

Heat Penetration Committee

- Chair: Ram Pandit, Nestle Purina - ram.pandit@purina.nestle.com
- Vice-Chair: Bart Richards, PepsiCo - bart.richards@pepsico.com

IFTPS 2020 Heat Pen Group Meeting Notes

Date: 03/04/2020

- Chair: Ram Pandit, Nestle Purina
- Vice Chair: Bart Richards, PepsiCo

A. Introduction and welcome to members.

- 55 participants + 4 after presentation
- Need bigger room and more chairs

B. Update year 2019 heat pen group meetings and follow up items.

- 3 topics were identified last year out of 6 topics
- 3 presentation were made in in-container sterilization session

C. Discuss IFTPS guideline update for frequent formula changes such as:

- Critical factors identification and monitoring

Dan Geffin: Dehydrated Product (Pasta and rice)

- Need to identify hydration rate

- Solid to liquid ratio
- Moisture content
- Moisture uptake

Scott Cabes:

- Establish critical factors not to penalize the production
- Know the production capabilities

Dhaval:

Too long dwell time during hydration (rice in gravy) increases cooking time for product such as rice in sauce

- Worse product from family
- Identify worse case moisture, worse fill; worse % of solids.

Dan Geffin:

In the filing form, list everything that has same profile to the product family. If necessary, explain why it is part of the family, if anything unique

In the case of a new formulations that is eligible to be added in the family, a letter from TPA to support this.

- Ingredient changes,
- Process and operating conditions
- Who & How of the existing heat pen data
- Update FDA filing as needed.

When do you need to revisit HP testing

- Depends on how complex the formulation determines how often a review of the process and how often we need to redo the HP testing.
- Also depend how conservative your initial HP was
- Change in personnel, new person should initiate HP
- Depends upon the change in verities of product.
- Do periodic audit of the formulations; Annual review of the thermal process is not a bad thing

- TPA need to be engaged as early as the product development stage. Any formula change, the PA must be informed.
- Comparing 2 HP formula side by side.

D. Transferring knowledge to next generation

- Identify topic for case studies
 - Discuss presentation format such as video vs reports
1. How many probes need to be used to establish a process, how many test; what makes process authority comfortable
 - Look for consistencies in process calculations and heat pen data
 - GM method or Ball formula method
 - List questions that you have
 - Importance of CV or six sigma
 1. Any wireless loggers' manufacturer that could give solution to install probe to unique containers?
 2. Thermocouples or wire repairs
 3. Comparisons of wires vs wireless performance (brands/manufacturer)
 4. Challenges in the HP design based on manufacturer wireless loggers or wired system
 5. Challenges on finding cold spots in a container

E. Identify topic and research work for 2021 IFTPS presentation.

Dan Geffin Filing issues on flexible pouches

- Include pouches dimensions (internal) with product;
- Method on how to measure flexible pouch dimension with product.
- Methods for cold spot prediction

Next Steps:

- Team will meet frequently and make final decision along these topics.
- Group discussion to determine if IFTPS guidelines need to be updated.
- Posting of heat pen group meeting notes on IFTPS webpage
- Sharing future group meeting note and updates to broader IFTPS group through newsletter. Work with board member to send newsletters as needed.