

Visit Report

To : GUOE
 Cc : CAAG, FNM, LIAW, LINR, GUOS, ZUP,
 YAVY, WANS, GUOC, ZHAI, YAGK
 From : XUEA

Date of visit: 18 Jul. 2023
 Date of report: 21 Jul. 2023

Plaston / CFMOTO-R2R

Participants : Plaston : Beck (PE)
 EMS : XUEA
 OEM : CFMOTO-R2R
 Sales responsible : GUOE
 Distributor : N/A
 Location : Zhejiang Jiaxing
 Application : Motorcycle Gasoline Tank Cover
 Segment Code : 740
 Project number : Old
 Material : Grilamid TR 90 UV + 4% Yellow MB from Plaston
 USP : Stress crack resistance (*Resist to gasoline*); High gloss surface / paint free;
 UV resistance (*Long time exposure to sun light*); Toughness (*Impact under different situation*)
 Potential : 10 t/a
 SOP : 01.2022



1. Target of visit

- Check the root cause of silver streak issue
- Get sample parts for success stories

2. Summary

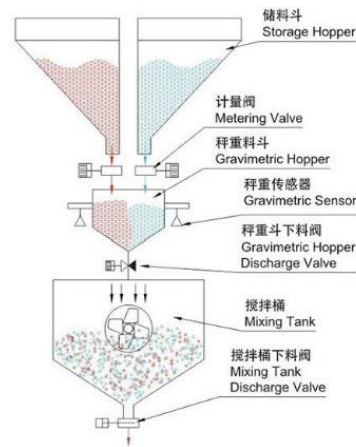
- The silver streaks issue most probably is caused by moisture absorption during material convey process and wrong drying of the colour MB.
- Problem solved after we change the material delivery process. Silver streaks issue solved.
- 1 set of sample parts are obtained during this visit.

3. Details

- Plaston complained >15% reject rate due to silver streaks and want EMS support them to solve the issue. Processing parameters are checked without issue.
- Central drying and central delivery system are used at Plaston. Central drying system is from SHINI which is a famous local brand. The dew point from the machine is -35°C which is sufficient to dry Grilamid TR material. And the moisture tested from the natural material is 0.013% (*By EMS Carl Fisher*). The colour MB (*adding 4%*) is dried by a hot air drier. The tested moisture content is 0.36% (*By EMS Carl Fisher*) which is over-specified and could be a risk point.



- Due to central supply system is used, the pipe is more than 20 meter long and wet air is used to convey the material which might cause the quick moisture absorption and residual of materials in the pipe. So we decide to use the manual filling of material. The defect rate is significantly reduced after changing to this process. Plaston is satisfied with the result.
- Polymer base of the MB also need to be checked to avoid any delamination which might looks similar as silver streak. Plaston will check with their supplier for details.
- The colour mixing machine (*by weight method*) is used for the part production which can solve the colour uneven issue very well. This could be a good experience for other customers especially function MBs are used.



- Part & Test Requirement
 - UV test
 - Stress crack test to Gasoline

4. Actions

No.	Action	Resp.	Due date
1	Get the MB base material information	XUEA	10 Aug. 2023
2	Secure order	GUOE	Monthly

Best regards

Arthur Xue
I&C New Application Development