

Abstract**OXYGEN REDUCTION SYSTEM AND METHOD FOR OPERATING AN OXYGEN REDUCTION SYSTEM**

The present invention relates to an oxygen reduction system (100) comprising at least one gas separation system (102) as well as one compressed gas storage (105; 105a to 105f). The compressed gas storage (105; 105a-f) is fluidly connected or connectable to at least one enclosed area (107; 107a, 107b) by means of a line system in order for a gas mixture or inert gas stored in the compressed gas storage (105; 105a-f) to be fed to the enclosed area (107; 107a, 107b) when needed. The outlet of the gas separation system (102) is or can be fluidly connected selectively to an inlet of the compressed gas storage (105; 105a-f) or to the at least one enclosed area (107; 107a, 107b) in order to feed the gas mixture provided at the outlet of the gas separation system (102) either to the compressed gas storage (105; 105a-f) or to the at least one enclosed area (107; 107a, 107b) as needed.

15 (Fig. 2)