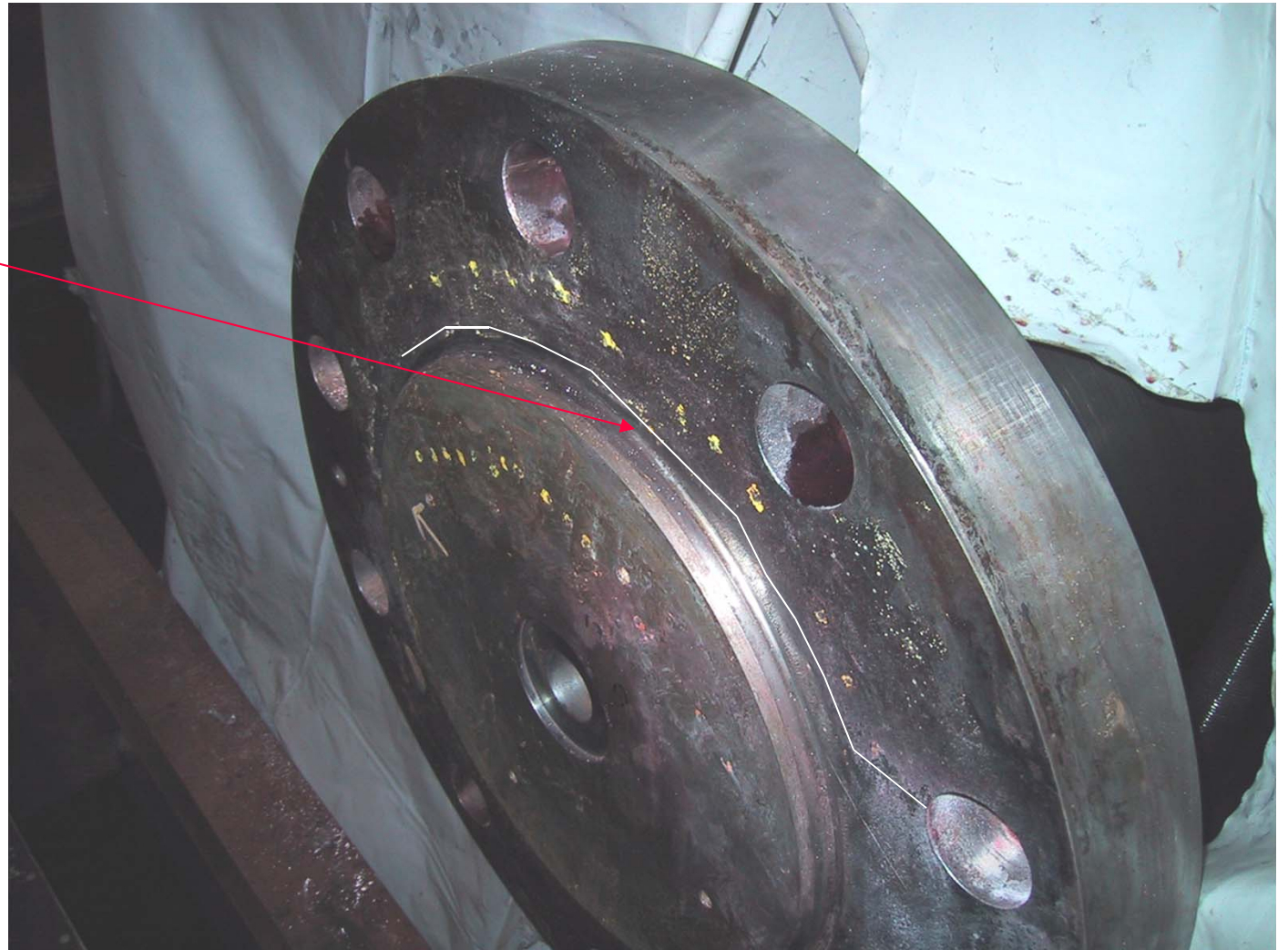


Cooper Bessemer LSV 20 Crankshaft repair



Cracked output flange

Crack was 3" deep X
18" long running
around the spigot



