

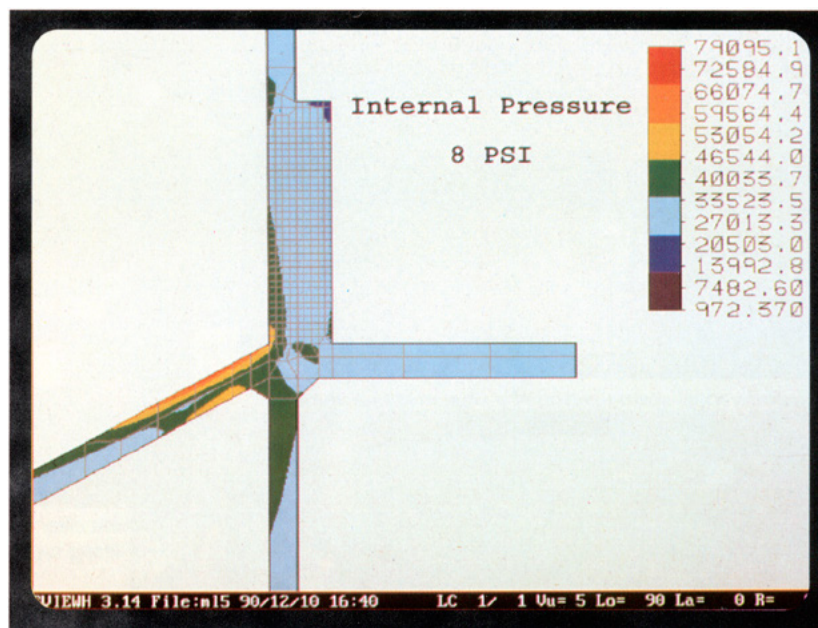
Engineering

The engineering department of the Fabrication Division concentrates its efforts in three areas: the design of pressure vessels, thermal and mechanical design of shell-and-tube heat exchangers and refinement of customer-supplied designs for more practical and economic fabrication.

Most pressure vessels and heat exchangers are designed using ASME Code and TEMA rules where applicable. Using finite element analysis, we are also prepared to calculate stresses occurring in pressure vessel and heat exchanger structural details that do not match standard configurations covered by these rules.

The price-to-performance ratio for heat exchangers can be optimized using customer-supplied process conditions and our up-to-date heat transfer and pressure drop correlations.

Through its development of custom computer software, Alaskan Copper Works is efficiently able to draw upon years of experience to enhance the quality and cost effectiveness of its fabrication processes.

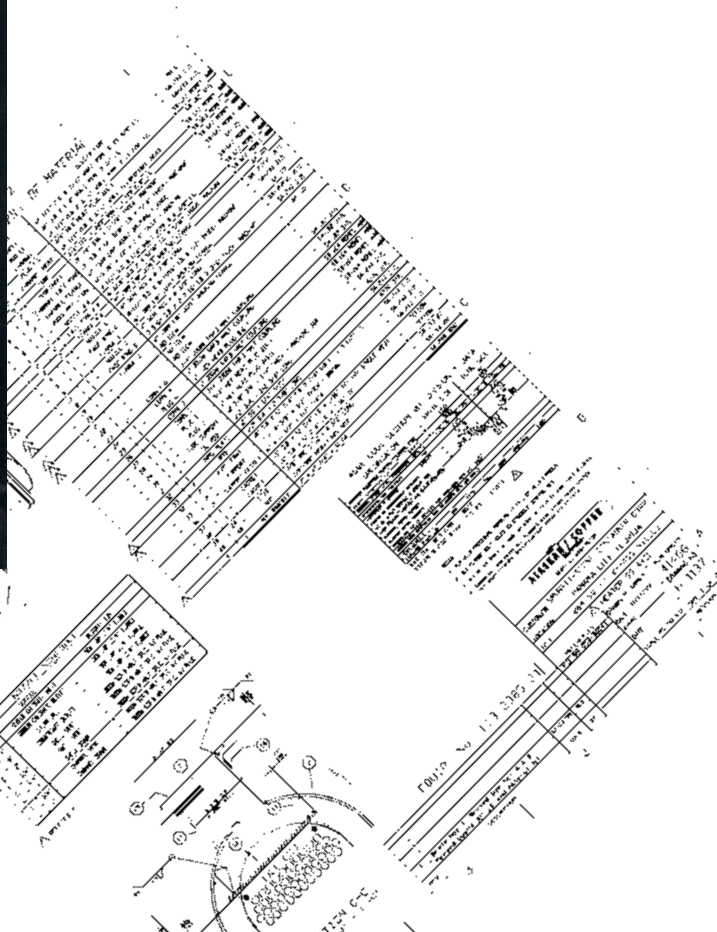
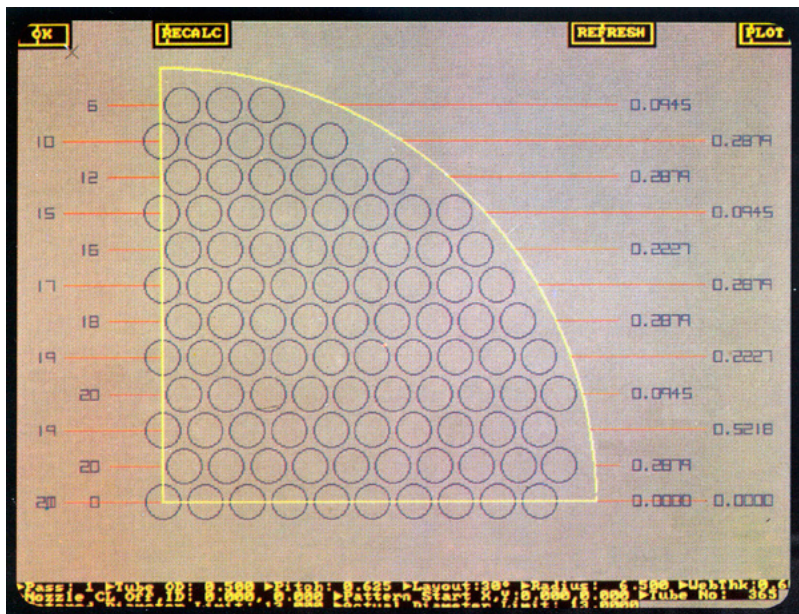


A portion of a pressure vessel with its stress pattern displayed by a finite element analysis. This method can calculate stresses for design details not covered by ASME Code or TEMA rules.



An experienced engineering staff is available to control design details of alloy fabrications made to demanding specifications.

A sample display of the output screen of a computer program designed specifically to calculate tubesheet layouts for single and multipass designs.



Shop detail drawings are prepared for nearly all fabrications.



Close coordination between engineering and production ensures a quality finished product.