Megan Kowalski

Mechanical Engineer II · Product Design, Rotating Equipment

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SUMMARY

Mechanical engineer with 7 years designing industrial equipment, currently on centrifugal pumps and previously on custom conveyors. Takes parts from SolidWorks model through FEA, GD&T drawings and first production run, and works directly with foundries and machine shops on cost.

EXPERIENCE

Mechanical Engineer II · Lakeshore Fluid Systems — Apr 2022 – Present
Milwaukee, WI

- Designed the bearing frame and seal chamber for a new end-suction pump family, taking 6 sizes from concept to production release in 14 months.
- Ran SolidWorks Simulation on the bearing frame; a rib change cut peak stress enough to move from ductile to gray iron, saving $18 per casting.
- Led DFMEA sessions with quality and manufacturing for 3 product launches and tracked 41 action items to closure in Windchill.
- Built tolerance stack-ups per ASME Y14.5-2018 for the shaft and impeller fit, eliminating a second machining operation on every impeller.
- Cut seal-leak warranty returns from 23 to 6 a year by redesigning the gland plate and adding a vent port.

Mechanical Engineer I · Menomonee Conveyor Co. — Jun 2019 – Mar 2022
Milwaukee, WI

- Produced detail and assembly drawings for custom conveyor systems, releasing about 300 drawings a year through SolidWorks PDM.
- Sized motors, gearboxes, bearings and shafts for belt and roller conveyors carrying loads up to 2,000 lb.
- Standardized 40 frame weldments into a configurable SolidWorks design table, cutting engineering hours on repeat orders by about a third.
- Traveled to 9 customer plants for installation support, fixing belt tracking and chain wear problems on the floor.

EDUCATION

B.S. Mechanical Engineering · Milwaukee School of Engineering — May 2019

SKILLS

CAD & PLM: SolidWorks, SolidWorks PDM, Windchill, AutoCAD

Analysis: SolidWorks Simulation (FEA), Tolerance stack-up analysis, Mathcad, MATLAB

Design Practice: GD&T (ASME Y14.5), DFMEA, DFM/DFA, Castings & machined parts, Weldments, Root cause analysis

CERTIFICATIONS

Engineer in Training (EIT), Wisconsin, 2019 · Certified SOLIDWORKS Professional (CSWP)