

IPC 2020 Virtual Conference Presentations
Live and On Demand

Track	Format	ASME Paper Number	Name	Paper Title
Track 1: Pipeline Safety Management Systems	Track 1.1	IPC2020-9370	Colin Frazer	Api Rp 1173 Third Party Assessments: A Key Industry Tool for Evaluating and Supporting Implementation of Pipeline Safety Management Systems
Track 1: Pipeline Safety Management Systems	Track 1.1	IPC2020-9561	Reena Sahney	Investigation and Adoption of Apga's Pipeline Engineer Competency System - the Canadian Experience
Track 1: Pipeline Safety Management Systems	On Demand	IPC2020-9374	Karen Collins	How Do I Ensure "Staff Competency" in My Pipeline Safety Management System?
Track 1: Pipeline Safety Management Systems	On Demand	IPC2020-9519	Nikhil Joshi	Comparison of Buried Pipeline Crossing Assessments Using Api Rp 1102, Analytical Methods, and Finite Element Approach
Track 1: Pipeline Safety Management Systems	On Demand	IPC2020-9639	Ramon Loback	Pipeline Class Reclassification - Standards Criteria & Best Practices
Track 1: Pipeline Safety Management Systems	On Demand	IPC2020-9762	Brad Raabis	Digital Quality Management System (Qms) Provides Unprecedented Business Improvements and Return on Investment
Track 2: Project Management, Design, Construction and Environmental Issues	Track 2.1	IPC2020-9334	Sheldon Smith	Does Open Cut Pipeline Installation Affect the Geomorphology of Rivers?
Track 2: Project Management, Design, Construction and Environmental Issues	Track 2.1	IPC2020-9753	Yong-Yi Wang	Development of Lifting and Lowering-in Plan for the Control of Construction Stresses
Track 2: Project Management, Design, Construction and Environmental Issues	Track 2.1	IPC2020-9770	Ryan Phillips	Developing a Representative Soil Response Model
Track 2: Project Management, Design, Construction and Environmental Issues	On Demand	IPC2020-9204	Jim Horner	Pump Station Design 2, a Tale of Two Pump Stations
Track 2: Project Management, Design, Construction and Environmental Issues	On Demand	IPC2020-9239	Tran Mah-Paulson	Understanding Why and How Pipeline Companies Enter Foreign Markets, Such as Brazil
Track 2: Project Management, Design, Construction and Environmental Issues	On Demand	IPC2020-9309	Emma Perez	Relief Tanks: Parameters to Consider When Designing Relief Systems and Connections to Tanks
Track 2: Project Management, Design, Construction and Environmental Issues	On Demand	IPC2020-9377	Jeremy Fontenault	Assessing Potential Impacts to Waterways From Small Volume Releases Originating From Facilities or Equipment
Track 2: Project Management, Design, Construction and Environmental Issues	On Demand	IPC2020-9391	Graeme King	Hot Bitumen Pipeline Valve Replacement: Pipe Prop Anchoring Design With Mechanical Tensioning
Track 2: Project Management, Design, Construction and Environmental Issues	On Demand	IPC2020-9402	Neetu Prasad	Design and Construction Challenges of a Roped Insulated Pipeline
Track 2: Project Management, Design, Construction and Environmental Issues	On Demand	IPC2020-9661	Mohammad Katebi	Effects of Slope Grade on Soil-Pipe Interaction—full-Scale Experiments
Track 2: Project Management, Design, Construction and Environmental Issues	On Demand	IPC2020-9673	Kshama Roy	Streamlining the Gis to Cad Workflow for Automated Pipeline Alignment Sheet Generation

