



FLANGEPRO

FlangePRO is a flange design tool that helps engineers and designers quickly analyze and validate weldneck and slip-on flanges using built-in code methods and FEA.

It supports standard sizes from ASME B16.5 and B16.47 Series A/B, or custom user-defined designs. The software performs linear and nonlinear FEA using axisymmetric or brick elements to model interactions between flanges, gaskets, bolts, and nuts.

Users can run code-based stress and leakage checks with ASME, EN, and PD 5500 standards, and compare them directly with FEA results. **FlangePRO** automates contact modeling, stress linearization, and result display, helping streamline design and ensure compliance.

PROGRAM FEATURE	TIER 1	TIER 2
MatPRO & MiMOut Access	✓	✓
Model Weld Neck Flanges	✓	✓
Linear Elastic Analysis for Axisymmetric & Brick Elements	✓	✓
Code Stress Calcs per ASME Section VIII-1, Appendix 2	✓	✓
Code Stress Calcs per ASME Section VIII-2	✓	✓
Model & Analyze Slip-on Flanges with Hub		✓
Code Stress Calcs per PD 5500		✓
Code Stress Calcs per EN 13445		✓
Leak Calcs per Kellogg Method		✓
Leak Calcs per Code Case 2901-1/UG-44		✓
Nonlinear Analysis		✓