1708-3, DIN 2559-2, DIN 2559-3, DIN 2559-4"/> Classification of imperfections fusion-, presswelding <input type="text" value="DIN EN ISO 6520-1,- 2"/> Classification of imperfections Thermal cutting <input type="text" value="DIN EN ISO 17658"/> Weldability <input type="text" value="DIN FB ISO/TR 581"/>		<input type="text" value="DIN EN ISO 2560"/> <input type="text" value="DIN EN ISO 14341"/> <input type="text" value="DIN EN ISO 636"/>		<input type="text" value="DIN EN ISO 18275"/> <input type="text" value="DIN EN ISO 16834"/>		<input type="text" value="DIN EN ISO 3580"/> <input type="text" value="DIN EN ISO 21952"/>		<input type="text" value="DIN EN ISO 3581"/> <input type="text" value="DIN EN ISO 14343"/>		<input type="text" value="DIN EN ISO 14172"/> <input type="text" value="DIN EN ISO 18274"/>		<input type="text" value="DIN EN ISO 24373"/>		<input type="text" value="DIN EN ISO 18273"/>		<input type="text" value="DIN EN ISO 24034"/>	
Arc welding equipment, safety		Cored wire (FCAW)		Gas rod (OFW)		Shielding gas											
Welding power sources <input type="text" value="DIN EN (IEC) 60974-1, -2, -3, -4"/> Wire feeders, burners, rod electrode holders, push connectors for welding cable <input type="text" value="DIN EN (IEC) 60974-5, -6, -7, -8, -9, -10, -11, -12, -13"/> Piping, Gaspipes, connections, gauges <input type="text" value="DIN 2403; DIN EN 560, 561, 1256; DIN EN ISO 2503, 3821, 5171, 7291, 14113, 10462"/> Flash back arrestor, blow pipes <input type="text" value="DIN EN 730-1, -2; DIN EN ISO 9012"/> Protective clothing, gloves <input type="text" value="DIN EN ISO 11611; DIN EN 12477"/> Eye protection <input type="text" value="DIN EN 169, 175, 379"/> Welding curtains <input type="text" value="DIN EN ISO 25980"/> Environmental checklist <input type="text" value="DIN EN 14717"/> Air purification systems <input type="text" value="DIN EN ISO 21904-1 up to -4"/> Welding fumes Laboratory methodes <input type="text" value="DIN EN ISO 15011-1 up to -5, DIN CEN ISO/TS 15011-6"/> Welding fumes Sampling <input type="text" value="DIN EN ISO 10882-1, -2"/>		<input type="text" value="DIN EN ISO 17632"/> <input type="text" value="DIN EN ISO 20378"/>		<input type="text" value="DIN EN ISO 18276"/> <input type="text" value="DIN EN ISO 20378"/>		<input type="text" value="DIN EN ISO 17634"/> <input type="text" value="DIN EN ISO 20378"/>		<input type="text" value="DIN EN ISO 17633"/> <input type="text" value="DIN EN ISO 14175, DIN EN 1089-3"/>		<input type="text" value="(ISO 12153)"/>							