Sheet1

Track 2: Project Management, Design, Construction and Environmental Issues	On Demand	IPC2020-9730	Joseph Hlady	Comparison of Remote Sensing Techniques for Centreline and Weld Mapping in Place of Manual Survey in Hazardous Environments
Track 2: Project Management, Design, Construction and Environmental Issues	On Demand	IPC2020-9735	Sukhi Gill	4d Inspection: A Comprehensive Platform to Digitize Pipeline Construction Inspection and Generate Data Driven Continuous Improvement
Track 2: Project Management, Design, Construction and Environmental Issues	On Demand	IPC2020-9769	Ryan Phillips	Formulation of 3d Soil Springs for Pipe Stress Analyses
Track 3: Pipeline and Facilities Integrity	Track 3.7	IPC2020-9548	Taylor Shie	Integration of Multiple Ili Technologies for Robust Understanding of Unique Anomalies on a Pipeline
Track 3: Pipeline and Facilities Integrity	Track 3.7	IPC2020-9696	Bo Wang	Burst Pressure Prediction of Pipes With Scc Colonies - Evaluation of Intelligent Flaw Interaction Rules Using Full-Scale Burst Tests
Track 3: Pipeline and Facilities Integrity	Track 3.7	IPC2020-9705	Sanjay Tiku	Full Scale Test Validation of Fatigue Crack Growth Rate of Flaws in Erw Pipe
Track 3: Pipeline and Facilities Integrity	Track 3.6	IPC2020-9572	Thomas Dessen	Characterizing Corrosion Defects With Apparent High Growth Rates on Transmission Pipelines
Track 3: Pipeline and Facilities Integrity	Track 3.6	IPC2020-9601	Dongliang Lu	Full-Scale Pull Testing Study of the Mfl-a Performance Within Casings to Improve Ili-Based Corrosion Management of Cased Pipes
Track 3: Pipeline and Facilities Integrity	Track 3.6	IPC2020-9746	Jennifer Sargent	When Metals and Microbes Meet – Preventing Microbial Corrosion in Oil and Gas Transmission Pipelines
Track 3: Pipeline and Facilities Integrity	Track 3.5	IPC2020-9251	Cory Wargacki	Applying Advanced Ultrasonic In-Line Inspections Technologies to Effectively Manage Hook Cracks
Track 3: Pipeline and Facilities Integrity	Track 3.5	IPC2020-9465	Chris Davies	Managing the Threat of Selective Seam Weld Corrosion Using a State of the Art Ili System
Track 3: Pipeline and Facilities Integrity	Track 3.5	IPC2020-9494	Jake Philipot	Overcoming Challenges of Emat In-Line Inspection Validation for Scc Management in Natural Gas Pipelines - a Practical Approach
Track 3: Pipeline and Facilities Integrity	Track 3.4	IPC2020-9231	Hamid Mostaghimi	Dynamic Stress Analysis of an Exposed Pipe Subjected to Moving Ili Tool
Track 3: Pipeline and Facilities Integrity	Track 3.4	IPC2020-9288	Mohamed Elseify	Slope Movement Inspection Using Axial Strain Data Across Multiple Lines and Repeat Inspections
Track 3: Pipeline and Facilities Integrity	Track 3.4	IPC2020-9478	Shenwei Zhang	Improved Surface Loading Stress Analysis Method Considering Protection Measures
Track 3: Pipeline and Facilities Integrity	Track 3.3	IPC2020-9486	Jeremiah Konell	A Midstream Pipeline Operator's Perspective on the Implementation of Api 1183
Track 3: Pipeline and Facilities Integrity	Track 3.3	IPC2020-9544	Rogelio Guajardo	Cracks in Dents: How Can I Use an Ultrasonic Crack Ili Robot to Detect Them?

Sheet1

Track 3: Pipeline and Facilities Integrity	Track 3.3	IPC2020-9575	Brian Leis	Continuing Development of Criteria to Quantify Metal-Loss Severity, Including Width
Track 3: Pipeline and Facilities Integrity	Track 3.2	IPC2020-9331	David Heaney	A Feature-Specific Probabilistic Assessment of Pipeline Defect Size From Ili Mfl Signal Using Convolutional Neural Network
Track 3: Pipeline and Facilities Integrity	Track 3.2	IPC2020-9386	Thomas Hennig	At the Forefront of In-Line Crack Inspection Services – a Highly Versatile Crack Inspection Platform for Complex Flaw Morphologies and Absolute Depth Sizing
Track 3: Pipeline and Facilities Integrity	Track 3.2	IPC2020-9495	Doug Dewar	Incorporating Inline Inspection Internal Measurement Unit Data Analysis Into Integrity Management Programs
Track 3: Pipeline and Facilities Integrity	Track 3.1	IPC2020-9254	John Kiefner	Peer Review of the Plausible Profiles Corrosion Assessment Model
Track 3: Pipeline and Facilities Integrity	Track 3.1	IPC2020-9470	Mohammad Al-Amin	Achieving Consistent Safety by Using Appropriate Safety Factors in Corrosion Management Program
Track 3: Pipeline and Facilities Integrity	Track 3.1	IPC2020-9690	Shahani Kariyawasam	A Data Driven Validation of a Defect Assessment Model and its Safe Implementation
Track 3: Pipeline and Facilities Integrity	On Demand	IPC2020-9205	Otto Jan Husing	H2 in an Existing Natural Gas Pipeline
Track 3: Pipeline and Facilities Integrity	On Demand	IPC2020-9268	Lyndon Lamborn	Near-Neutral Ph Stress Corrosion Cracking Growth Model Trials: Pipeonline
Track 3: Pipeline and Facilities Integrity	On Demand	IPC2020-9269	Leping Li	Pipe Stress and Deflection During an Integrity Dig
Track 3: Pipeline and Facilities Integrity	On Demand	IPC2020-9285	Yannick Beauregard	Assessing Soil Corrosivity for Buried Structural Steel
Track 3: Pipeline and Facilities Integrity	On Demand	IPC2020-9303	Shawn Laughlin	Full Encirclement Engineered Laminated Steel Sleeve System for Repairs and Augmentation of Pipelines: The Engineering Development, Validation Test Results, and Implications for Mitigation of Both Stress and Strain Dependent Integrity Threats
Track 3: Pipeline and Facilities Integrity	On Demand	IPC2020-9307	Smitha Koduru	A Bayesian Approach for Effective Use of Multiple Measurements of Crack Depths
Track 3: Pipeline and Facilities Integrity	On Demand	IPC2020-9312	Xinfang Zhang	Failure Pressure Prediction of Cracks in Corrosion Defects Using Xfem
Track 3: Pipeline and Facilities Integrity	On Demand	IPC2020-9328	Michael Turnquist	An Improved Methodology for Prioritizing Pipelines With Respect to Fatigue Seam Weld Cracking
Track 3: Pipeline and Facilities Integrity	On Demand	IPC2020-9329	Chee Wong	Life Expectancy of Decommissioned Pipelines Under External Corrosion - Probabilistic Modeling
Track 3: Pipeline and Facilities Integrity	On Demand	IPC2020-9335	michael sirois	Advanced Eddy Current Array Tools for Stress Corrosion Cracking Direct Assessment on Pipelines
Track 3: Pipeline and Facilities Integrity	On Demand	IPC2020-9357	Stijn Hertelé	Crack Driving Force Calculation in Arbitrarily Shaped Defects Based on 3d Non-Destructive Evaluation and Finite Element Analysis

