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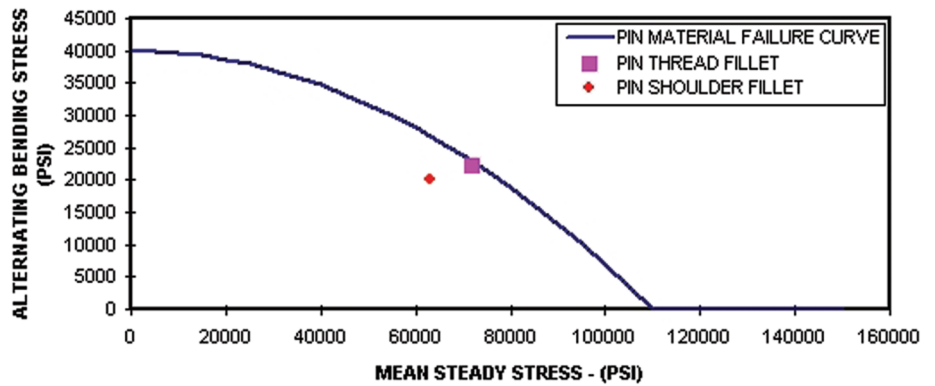
ToolJoint™

The program analyzes the working stresses at four connection locations:

- > Pin thread fillet
- > Pin shoulder fillet
- > Box thread fillet
- > Box bore back

The stress at each of these locations is compared to the material properties. Connections with different pin and box materials can be analyzed. The connection fatigue capability is based on the Gerber failure criteria. The maximum sliding build rate is based on the yield strength of the material as well as the ability of the connection to resist opening at the faces.

PIN FAILURE DIAGRAM



For more detailed analyses, APS Technology's FEA consulting services are also available.

APS has a companion program, WellDrill, used for predicting accurate bending moments at the connections. This program calculates the bending moment along the drill string, critical rotary speeds that excite vibration, buckling and forced drill string response. The latest version of WellDrill includes BHA Predict, for accurate prediction of BHA response in all drilling conditions.

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Specifications subject to change without notice.

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