



February 4, 2022

Notice regarding the construction of a remote operation system for core manufacturing plants

Taiyo Nippon Sanso Corporation (“TNSC”, President: Kenji Nagata) sees the promotion of safety, quality control, and productivity improvement through the promotion of DX as one issue that must be addressed in the medium to long term. TNSC hereby announces that it has constructed a system to enable the remote operation of large-scale air separation units that manufacture industrial gases such as oxygen, nitrogen, and argon.

1. Background

Up until now, TNSC has supported customers with small-scale nitrogen gas manufacturing equipment installed within customers’ facilities or in adjacent areas through integrated condition monitoring (Total Monitoring Center) using a uniquely developed remote monitoring system, thereby ensuring safe and steady around-the-clock gas supplies and rapid recovery when problems occur.

Meanwhile, manufacturing plants operating large-scale air separation units deploy safety personnel who possess specialized knowledge to each plant, and carry out operations on a 24-hour basis.

Since the beginning, we have thoroughly ensured operations that prioritize safety, quality, and a stable supply above all else. However, amid projections that the working-age population will decrease going forward, rigorous plant operation based on more sophisticated risk evaluation is being required. We will introduce a remote operation system that allows us to maintain operation management with an unprecedented degree of sophistication, thereby enabling improvements in productivity and a plant operation system that realizes effective use of human resources.

2. Future plans

We will evaluate this system and aim to realize remote operations of manufacturing plants that strictly adhere to legal requirements. In fiscal 2023, we plan to open the Remote Operation Center (tentative name) and gradually expand target plants (such as Shin Sagami Sanso Co., Ltd.). This center will be established to handle plant operation, equipment management, quality control, etc., and will harness digital technology such as IoT and AI in addition to the remote monitoring technology cultivated at the Total Monitoring Center. Along with this, we will also work on auto-operation, which will perform optimal automated functions, and promote efficient operations with a higher degree of sophistication.

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