EPFL

Production Management (ME-419)

Module 3: Supply Management

Assignment 11: EPQ, Discount, Safety Stock Models

Objectives: The objective of this assignment is to develop Economic Production Quantity (EPQ), Discount Model (if it makes sense for your product), and Safety Stock (SS) model.

Tasks: The tasks to complete and the results to obtain are as follows:

- **Note:** Please send the list of required information the latest Monday evening to your Coach.

EPQ model

- Define EPQ (Economic Production Quantity) for the item(s) defined by your Coach.

Discount model

- Negotiate with your supplier (Coach) and provide a quantity discount model for your case study.
- Graphically show ordering cost, holding cost and total cost curves for different order quantities and costs. (Reference: Slide of "Quantity Discount Total Cost Curves")
- **Note:** This model might not be the best fit for your product. If so, please provide a clear justification explaining why.

Steffy Stock (SS) model

- Define Safety Stock for your product (Finished Good)

Your submission:

1. **This is a group assignment**, there will be a group presentation for this assignment. Each presentation will have 7 minutes with about 8 minutes of feedback.
2. Time: As set on Moodle.
3. No report is needed for this assignment.
4. Connect and bond with your group members, define a proper group strategy for handling the workload and reach an agreement on the time to meet up during the week.