Claims:

1. A process for producing a synthesis gas chiefly consisting of hydrogen and carbon monoxide by catalytic steam reformation of a hydrocarbonaceous feed gas in at least one tubular furnace, wherein the catalytic steam reformation uses burners to provide heat for a catalytic reforming reaction, wherein the burners produce a flue gas, wherein the process comprises the steps of:
   - utilizing the heat from the synthesis gas and the flue gas to generate a pure steam from boiler feed water;
   - using a first portion of the pure steam for providing heat to process condensate to produce a process steam in a steam boiler equipped with a heat exchanger, wherein a second part of the pure steam is discharged from the process as export steam, and
   - adjusting a first pressure value for the first portion of the pure steam and a second pressure value for the second pure steam, wherein the first pressure value and the second pressure value are adjusted independent of each other.

2. A plant for carrying out the process according to claim 1, comprising:

   - At least one tubular furnace for carrying out the catalytic steam reformation,

   - A degassing boiler for the thermal degasification of boiler feed water,

   - A steam boiler for the generation of pure steam from boiler feed water,

   - At least one heat exchanger each for heating and evaporating the boiler feed water by synthesis gas and by flue gas,

   - At least one apparatus for the mechanical separation of condensate from the synthesis gas,

   - A steam boiler for the generation of process steam, equipped with a heat exchanger suitable for the use of pure steam as heat-transfer medium.

   - Separate control devices for adjusting and regulating the respective pressures of that part of the pure steam which is used as heat-transfer medium for the generation of process steam and of that part which is discharged from the process as export steam

3. The plant according to claim 2, characterized in that the steam boiler for the generation of process steam is equipped with an internal plate heat exchanger.

4. The plant according to any of claims 2 to 3, characterized in that the plant sections getting in contact with process condensate and process steam are made of stainless steel.