Sheet1

Track 3: Pipeline and Facilities Integrity	On Demand	IPC2020-9361	Johannes Emil Otto Palmer	Concerted, Computing-Intense Novel Mfl Approach Ensuring Reliability and Reducing the Need for Dig Verification
Track 3: Pipeline and Facilities Integrity	On Demand	IPC2020-9373	Jason Skow	Distribution Reliability Assessment Using Machine Learning
Track 3: Pipeline and Facilities Integrity	On Demand	IPC2020-9389	Sergio Limon	Vintage Pipeline Steel Fracture Toughness Measurements
Track 3: Pipeline and Facilities Integrity	On Demand	IPC2020-9392	Brian Leis	Modelling Stress-Activated Creep at Axial Cracks in Pipelines
Track 3: Pipeline and Facilities Integrity	On Demand	IPC2020-9396	Pablo Cazenave	An Onshore Pipeline Failure Produced by Cathodic-Protection-Induced Hydrogen Cracking – Case Study
Track 3: Pipeline and Facilities Integrity	On Demand	IPC2020-9399	Chike Okoloekwe	Reliability-Based Assessment of Safe Excavation Pressure for Dented Pipelines
Track 3: Pipeline and Facilities Integrity	On Demand	IPC2020-9400	Jason Skow	Manufactured Cracks in Pipe Used to Evaluate ILI Measurement Performance
Track 3: Pipeline and Facilities Integrity	On Demand	IPC2020-9464	Lawrence Matta	Pipe Knocked From Supports by Hydraulic Transient Event
Track 3: Pipeline and Facilities Integrity	On Demand	IPC2020-9472	Janine Woo	Improved Semi-Quantitative Reliability-Based Method for Assessment of Pipeline Dents With Stress Risers
Track 3: Pipeline and Facilities Integrity	On Demand	IPC2020-9476	Dane Burden	Puddling Puddle Welds
Track 3: Pipeline and Facilities Integrity	On Demand	IPC2020-9481	Johannes Becker	Improving Data Collection With In-Line Inspection in Low-Pressure Gas Distribution Networks
Track 3: Pipeline and Facilities Integrity	On Demand	IPC2020-9493	Tim Edward	Statistical Analysis of Dig Operations Leading to Productive Repairs
Track 3: Pipeline and Facilities Integrity	On Demand	IPC2020-9499	Gregory Quickel	In-Service Cracking/leak at Bottom Side Repaired Dent
Track 3: Pipeline and Facilities Integrity	On Demand	IPC2020-9501	Rhett Dotson	Judge Me by My Size, Do You? Or: How Reliable Are Dent Assessments Based on Ili Data?
Track 3: Pipeline and Facilities Integrity	On Demand	IPC2020-9503	Nima Parsi	Integrity Validation of Small Diameter-Thin Wall Pipeline Susceptible to Cracking or Crack-Like Indications-a Case Study
Track 3: Pipeline and Facilities Integrity	On Demand	IPC2020-9506	Alireza Kohandehghan	An Engineering Assessment Methodology to Evaluate Arc Burns
Track 3: Pipeline and Facilities Integrity	On Demand	IPC2020-9508	Axel Aulin	Comparison of Non-Destructive Examination Techniques for Crack Inspection
Track 3: Pipeline and Facilities Integrity	On Demand	IPC2020-9511	Hamid Niazi	The Impact of Pressure Fluctuations on the Early Onset of Stage II Growth of High Ph Stress Corrosion Crack
Track 3: Pipeline and Facilities Integrity	On Demand	IPC2020-9512	Syed Haider	Integrity Management of Flange Connections Using Reliability Model
Track 3: Pipeline and Facilities Integrity	On Demand	IPC2020-9520	Aaron Woo	A Prudent Approach to Evaluate Dig Effectiveness

