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, wherein in at least one of the tubular furnace, the heat of burners required for the chemical reforming reactions to take place is generated by producing a flue gas and wherein, by utilizing the heat contained in the synthesis gas and in the flue gas, a pure steam is generated from boiler feed water and a process steam is generated from process condensate generated in the steam boiler equipped with a heat exchanger, characterized in that for the generation of the pure steam synthesis gas and flue gas are used and for the generation of the process steam a part of the pure steam is used as heat-transfer medium and the remaining part of the pure steam is discharged from the process as export steam, and wherein the respective pressures of that part of the pure steam which is used as heat-transfer medium for the generation of process steam and that part which is discharged from the process as export steam 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.