

Ready Mix Concrete - MINIMISING THE REJECTIONS EXTENDING TRNASIT LIFE

Janyu Technologies Pvt Ltd.





www.janyutech.com sales@jayutech.com 7770012260



JANYU TECHNOLOGIES is Robotic OEM in operations from 2016, with the main objective of providing human enabling Robots and services. We operate from Mumbai, Maharashtra. We have our roots from NCETIS IIT Bombay.

We design, develop, and build complete robotic hardware and software solutions in house.

Our robotic solutions enable:

- **ESG** Compliance
- Hazardous Sludge Cleaning
- Industry 4.0 Automation

PURPOSE

Providing Industry specific custom designed robotic solutions to the core manufacturing sector for mitigating the operational risk in high temperature and hazardous

Core manufacturing sectors:

- Cement and Concrete
- Chemical and Fertilizer
- Glass
- Marine Engineering
- Metal Extraction and Mining
- Oil and Gas
- Civic amenities
- Defense sector

One of the case studies

Al enabled Automatic in-Transit Admixture Dosing System for Ready **Mix Concrete**

The Ready-Mix Concrete delivered from RMC plant to the client through Transit Mixtures, undergoes change in quality particularly flowability during transit hours. This leads to setting of concrete affecting product quality and capacity utilisation of TM. With over 40000 plus TM trucks operating 24*7 across the country, this loss of the concrete is significant challenge for environment.

SMART SOLUTION

We have successfully solved the challenge with a Transit-mixer mounted System that monitors and maintains the workability of concrete for extended hours and reduces rejects to near zero.

- Maintains the workability of concrete in Transit Mixers
- Reduces rejects and losses to near zero
- Reduces Scaling/chipping in
- Improves Truck mileage, reduces wear and tear

Environmental Impact

Efficient Material Use: Automated systems enhance resource efficiency, lowering construction's environmental impact.

CO2 Emissions Cut: Precise dosing reduces cement use, significantly decreasing CO2 emissions. Sustainable Construction Support: Aligns with green certification standards, improving concrete's efficiency and lifespan Sets the Stage for Innovative Future Practices: Advances sustainable construction, anticipating a shift towards greener building

Industry Carbon Footprint Minimization: Adoption fosters substantial reductions in the construction sector's carbon

