To support industry for fighting COVID-19, an information on 'Guidance for Disinfecting Work Areas for First Time and Regularly due to outbreak of COVID-19' is published in NSC's bi-monthly Newsletter. NSC is conducting 'Pre-commissioning Safety Audit' and 'Hazard Identification & Risk Assessment (HIRA)' for safe reopening of operations.

What is your message to the industry to reboot manufacturing SAFELY

Manufacturing industry should quickly accept the new definition of safety which includes the safety from infectious diseases apart from the traditional thinking about safety. The industry will have to create and maintain the work places that will support the life first, to have a sustainable growth.

"There is no choice but to be digitized in the Process Industry. Already in the last 25 years, the Chemical Industries in India have made several advancements in the digitization of processes, but there is always room to improve further in this regard. Digitization is gaining all the more importance in existing pandemic scenario, with more focus towards Digital Twins, remote monitoring of sites and various such applications".



Mr. P. D. Samudra CEO & Managing Director thyssenkrupp Industrial Solutions (India) Private Limited (tkIS India)

Kindly tell us about your activities in India

thyssenkrupp Industrial Solutions India Private Ltd. (earlier known as UHDE India Private Limited) has been serving the Indian Chemical Industry for more than four decades. The main activities covered are Engineering, Procurement and Construction Management Services as well as EPC deliveries of Chemical Plants in the field of Fertilizers, Electrolysis, Petrochemicals and Polymers, Refineries, Metallurgical Plants, Cryogenic Storages etc. tkIS India has designed and constructed more than 750 major plants each requiring investments ranging between USD 10 million to USD 600 million.

We have been associated with majority of the chemical producers in India for grassroot, brownfield and revamp projects. Our market share in India for segments of Electrolysis and Phosphatic Fertilizer Plants is more than 75%, and nearly 60% for Cryogenic Storages. Presently we are also active in Refinery business and have completed several projects for the Indian Oil Industry. We have more than 1400 employees, majority of whom are well qualified and experienced engineers. We operate from Mumbai and Pune, and are presently active at 20 sites in India plus 2 sites abroad.

Our Parent Company, thyssenkrupp Industrial Solutions AG is a part of the diversified industrial group thyssenkrupp AG, an internationally wellknown Organization. Our Parent Company and the Associated Licensors have many proprietary processes and technologies to offer the Chemical Industries. The 'technology segment covers processes for production of Ammonia/ Urea, Nitric Acid, Hydrogen, Aromatics, various Polymers. Caustic Soda/Chlorine. Oxide/Glycols/Polyols, Propylene Dehydrogenation, Coke Ovens for Steel Plants etc. We have built several plants in India utilizing technologies of our Parent Company; as well as plants based on technologies from several other internationally-reputed process licensors in different fields such as Petrochemicals, Phosphatic Fertilizers, Oil Refining, Polymers and Metallurgy.

Our thrust is of course on Quality, Safety, Innovation and Sustainability during Design -Engineering, Procurement and Construction Management for the projects. In addition to EPC and EPCM Services, we also act as Project Management Consultants (PMC) for mega refineries and petrochemical projects. We are certified for Quality, Occupational Health and Safety and Environment Management Systems.

How do you foresee the impact of COVID -19 in the Process sector in India

Firstly, COVID-19 has affected the businesses in practically all the segments worldwide and

the Process Sector is no exception! The Process Industry in India which has been steadily growing, especially Petrochemicals and oil refining at more than 7% CAGR has got a big setback due to Covid-19. The availability and the cost of raw materials as well as the prices for products are varying continuously. Therefore, the Industry is presently rather in a "consolidation mode".

The Private Sector Industries will take little longer time to return to normalcy whereas large Public Sector Companies are showing remarkable recoveries. The new investments as planned by major Public Sector Companies are proceeding, but with some delays. However, the Private Sector is reviewing the planned new investment in the background of Global Covid-19 pandemic. Considering the huge demands in these sectors, I am sure within 6 – 8 months, the Country will reach normalcy in these fields and we will expect investments, in the near future.

What are your suggestions to become Atmanirbhar Bharat

Several experts are working in this direction. Certainly, India has the potential to become a self-reliant nation, and like the Make in India programme, it is a move in the right direction.

- The key is to reduce dependence on imports of raw materials for chemicals and to promote its local production, by giving special concession to the Indian entrepreneurs.
- The thrust should be on using environmentallyfriendly raw materials for fuels. to replace fossilbased fuels. Energy cost need to be reviewed to facilitate lower cost of production for chemicals thereby improving export opportunities.
- The long-awaited Special Chemical Zone (PCPIRs) should be urgently reactivated to ensure that multinationals (via foreign direct investment) and the local entrepreneurs set up mega sized plants in India, so that we can go in the direction of Atmanirbhar Bharat.

Kindly tell us on some new application areas which will be key drivers of growth in future

These As I mentioned, in my opinion, Green Hydrogen as a fuel will be a key driver of growth in future. This will be based on Water Electrolysis utilizing Solar Power, for production of Hydrogen which will be the fuel in Industries, Automobile and such applications. Our group is taking steps in this direction with our proprietary

Water Electrolysis technology.

Have you done any recent expansion in business or do you have any future expansion plans

We have adopted a conservative approach in this regard. However, we are constantly reviewing the situation by remaining in constant touch with our Customers for their ongoing projects and their future plans in this regards. Our thrust right now is on further improvement of qualifications and competence of our engineers to serve our customers better. Being in the midst of the pandemic, we are not thinking of any expansion plans at this stage.

Your opinion on the growing digitization of the Process industry in India

There is no choice but to be digitized in the Process Industry. Already in the last 25 years, the Chemical Industries in India have made several advancements in the digitization of processes, but there is always room to improve further in this regard. Several Technicians, Operators, Engineers have acquired the necessary expertise to handle modern technologies as well as digitization processes. This definitely will result in higher efficiencies and operational safety to a great extent. Digitization is gaining all the more importance in existing pandemic scenario, with more focus towards Digital Twins, remote monitoring of sites and various such applications.

What would be your suggestions to German companies who are looking to enter the Indian market

India has been a steadily growing market, sometime with fluctuations due to internal/ external factors, but in the long range a destination where investors can reap high benefits. Investors must have patience, since the long range benefits are very high in India, due to the increasing demands as well as reliable local partners. This can lead to substantial growth of the industry for the benefit of the investors. India is certainly an important destination for investments in Chemical Industry, as well as for partnering by way of technical collaboration for specialized equipment and package units in the field of Unit Operations for the Process Industry. German companies, with their lineage and attributes coupled with excellent Indo-German relations, have good prospects in India, though they will have a fair amount of competition to reckon with, initially.