



TYLER JANECEK, P.E.
STAFF CONSULTANT

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Mr. Janecek is a Staff Consultant located in the Omaha, Nebraska office of Engineering Systems Inc (ESi) and practices mechanical engineering. He has experience in utility equipment, hydraulic systems, structural design, electrically insulating aerial equipment, and is part of ESI's Rail Practice Group.

Mr. Janecek specializes in the design and evaluation of mechanical systems and equipment. He has extensive experience in solid modeling, finite element analysis, fabrication, and prototype testing. He has 6 years of industry experience designing electrically insulating mobile elevating work platforms (MEWP), digger derricks, and underground cable handling equipment for the utility market. During that time, he was involved in the design, testing, and implementation of all aspects of the equipment including the structures, machine design, hydraulic system, insulating system, power generation, and body compartments.

Mr. Janecek has also been involved in the creation and upkeep of internal company standards relating to anaerobic adhesives, electrically insulating material qualification, and electrically insulating MEWP qualification and periodic testing.

Areas of Specialization

Solid Modeling
Mechanical and Materials Design
FEA
Hydraulic Systems
High Voltage Dielectric Protection Systems
Mechanical Testing
Laboratory and Industrial Testing
Data Acquisition and Instrumented Testing
Non Destructive Testing and Inspection

Education

B.S., Mechanical Engineering, University of Nebraska – Lincoln, 2016

Licensed Professional Engineer (P.E.)

State of Nebraska, License No E-20718

Certifications

Hydraulic Specialist (IFPS) 35532, 2022

Mobile Hydraulic Mechanic (IFPS) 24094, 2018

Professional Affiliations/Honors

American Society of Mechanical Engineers (ASME)

Member

American Railway Engineering and Maintenance of Way Association (AREMA)

Member

International Fluid Power Society (IFPS)

Member

Positions Held

Engineering Systems Inc., Omaha NE

Staff Consultant, 2023 - Present

Altec Industries, Specialty Product Engineering, St. Joseph, MO

Staff Engineer, 2021 - 2023

Engineer II, 2019 - 2023

Altec Industries, Aerials Product Engineering, St. Joseph, MO

Engineer II, 2019

Engineer I, 2017-2019

Continued Education

Dale Carnegie Course: Effective Communication & Human Relations, Skills for Success

Dale Carnegie, St. Joseph, MO 2018

Fastener Training

Fastenal, St. Joseph, MO, 2018

Blodgett's Design of Welded Connections

Lincoln Electric, Cleveland, OH 2019

Level 1 GD&T Fundamentals

Sigmatix, St. Joseph, MO 2022

Traffic Crash Reconstruction for Engineers

Northwestern University Center for Public Safety, Aurora, IL, 2024

Technical Teaching and Presentations

“Dielectric Effects of Vacuum in Hydraulic Lines”

Introduction to Dielectric Systems course, Altec Industries, St. Joseph, MO 2022