Sheet1

Track 3: Pipeline and Facilities Integrity	On Demand	IPC2020-9523	Carly Meena	Third Party Damage Monitoring: Internal Fiber Optic Installation on a Transmission Pipeline Using a Pig, a Disengagement System and a Pack-Off
Track 3: Pipeline and Facilities Integrity	On Demand	IPC2020-9555	Phat Le	Communication and Mitigation Strategies Related to the Leading Indicator of Pressure Cycle Fatigue
Track 3: Pipeline and Facilities Integrity	On Demand	IPC2020-9578	Chris Wood	Getting to Know Your Bends to Support Scc Management
Track 3: Pipeline and Facilities Integrity	On Demand	IPC2020-9580	Noah Ergezinger	Application of Noise Filtering Techniques for the Quantification of Uncertainty in Dent Strain Calculations
Track 3: Pipeline and Facilities Integrity	On Demand	IPC2020-9616	Bing Liu	Axial Compressive Capacity of Pressurized Pipeline With Corrosion Defect
Track 3: Pipeline and Facilities Integrity	On Demand	IPC2020-9621	Masoud Baghelani	Microwave Chipless Resonator Strain Sensor for Pipeline Safety Monitoring
Track 3: Pipeline and Facilities Integrity	On Demand	IPC2020-9624	Michael Smith	Now You Scc Me, Now You Don't – Using Machine Learning to Find Stress Corrosion Cracking
Track 3: Pipeline and Facilities Integrity	On Demand	IPC2020-9655	Zeyanb Shirband	Pipeline Plain Dent Fatigue Assessment: Shedding Light on the Api 579 Level 2 Fatigue Assessment Methodology
Track 3: Pipeline and Facilities Integrity	On Demand	IPC2020-9681	Vignesh Shankar	Leveraging IoT Telemetry to Improve the Tracking of Inline Inspection Tools for Oil and Gas Pipelines
Track 3: Pipeline and Facilities Integrity	On Demand	IPC2020-9683	Miaad Safari	Optimizing the Management of Excavation and Repair Data From Inline Inspection Programs
Track 3: Pipeline and Facilities Integrity	On Demand	IPC2020-9708	Steven Palkovic	Advancements in Nondestructive Methods Using Frictional Sliding for Direct Assessment of Steel Pipelines and Welded Seams
Track 3: Pipeline and Facilities Integrity	On Demand	IPC2020-9709	Udayasankar Arumugam	Full-Scale Fatigue Testing of Crack-in-Dent and Framework Development for Life Prediction
Track 3: Pipeline and Facilities Integrity	On Demand	IPC2020-9724	Aaron Dinovitzer	Dent Assessment and Management, Api Recommended Practice 1183
Track 3: Pipeline and Facilities Integrity	On Demand	IPC2020-9781	Chris Alexander	Generation and Monitoring of Synthetic Crack-Like Features in Pipeline Materials Using Cyclic Pressure Loading
Track 4: Operations, Monitoring, and Maintenance	Track 4.4	IPC2020-9230	Gerald Ferris	Lessons Learned From Freespans at Pipeline Watercourse Crossings
Track 4: Operations, Monitoring, and Maintenance	Track 4.4	IPC2020-9452	Richard Guthrie	Using Results of Western Canadian Flood Scour Assessments to Provide a Simple Screening Tool for Pipeline Watercourse Crossings
Track 4: Operations, Monitoring, and Maintenance	Track 4.3	IPC2020-9258	Guoxi He	A Novel Three-Dimensional Non-Contact Pipeline Magnetism-Based Stress Inspection Technology and Its Application on Lng Pipeline

