

Claims

1. A process for producing synthesis gas, the process comprising the steps of
 - a) reforming a hydrocarbon feed in a reforming section thereby obtaining a synthesis gas comprising CH₄, CO, CO₂, H₂ and H₂O and impurities comprising ammonia;
 - b) shifting the synthesis gas in a shift section comprising one or more shift steps in series to a shifted synthesis gas;
 - c) separating from the shifted synthesis gas a process condensate originating from cooling and optionally washing of the shifted synthesis gas;
 - d) passing the process condensate to a condensate steam stripper, wherein dissolved shift byproducts comprising ammonia, methanol and amines formed during shifting the synthesis gas are stripped out of the process condensate using steam resulting in a stripper steam stream,
 - e) adding a part of the stripper steam stream from the process condensate steam stripper to the hydrocarbon feed and/or to the synthesis gas downstream the reforming section, up-stream the last shift step, wherein the remaining part of stripper steam is purged.
2. The process of claim 1, wherein the condensate steam stripper is a medium pressure stripper.
3. The process of claim 1 or 2, wherein the purge stripper steam is passed to a hydrocarbon combustion step.
4. The process of claim 3, wherein the hydrocarbon combustion step is the fuel side of a steam reformer.
5. The process of claim 3, wherein the hydrocarbon combustion step is the fuel side of a fired heater.
6. The process of any one of claims 3 to 5, wherein the purge stripper steam is mixed with the combustion air or hydrocarbon fuel before entering the hydrocarbon combustion step.