

Development of Wax De-oiling Technology and its Commercialization at Numaligarh Refinery Limited

CSIR- IIP has developed a '**Wax De-oiling Technology**' to produce petroleum waxes jointly with Engineers India Limited (EIL) and Numaligarh Refinery Limited (NRL). IIP gave an idea to NRL to produce high value Paraffin and Microcrystalline Waxes from Assam Crude and offered Wax De-oiling Technology to get more economic advantages.



Numaligarh Refinery has set-up a grass root 'Wax De-oiling Unit' using IIP and EIL Wax De-oiling Technology by making an investment of about Rs. 676 crores. This is the first wax plant set-up by any petroleum refinery in the country based on indigenous technology with the largest investment. This wax plant is designed to produce high quality and high value 50,000 Metric Ton Per Annum (MTPA) of 'Paraffin Wax' and 4,500 MTPA of 'Microcrystalline Wax' for producing candles, polishes, cosmetics etc. The key features of this technology are : high energy efficiency, low carbon footprint, low capital cost and payback period of less than 3 years.



The successful commercialization of 'Wax De-oiling Technology' at NRL reported several benefits such as it enhanced Numaligarh Refinery profitability, encouraged small scale entrepreneurs for startups and setting-up of medium and small sized ancillaries to generate direct and indirect employments in neighboring areas in North-East region of India which will help to improve the quality of life of local people etc. Some benefits to

the nation are it cut down the import of wax in the country and saved a lot of foreign exchange. NRL has also started export of wax to many foreign countries. The performance of wax plant has exceeded the expectations. The commercialization of indigenous Wax De-oiling Technology is in line with 'Make in India' initiative. The Numaligarh Wax plant was dedicated to the nation on 5th February, 2016.