Sheet1

Track 4: Operations, Monitoring, and Maintenance	Track 4.3	IPC2020-9599	Benjamin Zand	Surface Loading Analysis: Vehicle Load Distribution Under Timber Mats and Flexible Slab
Track 4: Operations, Monitoring, and Maintenance	Track 4.3	IPC2020-9786	Haobin Chen	Operational Modal Response Characterization of a Buried Pipe Structure
Track 4: Operations, Monitoring, and Maintenance	Track 4.2	IPC2020-9233	Chris Minto	Industrial Validation and Verification Approach for External Fiber Optic Based Leak Detection
Track 4: Operations, Monitoring, and Maintenance	Track 4.2	IPC2020-9237	Christopher Macdonald	Pipeline Rupture Detection Using Multiple Artificial Intelligence Classifiers During Steady-State and Transient Operations
Track 4: Operations, Monitoring, and Maintenance	Track 4.2	IPC2020-9333	Sergio Cunha	Pipeline Leak Detection Using a Moderate Gain Nonlinear Observer
Track 4: Operations, Monitoring, and Maintenance	Track 4.1	IPC2020-9461	Greg Thorwald	Pipe Sleeve Repair Analysis Case Study Examining Axial Surface Cracks With Pressure Reduction and Geometry Factors to Improve Remaining Life
Track 4: Operations, Monitoring, and Maintenance	Track 4.1	IPC2020-9479	Simon Slater	Maop Reconfirmation for a 20 Inch Gas Pipeline Using the Eca Approach and Enhanced Ili
Track 4: Operations, Monitoring, and Maintenance	Track 4.1	IPC2020-9757	Chris Alexander	Repair of Leaks in Thin-Wall High Pressure Pipelines Using Composite Reinforcing Technologies
Track 4: Operations, Monitoring, and Maintenance	On Demand	IPC2020-9247	Fabien Ravet	Sand Dune Migration Monitoring for Pipeline Hazard Risk Mitigation: The Peru Lng Coastal Section Case
Track 4: Operations, Monitoring, and Maintenance	On Demand	IPC2020-9260	Peter Song	Enhancing Flooding Monitoring and Response to Improve Geohazard Management
Track 4: Operations, Monitoring, and Maintenance	On Demand	IPC2020-9270	Bailey Theriault	An Integrated Approach to System-Wide Landslide Monitoring in the Appalachian Basin Region of the Us
Track 4: Operations, Monitoring, and Maintenance	On Demand	IPC2020-9332	Rongbin Li	Experimental Investigation of the Difference in Wax Deposition Aging Rate Between Polyethylene and Steel Pipes
Track 4: Operations, Monitoring, and Maintenance	On Demand	IPC2020-9366	Robert Andrews	Leak Rate Testing of a Natural Pipeline Defect
Track 4: Operations, Monitoring, and Maintenance	On Demand	IPC2020-9369	R. Peter Weaver	Employing Satellite-Based Hyperspectral Imagery for Pipeline Leak Prevention, Detection & Compliance
Track 4: Operations, Monitoring, and Maintenance	On Demand	IPC2020-9405	Xianwen Cheng	The Study on Non-Heating Transportation of Carbon Dioxide Flooding Gathering and Transportation Pipeline
Track 4: Operations, Monitoring, and Maintenance	On Demand	IPC2020-9434	Lei Xu	A Hybrid Method Based on Svm Integrated Improved Pso Algorithm for Electrical Energy Consumption Forecasting of Crude Oil Pipeline
Track 4: Operations, Monitoring, and Maintenance	On Demand	IPC2020-9463	Chris Apps	On-Water Liquid Leak Detection Technology Evaluation
Track 4: Operations, Monitoring, and Maintenance	On Demand	IPC2020-9518	Mathew Bussiere	Establishing a Detection Threshold for Acoustic-Based External Leak Detection Systems
Track 4: Operations, Monitoring, and Maintenance	On Demand	IPC2020-9525	Guohua Li	Evaluation and Acceptability of Pneumatic Pressure Test Results

