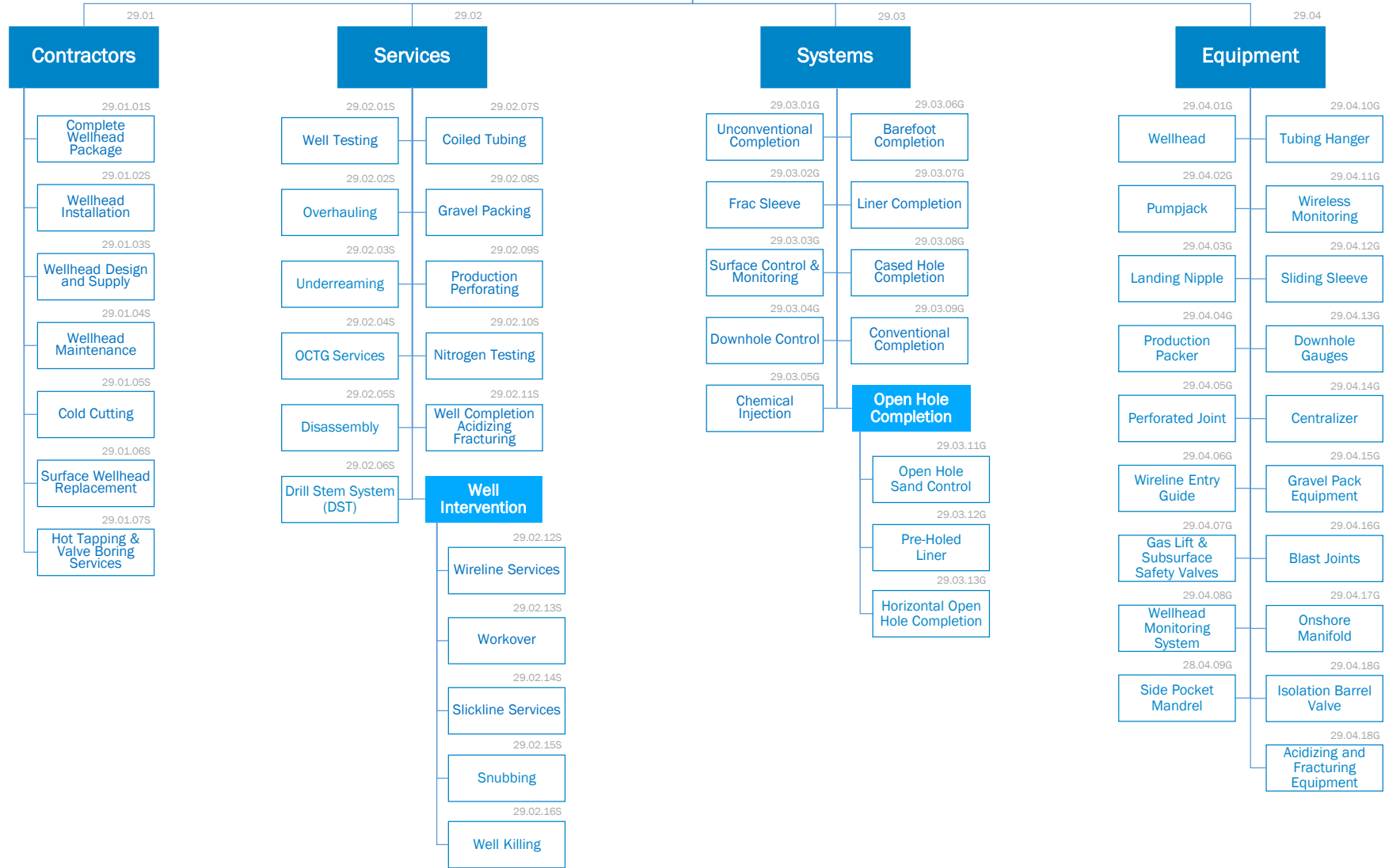


Well Completion



Well Completion

This family group encompasses all goods and services employed in well completion operations. The group is further divided in four families that range from full well completion contractor services to more specific services and equipment. Well completion services also include here disassembly activities.

MAIN RATIONALES BEHIND THE STANDARD CATEGORIZATION

Contractors

- This family includes whole well completion services provided by specialized contractors.
- “Cold Cutting” refers to cutting and bevelling services without the use of flames nor the production of sparks.

Services

- This family refers to all support services for well completion activities in both onshore and offshore sites. It also includes disassembly services performed for modifications or decommissioning.
- “Production Testing” refers to dynamic production monitoring and productivity sustaining activities. It includes diagnosis and solution of well problems, multiple wells data interpretation, and produced fluids profiling.
- “Remote visualization and advise” can be found in Group 26 (Reservoir Management)
- “Workover” is here intended in its specific acceptance as the process of pulling and replacing a completion involving invasive techniques.
- “Well Testing” Includes Swabbing Activities
- “Coiled Tubing” is part of “Drilling Services” group and is identified a the category code 27.03.21

Systems

- “Conventional Completion” include casing flow, casing and tubing flow:, pumping flow, tubing flow, gas lift well, single-well alternate completions, single-well concentric kill string, single-well 2-tubing completion.
- Goods as perforated Liner or Perforated casing are considered as OCTG as the suppliers with capabilities to supply them are the same as OCTG ones

Equipment

- This family includes equipment and components used for well completion.
- “Wellbore Cleaning Tools” are included in the category “OCTG Tools” of the group 28 (Drilling Equipment and Materials)