Drilling and Tapping

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



Old Spacer

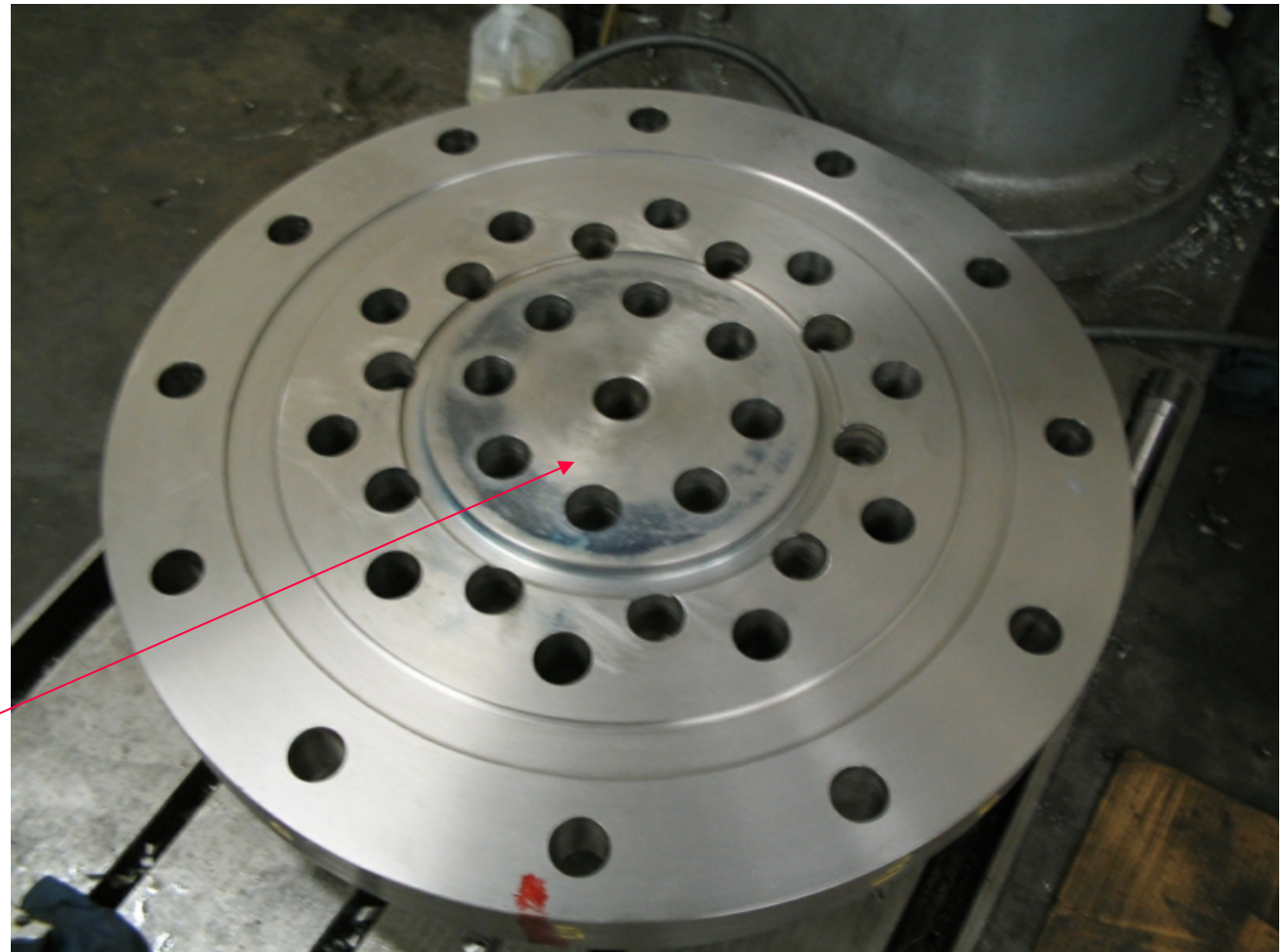
The old spacer was discarded because of the center hole.

