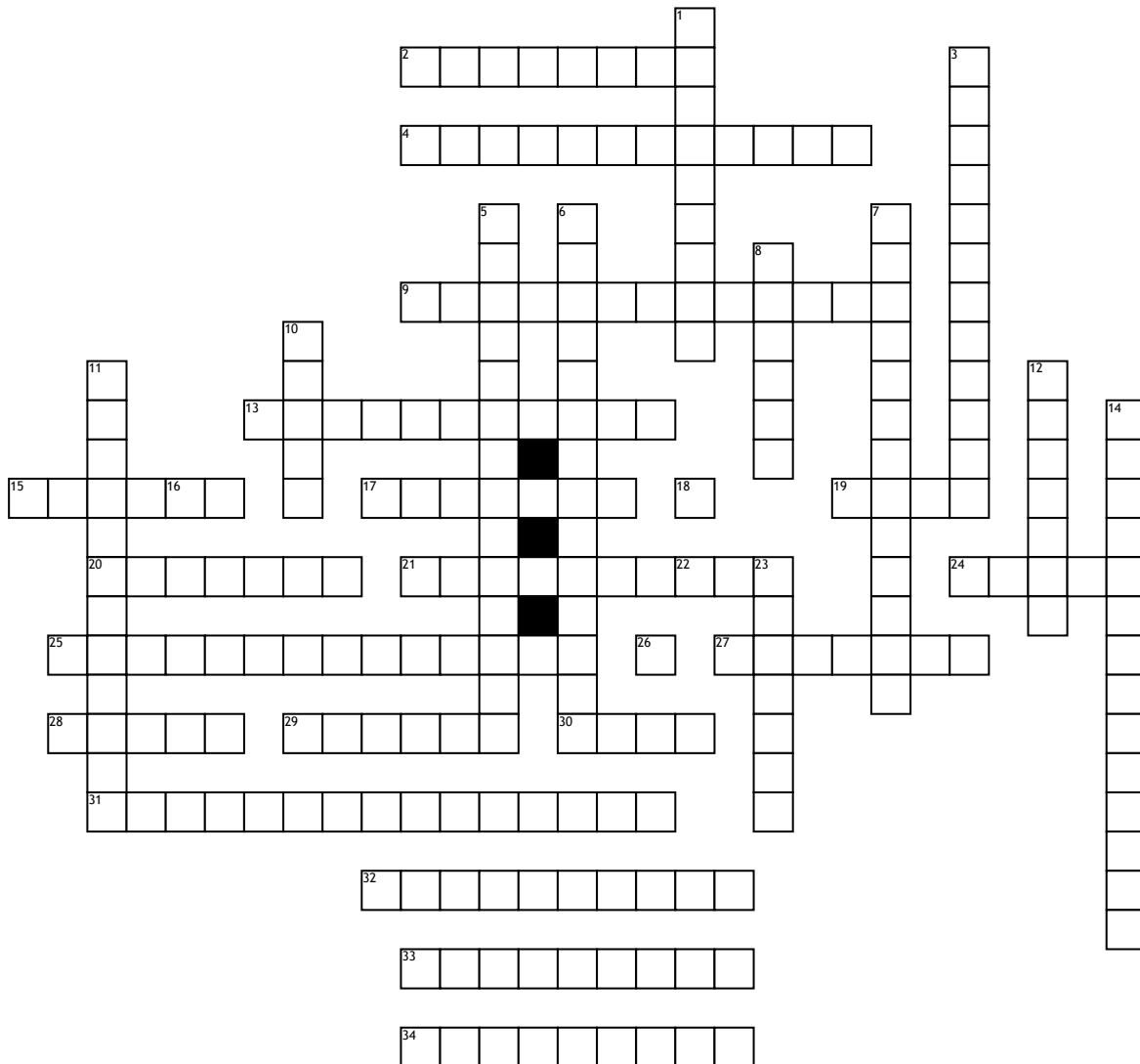


VESSELS #1 2017



Across

- 2. is required in each repad to ensure that no pressure is allowed to accumulate between the repad and the shell.
- 4. Nozzles may be located on either the shell or the head and may be connected either concentrically
- 9. an assembly using two crossed plates at the liquid outlet of a vessel to eliminate the vortex
- 13. allows for the connection of hooks or slings
- 15. reinforcing pads also known as
- 17. a vertical appendage off the bottom of a horizontal vessel
- 19. A plate that maintains a certain liquid level on one side of a vessel.
- 20. the most common support for horizontal vessels.
- 21. common than bubble cap trays due to their simplicity, low cost and minimal maintenance
- 24. sometimes called the can, ring or course belt.
- 25. often required to prevent a vessel from collapsing under external pressure, or to prevent long, horizontal vessels from buckling under their own weight. If
- 26. indicates the welds to flanges.

27. provide access for personnel to enter the inside of the vessel

- 28. must be used to hold up the flange while the manway is open because of the weight of the blind flange
- 29. small pipe extending from the top to the bottom of a horizontal vessel
- 30. Spherical vessels, as well as some vertical vessels, are supported on
- 31. have one downcomer per tray
- 32. used in vertical vessels to transport liquid from one tray to the tray below.
- 33. attached at some conspicuous location on the vessel
- 34. also known as mist extractors or mist eliminators

Down

- 1. They extract small droplets or particles of undesirable liquids from the gas stream that would otherwise carry over into the vapour stream as it leaves the vessel
- 3. Large or tall vessels may require a double base ring and

- 5. the distance between the tangent line of the head and the circumferential seam between the head and the shell
- 6. a container having a design pressure between 15 psi and 3000 psi
- 7. usually referred to as flanged and dished
- 8. changes the direction of flow or to promote the mixing of a fluid
- 10. is not a pressure-holding part
- 11. have two downcomers
- 12. allows a heavy liquid to separate from a lighter liquid
- 14. most complex and expensive to maintain.
- 16. indicates the welds of nozzle to vessel.
- 18. indicates the circumference welds in shell and joins to other heads.
- 22. indicates the longitudinal and circumference welds in hemispherical heads
- 23. required below the downcomer of the lowest tray to prevent vapours from bypassing through the downcomers.