Sheet1

Track 4: Operations, Monitoring, and Maintenance	On Demand	IPC2020-9532	Chris Holliday	The North Saskatchewan River Valley Landslide – Slope and Pipeline Condition Monitoring
Track 4: Operations, Monitoring, and Maintenance	On Demand	IPC2020-9538	Jianqin Zheng	A Method of Leakage Parameters Estimation for Liquid Pipelines Based on Conditional Generative Adversarial Network
Track 4: Operations, Monitoring, and Maintenance	On Demand	IPC2020-9558	Lei He	Kalman Filter and Model-Free Adaptive Control Theory Applied to the Unsteady Flow State Estimation of Product Pipelines
Track 4: Operations, Monitoring, and Maintenance	On Demand	IPC2020-9565	Dongliang Yu	Numerical Simulation of Petroleum Spreading in a Complex River Channel
Track 4: Operations, Monitoring, and Maintenance	On Demand	IPC2020-9584	Tianzong (David) Xu	Large Standoff Magnetometry as a Practical Screening and Monitoring Tool for Pipelines Under Geohazard Conditions
Track 4: Operations, Monitoring, and Maintenance	On Demand	IPC2020-9604	Rui Qiu	A Novel Approach for Two-Stage Uav Path Planning in Pipeline Network Inspection
Track 4: Operations, Monitoring, and Maintenance	On Demand	IPC2020-9636	Zhichao Guo	The Application of Numerical Simulation to Liquid Pipeline Leakage at Lng Terminal in China
Track 4: Operations, Monitoring, and Maintenance	On Demand	IPC2020-9641	Joshua Nasrallah	Case Study of Team Approach to Geohazard Identification, Characterization, and Mitigation
Track 4: Operations, Monitoring, and Maintenance	On Demand	IPC2020-9722	Yuanpeng You	Research Progress of Sand Transport Mechanism and Critical Conditions in Pipelines
Track 4: Operations, Monitoring, and Maintenance	On Demand	IPC2020-9743	Alex Mckenzie-Johnson	Identification and Mitigation of a Landslide Threatening an Operating Natural Gas Pipeline
Track 4: Operations, Monitoring, and Maintenance	On Demand	IPC2020-9785	Chantz Denowh	Use of Spoolable Pipe Technologies as a Means for Rehabilitating Small Diameter High Pressure Pipeline Systems
Track 5: Materials and Joining	Track 5.4	IPC2020-9323	Taro Kizu	Effects of Niobium on Microstructure and Hardness of Coarse Grained Haz of High Strength X70 Grade Uoe Linepipe Steel
Track 5: Materials and Joining	Track 5.4	IPC2020-9404	Douglas Stalheim	Cross-Sectional Grain Size Homogeneity Effect on Structural Steel Fatigue Performance in Air and Hydrogen Environments
Track 5: Materials and Joining	Track 5.4	IPC2020-9725	Yong-Yi Wang	Improved Linepipe Specifications and Welding Practice for Resilient Pipelines
Track 5: Materials and Joining	Track 5.3	IPC2020-9290	Paul Hill	Repair and Reinforcement of Blunt Defects on Pipeline Bends Using Composite Materials
Track 5: Materials and Joining	Track 5.3	IPC2020-9421	Guillaume Michal	An Empirical Fracture Control Model for Dense-Phase Co2 Carrying Pipelines
Track 5: Materials and Joining	Track 5.3	IPC2020-9787	J. Barry Wiskel	Evaluation of Hydrogen Induced Cracking Resistance of X70 Pipeline Steel Under Severe and Mild Sour Service Conditions Using Ultrasonic Analysis

Sheet1

Track 5: Materials and Joining	Track 5.2	IPC2020-9444	Harpreet Sidhar	Improving Reliability of Carbon Steel Girth Welds in Sour Environment
Track 5: Materials and Joining	Track 5.2	IPC2020-9497	Liam Hagel	Electromagnetic Induction Post Heating to Reduce Nde Delay Times of Welded In-Service Repairs
Track 5: Materials and Joining	Track 5.2	IPC2020-9721	Mohsen Mohammadjoo	Influence of Steel Chemistry and Field Girth Welding Procedure on Performance of Api X70 Pipelines
Track 5: Materials and Joining	5.1	IPC2020-9407	William Walsh	Clamping and Strain Measurement Methods
Track 5: Materials and Joining	On Demand	IPC2020-9248	Lyndon Lamborn	Negligible Crack Growth Thresholds
Track 5: Materials and Joining	On Demand	IPC2020-9255	John Kiefner	Estimating Toughness for Lf and Dc Welded Erw Seams
Track 5: Materials and Joining	On Demand	IPC2020-9354	Philippa Moore	Crack Initiation and Propagation in Static Loaded Fracture Mechanics Tests in Steels Containing Atomic Hydrogen
Track 5: Materials and Joining	On Demand	IPC2020-9403	Brian Leis	The Effects of the Flow Response on the Failure Pressure of Line Pipe Steels
Track 5: Materials and Joining	On Demand	IPC2020-9410	Xin Wang	Application of the Cohesive Zone Model to Crack Tip Opening Angle Design Methodology for Ductile Fracture in Pipeline Steels
Track 5: Materials and Joining	On Demand	IPC2020-9545	Bradley Davis	Separation Characteristics of an X65 Linepipe Steel From Laboratory-Scale to Full-Scale Fracture Tests
Track 5: Materials and Joining	On Demand	IPC2020-9582	Vitor Adriano	Influence of Small Volumetric Flaws on the Measurement of Crack Growth and Tearing Resistance in Sent Tests.
Track 5: Materials and Joining	On Demand	IPC2020-9589	Nathan Switzner	An Approach to Establishing Manufacturing Process and Vintage of Line Pipe Using In-Situ Nondestructive Examination and Historical Manufacturing Data
Track 5: Materials and Joining	On Demand	IPC2020-9596	Nitin Sharma	Role of Crystallographic Texture on Toughness of Erw Welded and Heat-Treated Api X70 Pipeline Steel
Track 5: Materials and Joining	On Demand	IPC2020-9602	Scott Riccardella	Insight on Fracture Toughness and Predicted Failure Pressure for Vintage Erw Seam Defects
Track 5: Materials and Joining	On Demand	IPC2020-9649	Muhammad Rashid	The Use of Optimized Erw Techniques to Improve Low Temperature Fracture Toughness of Welded Pipe
Track 5: Materials and Joining	On Demand	IPC2020-9687	Nicolas Romualdi	Austenite Grain Size Control During Welding of Line Pipe Steels
Track 5: Materials and Joining	On Demand	IPC2020-9706	Mitchell Grams	A Quantitative Index to Assess the Influence of Joint Fit-Up on Pipeline Weld Root Discontinuities
Track 5: Materials and Joining	On Demand	IPC2020-9710	Aaron Dinovitzer	Heat Affected Zone Softening Susceptibility Test
Track 5: Materials and Joining	On Demand	IPC2020-9712	Aaron Dinovitzer	Weld Hydrogen Cracking Susceptibility
Track 5: Materials and Joining	On Demand	IPC2020-9766	Gaute Gruben	Pipeline Fracture Control Concepts for Norwegian Offshore Carbon Capture and Storage