A new spacer was machined with a solid center



New Spacer with solid Center

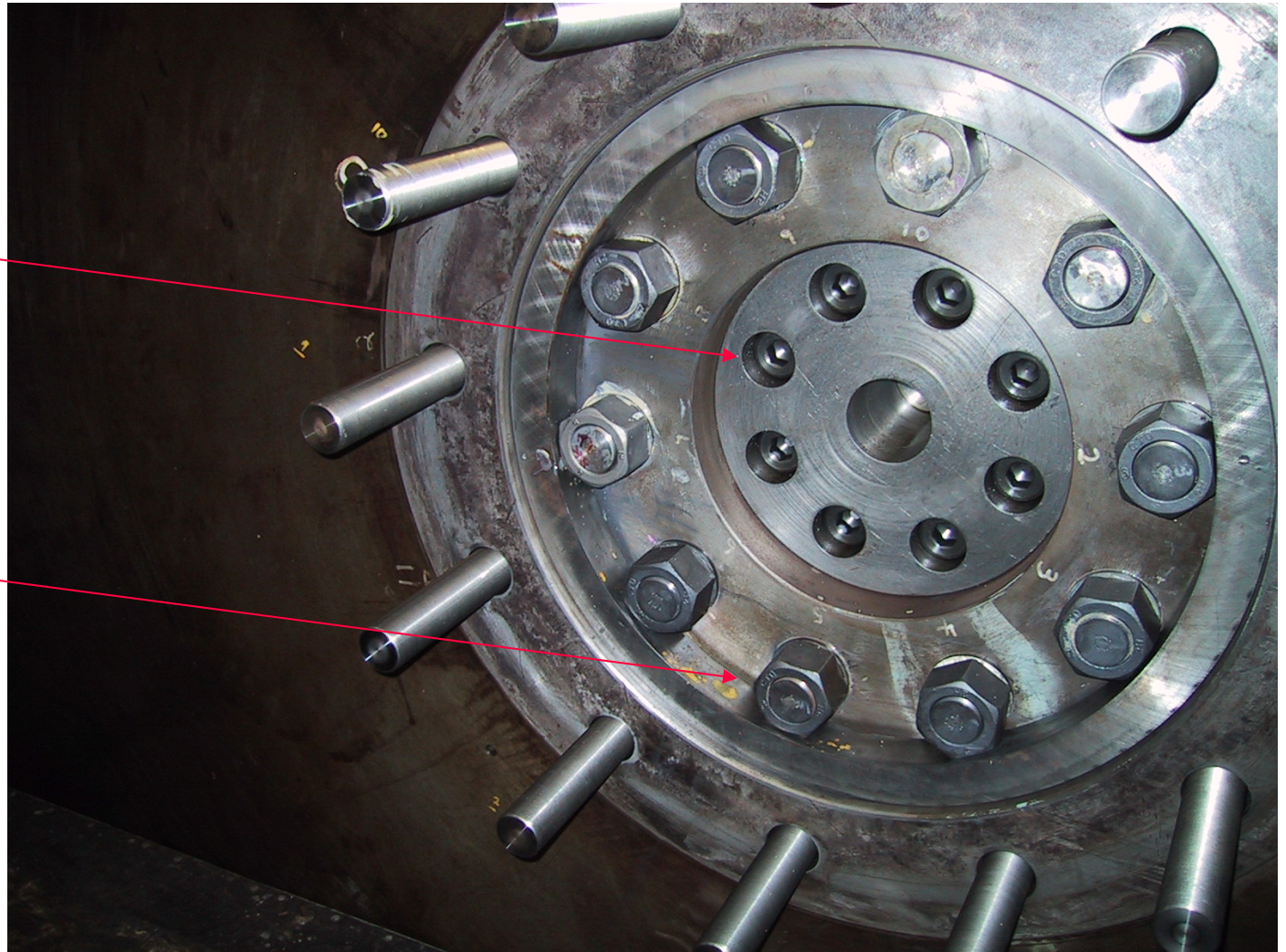
The new spacer was machined from 8" solid steel in order to create the solid center to drill the holes for the new bolt circle for the additional 8 new bolts.



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

