



A patented product used with the continuous pump to surface. Attached to the top of the pump stroke, the surge tool pushes wellbore fluid downward with every stroke of the tubing. In doing so it helps prevent and break down blockages in the formation and perforations.

This process develops more worm holes in the formation, thus producing more fluid and more sand.

Sizes and configurations can be built to suit well requirements.

By combining the patented technology developed by Wavefront Energy and Environmental and reciprocating tubing pumps (example) CSE (Continuous Sand Extraction) pumps) mechanical blockages of the perforation and formation can be overcome. On the down stroke, the tool causes a pressure surge into the formation that dislodges debris and destabilizes bridges. The Surge Tool and CSE pumps (CSES) have been surprisingly effective in dealing with the blockage debris (shale, coal) associated with catastrophic formation collapse.

- ❖ Surge Tools are an exclusive product to Top Gun
- ❖ Sizes and configurations can be built for well parameters