Sheet1

Track 6: Strain Based Design	Track 6.2	IPC2020-9739	Yong-Yi Wang	Management of Ground Movement Hazards – an Overview of a Jip
Track 6: Strain Based Design	Track 6.1	IPC2020-9259	Ali Fathi	Rapid Strain Demand Estimation of Pipelines Deformed by Lateral Ground Movements
Track 6: Strain Based Design	Track 6.1	IPC2020-9473	Bob Albrecht	High-Pressure Natural Gas Pipeline in Geohazardous Region of Papua New Guinea Sustains M 7.5 Earthquake: Key Factors of Successful Outcome
Track 6: Strain Based Design	Track 6.1	IPC2020-9664	Banglin Liu	Estimation of Tensile Strain Capacity of Vintage Girth Welds
Track 6: Strain Based Design	On Demand	IPC2020-9310	Junfang Lu	A Case Study of Predicting Tensile Strain Capacity of In-Service Pipelines
Track 6: Strain Based Design	On Demand	IPC2020-9319	Kanako Asano	Effects of Profile Data Grid on Deformation Capacity of Line Pipes
Track 6: Strain Based Design	On Demand	IPC2020-9341	Xiaoben Liu	An Improved Analytical Strain Analysis Method for Buried Steel Pipelines Subjected to Permanent Ground Displacement
Track 6: Strain Based Design	On Demand	IPC2020-9376	Mario Macia	Papua New Guinea Earthquake Proves the Value of Robust Pipeline Materials Selection and Construction
Track 6: Strain Based Design	On Demand	IPC2020-9471	Christoph Ladenhauf	Earthquake in Papua New Guinea Results in New Concept for Securing Pipelines in Ridgeline Right-of-Way: the Micropile Contiguous Wall
Track 6: Strain Based Design	On Demand	IPC2020-9492	Bob Albrecht	Returning Pipelines to Service Following a M 7.5 Earthquake: Papua New Guinea Experience
Track 6: Strain Based Design	On Demand	IPC2020-9546	Jinxu JIANG	Failure Analysis of Buried X65 Steel Pipeline Under the Influence of Permafrost Thawing Settlement Based on Moisture-Heat-Stress Coupled Method
Track 6: Strain Based Design	On Demand	IPC2020-9617	Shoma Onuki	Theoretical Formula for Determining the Maximum Straight Length of a Buried Pipeline That Can Prevent Seismic Buckling
Track 7: Risk and Reliability	Track 7.2	IPC2020-9274	Maher Nessim	Safety Risk Acceptance Criteria for Pipelines
Track 7: Risk and Reliability	Track 7.2	IPC2020-9278	Mark Stephens	Hazardous Liquid Pipeline Spill Volumes
Track 7: Risk and Reliability	Track 7.2	IPC2020-9788	Rodolfo Sancio	Model for Estimating the Probability of Failure at River Crossings
Track 7: Risk and Reliability	Track 7.1	IPC2020-9240	Francois Ayello	Probabilistic Digital Twin for Risk Assessment Transmission Pipelines
Track 7: Risk and Reliability	Track 7.1	IPC2020-9504	Smitha Koduru	Comparison of a Standard Reliability-Based Approach and a Bayesian Network Approach for Integrity Management of a Northern Canadian Liquids Pipeline
Track 7: Risk and Reliability	Track 7.1	IPC2020-9586	Daryl Bandstra	Subset Simulation for Structural Reliability Analysis of Pipeline Corrosion Defects

