

## Broad outline of Presentation by Chemtrade

### ***Die Lubricant Building Blocks & technology training for Die cast industry***

- The presentation focused on the evolution in die lubricant technology for the changes in demand & global industry trends
- The global industry trends are
  - Complex & dimensionally demanding parts
  - New structural alloys
  - Increased focused on productivity
  - Reduce wastages
- The presentation covered the die lubricant functionality, principles of physics behind the die lube properties like Leidenfrost point & Nukiyama point. Videos were played to better explain the theory
- Characteristics of die lube like die cooling, die adhesion, wetting temperature, wetting time, flow diameter were explained
- Die cooling : Graphs with different generations of die lube technology vis-à-vis water were shown. A video showing the live cooling curve plotting with water & 2 different technology is shown
- The film thickness variables were also explained in details
- Heat extraction ability & the benefits were explained with two different chemistries
- Likewise die adhesion, wetting temperature & wetting time with different technology explained
- The ill effect is high dilution was also explained. High dilution affect the die cooling, die adhesion & film formation abilities

**Conclusions** : The latest technology benefits productivity & quality & urged die casters to adopt the latest technology