Cooper Bessemer LSV 20
Crankshaft repair
Cracked output flange

Crack was 3” deep X 18” long running around the spigot
Drilling and tapping the holes for the CASTMASTER stitching pins along the crack
Stitching the crack

The crack was found to be 3” deep over most of its length
The crack was stitched from one end to the other
Inspecting the flange for run out
Machining the flange
Final inspection

Total run out was held to +/- .001”
Crack repair and machining completed
The old spacer was discarded because of the center hole.

A new spacer was machined with a solid center.
New Spacer with solid Center

The new spacer was machined from 8” solid steel in order to create the solid center to drill the holes for the new bolt circle for the additional 8 new bolts.
New adapter plate and flywheel are mounted to the crankshaft

8 new holes were drilled and tapped into the crankshaft to accept bolts for additional strength.

New oversize stretch bolts were manufactured and installed through the crankshaft, spacer and flywheel.
Assembly is complete and the unit is placed back on-line
This repair was performed in the summer of 2000 and is still in service today along with three others that LNMS has repaired with the same type of cracks.