



# HUP FATT BROTHERS ENGINEERING PTE LTD

## (Total Productive Maintenance - TPM) Program

In HFB, our business is about keeping customer satisfaction through total cost, delivery and quality. For production to work towards our quality policy, we need to ensure that the equipments used are properly maintained and kept "healthy" to reduce production downtime and increase equipment effectiveness.

This is done through the following steps

### 1. Early equipment maintenance

- a. knowing about the equipments prior to installing them in the factory through **equipment manuals**
- b. sending personals to equipment manufacturer beforehand to understand the preventive maintenance we can do (**training**)

### 2. Preventive Maintenance

- a. Ensure **effectiveness and efficiency** of maintenance
  - b. Ensure proper training is given so that good maintenance is carried out and continued at operator's level
  - c. **Operator involvement** is needed for them to understand the importance of day to day protection of the machine to reduce down time
3. Mean time before Failure (**MTBF**) charts are done against corrective and preventive maintenance levels to evaluate the effectiveness of TPM program
  4. Improvements are shared (**cross functionally**) by operator, maintenance personal, equipment manufacturer, outsourced maintenance supplier, consultants to further improve machine's "health status"
  5. Spare parts are kept in house for day to day maintenance work and some are kept at supplier's site and bounded by contract that within a certain agreed period, it has to be delivered to HFB to reduce downtime of machine. (**inhouse discipline and supplier's contract**)

From the management of HFB Singapore