Phases of the Waterfall model

① Requirements needed for the Tool. Which has to be stable.
→ Output: → Requirements specification.

② Design: → Designing the tools with respect to the requirements specification. It has to be less complex.
→ Output: → Design specification or Software architecture

③ Implementation: → With the discussed design specification, the company creates the tool.
→ Output: - Software.

④ Verification: → Testing and review of this Software; to ensure it does the required tasks | specification.

⑤ Maintenance: Updates can be made to the Tool depending on the recent demand of the company, or feedback from the users of the Tool.

Addition phases of the V-model

① Design
- ① Coarse design: - Which focuses on the Software architecture
- ② Detailed design: → Which focuses on the interface design ie. Detailed Component Specification.

② Implementation.
- ① Module Test: - Actual coding starts in this stage.
- ② Integration test: Focuses on the detailed design. Test the flow of different modules.
- ③ System test: → This test is focused on the software architecture | coarse design.
- ④ Acceptance Destination: Test the software in the user environment and also if the software is in line with the requirements.

for every stage in the V-model there is a corresponding testing phase.

Pros.

WaterFall

① Less complex forms are considered.

② Small sized teams are dealt with because we have specific stages.

③ Easy to manage and understand due to the restricted form of the model.

V-model

① Quality is much higher. because clarifications can be made.

② We can consider more complex problems.

③ It is less time consuming as different stages of the process such as planning, testing, coding can be carried out simultaneously.

④ Work really well for small projects where requirements are easily understood.

Cons.

Water-Fall

① All the requirements are required at the beginning. Therefore no changes can be made at a later time once the process has begun.

② The phases of the process are completed one after another which can be time consuming.

③ Not a good model for complex systems. because of the risk caused by the restricted format.

V-model

① It is more expensive to carry-out; if changes are being implemented at a later stage in the process,

② For every change that occurs. the requirements have to be updated.