Track 7: Risk and Reliability	On Demand	IPC2020-9261	MD Anthony Payoe	Application of Risk and Reliability in Designing Facility Site Containment
Track 7: Risk and Reliability	On Demand	IPC2020-9314	Lyndon Lamborn	Surviving Population Reliability Projection Methods
Track 7: Risk and Reliability	On Demand	IPC2020-9367	Thomas Dessenin	Reliability Performance Benchmarks for Low Vapor Pressure Liquid Pipelines
Track 7: Risk and Reliability	On Demand	IPC2020-9459	Alex Nemeth	Quantifying Risk to Optimize Facility Integrity Management
Track 7: Risk and Reliability	On Demand	IPC2020-9483	Shawn Smith	Recommendations for Jet Fire Model Selection When Performing Consequence Assessments of Onshore Natural Gas Pipelines and Facilities
Track 7: Risk and Reliability	On Demand	IPC2020-9484	Jason Yan	Reliability-Based Crack Threat Assessment and Management
Track 7: Risk and Reliability	On Demand	IPC2020-9500	Dan Williams	Stress Corrosion Cracking "Like-in-Kind" Reliability Approach for Pipelines Without Crack Tool In-Line Inspection
Track 7: Risk and Reliability	On Demand	IPC2020-9517	Riski Adianto	Demonstration of Limit States Design Method for Assessment of Corrosion and Crack Features
Track 7: Risk and Reliability	On Demand	IPC2020-9556	Jiatong Ling	Intelligent Prevention Method for Third-Party Damage of Long-Distance Pipeline Based on Mobile Devices Location Information
Track 7: Risk and Reliability	On Demand	IPC2020-9609	Qian Zhen	Reliability-Based Assessment Method for Pipelines Buried at Fault Crossings
Track 7: Risk and Reliability	On Demand	IPC2020-9726	Mona Abdolrazaghi	Into Multi-Parameter Decision Making Scenarios: A New Look at Optimizing Utility Functions
Track 7: Risk and Reliability	On Demand	IPC2020-9738	Martin Di Blasi	Asset Complexity Based Benchmarks in Support of Reliability Improvement Program
Track 8: Northern, Offshore and Production Pipelines	Track 6.2 / Track 8.1	IPC2020-9597	SeonHong Na	A Coupled Thermo-Hydro-Mechanical Model for Capturing Frost Heave Under Chilled Gas Pipelines
Track 8: Northern, Offshore and Production Pipelines	On Demand	IPC2020-9346	Baodong Wang	Numerical Analysis of the Mechanical Behaviors of Nonmetal Unbonded Flexible Pipe Under Combined Load
Track 8: Northern, Offshore and Production Pipelines	On Demand	IPC2020-9350	Dongxu Zhang	Hydrate Formation in Water-in-Oil Emulsions in the Presence of Resins
Track 8: Northern, Offshore and Production Pipelines	On Demand	IPC2020-9351	Xun Zhang	The Coarse Particle Influence on the Strength of Wax Deposition
Track 8: Northern, Offshore and Production Pipelines	On Demand	IPC2020-9436	Mohamed Odan	Investigation Four-Phase Multi-Component Flow Techniques in Horizontal and Sub-Sea Pipelines
Track 8: Northern, Offshore and Production Pipelines	On Demand	IPC2020-9542	Zonghan Bai	Research on Virtual Metering System of Offshore Oilfield Based on Multi-Level Electrical Submersible Pump

Sheet1

Track 8: Northern, Offshore and Production Pipelines	On Demand	IPC2020-9547	Jianping Liu	Establishment and Application of the Pipeline Monitoring System in Permafrost Regions in China
Track 8: Northern, Offshore and Production Pipelines	On Demand	IPC2020-9567	Sijia Chen	Study on the Distribution of Submarine Pipeline Corrosion Defects Based on Internal Inspection Data and Data Mining Method
Track 8: Northern, Offshore and Production Pipelines	On Demand	IPC2020-9695	Babafemi Olugunwa	The Influence of Burial Depth and Soil Thermal Conductivity on Heat Transfer in Buried Co2 Pipelines for Ccs: A Parametric Study