

Title (en)  
METHOD AND PLANT FOR CONDUCTING AN INDUSTRIAL PROCESS

Title (de)  
VERFAHREN UND ANLAGE ZUR DURCHFÜHRUNG EINES INDUSTRIEPROZESSES

Title (fr)  
PROCÉDÉ ET INSTALLATION POUR EFFECTUER UN PROCESSUS INDUSTRIEL

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Abstract (en)  
[origin: WO2022028732A1] The present invention relates to a method for conducting an industrial process (100), in which impure argon is discharged from a process step (10), in which the impure argon or part thereof is processed (20) so as to result in pure argon, and in which the pure argon or part thereof is fed back to the process step (10), wherein the processing (20) comprises a compression (21), a heat exchange (22) and a rectification (23) in a rectification column (24) column having a reboiler (25) and a tops condenser (26), the impure argon discharged from process step (10), or part thereof, is subjected to the compression (21), to the heat exchange (22) with cooling, and to at least partial condensation in the reboiler (25) to obtain an impure argon condensate, a first part of the impure argon condensate being fed into the rectification column (24) in condensed form, and a second part of the impure argon condensate being subjected to evaporation in the tops condenser (26), and the evaporated second portion of the impure argon condensate, or part thereof, being fed back to the rectification (23) as circulation stream. What is envisaged within the scope of the invention is that the circulation stream at least in part is subjected to the compression (21) together with the impure argon discharged from process step (10) or together with the part thereof that has been subjected to the compression (21). The pure argon is provided using a bottom product that is formed in the rectification (23), wherein, after removal and prior to heating, the bottom product that is formed in the rectification (23) or part thereof is subjected to heating in the heat exchange (22), and the bottom product formed in the rectification (23) or part thereof which has been subjected to heating in the heat exchange (22) is subjected to evaporation in the tops condenser (26). The present invention also relates to a corresponding plant.

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