

## Bitzer commissions 1st inverter rack (I-Pac) at Bangalore

BITZER India commissioned the first Inverter Driven Rack at Bangalore. The commissioning activity was led by an Application Engineer who flew in from Singapore and assisted the local BITZER team in India. The Rack (Model iP-103-L-4ECF-4DC) consists of three semi-hermetic reciprocating compressors and the base compressor is equipped with a flanged-on suction gas cooled inverter. This compressor can operate in the frequency range of 30-87 Hz and offers benefits of both power savings at lower speeds (part load) and higher cooling capacity by running above rated speed (50-87 Hz). Since the electronics of the inverter are cooled by the suction gas, there is no de-rating of the inverter (& compressor) performance even at high ambient temperatures. Additionally there are no problems of dust ingress. This design is far superior to conventional machines offered in the market where the inverter is cooled by ambient air and there is de-rating at high ambient temperatures. Some other features of this unit are:

- Low starting current
- High power density
- Full torque upto 87 Hz with a special motor
- Easy commissioning since the Inverter is fully parameterized
- Shielded motor cable



- No air filter needed for the inverter

BITZER is the world's single largest manufacturer of semi-hermetic Reciprocating & Screw Compressors in the world. In the past few years, it has been introducing more & more compressor types that are inverter driven and offer highest part load efficiency to the customers.

The application is Banana Ripening, there are six rooms of capacity 11MT each. The project has been set up by a company called Srinivasa Hi Tech, Bangalore who are pioneers in this field and have Ripening chambers at multiple locations across the country.

The contract for this project was awarded to M/s Climate Changers, a company incorporated in Bangalore. Mr. Dharmendra is the MD of this company and has 15 years of rich experience in Design, Planning & Project Management of Air Conditioning & Refrigeration Projects. The company focuses on Integration Solutions for Refrigeration & HVAC projects for Food Retail, Hospitality, Pharmaceutical, Logistics & processing sectors.

The rack is connected to six evaporators supplied by Lu-Ve India (Model No F50 S3, 9 KW capacity each). Lu-Ve is an Italian company with operations in India and is one of the most prominent name for supply of indoor units worldwide.

India wastes Rs.44,000 crore worth of food each year and the primary reason for this is lack of enough cold storages in the country. A report released in 2012 by Ministry of Statistics & Programme Implementation claimed 48% children under age of five are stunted, indicating that half of country's children are malnourished. Thus, India has an urgent need to beef up the cold storage infrastructure and global players like BITZER are well equipped to support the growth & development of India's cold chain.

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