2nd Inspection Expo & Conference (IEC) 2020 Abstract Submittal

Details on Preferred Topics by Track and Experience Level

Below are suggested focus areas for abstract submissions for the Inspection Expo & Conference (IEC):



TRACK	WELDING TRACK	STRUCTURAL STEEL	COATING / CORROSION	NDT
Entry Level	Welder Qualifications - What a CWI needs to know	AISC field fixes	Entry level corrosion	Introduction to advanced UT techniques (e.g., PAUT, TOFT, FMC, AC Field) (including AWS D1 & ASME V)
	Welding Symbols - Changes in AWS A2.4:2020 and A3.0:2020	Structural bolting primer	Surface cleanliness standards	Development of an NDT program
	Understanding the reason behind various joint designs	Seismic connections / demand critical	Basics of coating chemistry	Realignment of the ACCP program
	Welding processes primer	Fatigue/fracture	Coating inspection gauges	ISQ program introduction
	Intro to mechanical testing	Erection drawings	Coating type vs environment	Magnetic particle introduction
	Discontinuities and defects	Fabrication drawings	Concrete coating	Liquid penetrant introduction
	Intro to Codes - Changes in codes relating to inspection (B31.3; D1.1 allowance for various certifications)	Chapter 17 IBC (approved fabricator)	Fireproofing inspection	Thermal/infrared introduction
	Visual inspection gauges	Structural inspection case studies		Magnetic flux leakage introduction
	Business/client relationships for inspectors (soft skills)			Writing a written practice/procedure
	Remote virtual inspections / application of technologies for remote inspection			ASME Section V issues with changes to ASNT certifications
	AWS Certification Program (CWI, RI, PT, etc.)			
Intermediate Level	Fracture critical welding	Dimensioning of complex structures	Coating inspection plan development	Introduction to advanced RT techniques (CR/DRSPIP - including AWS D1 & ASME V)
	Weld mapping	AESS	Cathodic protection	POD of various methods
	Remote visual inspection	New structural steels	Impressed current	Shearwave UT acceptance criteria ASME Vs. AWS (Including proposed reduction in minimum thickness in ASME VIII)
	Debunking welding tribal knowledge	Erection errors	Coating defects	ASNT NDT auditing program
	3D printing quality	Understanding constructability	Corrosion under insulation	Intro to RT interpretation
	Distortion control planning and implementation	Fracture critical welding AISC requirements for fabricators of hydraulic steel structures (HYD)	Aerospace coatings	NDT 4.0 / Automation of NDT / Machine learning/ AI / DICONDE
	Qualifying a WPS & writing a prequalified or qualified WPS - How a CWI is involved		Surface profile measurements comparing Methods A, B, C stylus	Electromagnetic testing intro
	Friction stir welding		Marine coatings	Radiography introduction
	AWS CWI Endorsements – Including new welder qualification endorsements			Ultrasonics introduction
	K-Areas			Visual inspection using drones (ASME Section V)
Advanced Expert	Heat Treating - Including code requirements (AWS D1 codes; ASME B31P)	Heat straightening	Coating failures causes & remedies	NDT procedure development
	Fitness for service	Cost estimating		Phased array ultrasonic testing
	Cost estimating	Troubleshooting erection issues		Full matrix capture (FMC)
	Weld cracking			Time-of-flight diffraction (TOFD)
	Troubleshooting weld defects			Computed tomography
	Industry VT & NDE certification programs			Neutron radiography
	Auditing welding QC programs			Digital Radiography (DR) / Computed Radiography (CR)

IEC HOST



IEC EVENT PARTNERS



