

Detailed brochure of “Plant Operations Optimization Month” initiative.

What is this? Summary

This is an initiative for process engineers to participate, along with optimizations experts, REMOTELY, and actually optimizing plant operations every day, for 30 days, over and above APC!

This exercise will definitely answer the question- “How much more profit can *STILL* be extracted out of this plant operations?” AND this will bring extra money to company for 30 days, WITHOUT capital expenditure, without hiring people, without purchasing any software or hardware. Participation fee is Rs. 30,000 per plant.

For process engineers, this is extraordinary achievement for this year and lifelong skill and knowledge to optimize plant operations.

In terms of actions, process engineers work for about 40 hours PLUS about 30 minutes every day, for 30 days, are required for every plant. Total efforts 55 hours.

1. For 30 days, give live plant data to optimization expert, get optimal recommendation, put those set points in plant, record the effects, validate the effect with peer/superior and submit to BENCHMARK
2. As a preparatory exercise, give historical plant and lab data for 2 years, process flow sketch with tag names. If required NDA can be signed
3. Sessions/discussions with optimization expert

Rest of this document gives details of this initiative.

To initiate participation/show interest, just email (from official email account), to Samir.Gijre@benchmark1.in, saying that you are interested in participating and telling name, company name, location, phone number, address, plant (e.g. CDU/Ammonia Plant), industry (e.g. petroleum refining/fertilizer)

BEST PARTICIPANT WILL BE GIVEN A PRIZE OF Rs. 1 Lakh

US\$ 1,111 (US Dollar One Thousand One Hundred Eleven Only)

Details of the initiative

1. What are milestones that happen, after I send the email of interest?

Following milestones happen, you can start participate any time/any month/any year, till BENCHMARK is running this initiative

MONTH	Example	ACTIVITY
1	August 2026	Attend remote introductory session, along with others interested engineers from many companies Call with BENCHMARK optimization expert, to know BENCHMARK recommendation that whether it will be fruitful to do this exercise for a particular plant. You decide whether to participate now
2	September 2026	Formally register by paying Rs. 30,000 Kick-off meeting (KOM), remotely along with other participants NDA signing, if required. Collect data and information, and send to BENCHMARK
3	October 2026	BENCHMARK understands the plant , possible session for clarification
4	November 2026	Session for deciding optimization strategy, mythology for the 30-day actions, reporting and validation.
5	December 2026	The 30-day action
6	January 2027	Compile results of the initiative BENCHMARK evaluates winner
7	February 2027	Winner is announced, given prize, citation All those who completed the initiative will be given a citation.

2. What data is required

- a. Plant data from historian, in Excel sheets, 1 hour snapshot for 2-year period
- b. Corresponding period lab data
- c. A hand drawn sketch of process flow, showing major equipment, flow, tags
- d. Table of all flows, tag numbers of feed and products in plant, along with measuring tag numbers
- e. Plant operations practice
- f. Control properties and limits of lab/property parameters
- g. Optimization target

No licensor confidential data like PFD, P&ID, operating manual, process model, catalyst details etc. are required

3. What data will be required to be sent daily?

You will send an email every day, with following attachments

1. Excel file that has important tag parameter values at an instant, say 9 AM. For example, it may have 100 tags of temperature, pressure flow and their values. TIC100- 450 Deg C,other 99 tags.
2. Latest lab data available for the current/last shift
3. Any special instructions given to plant operator e.g. planning department instructions for the day.

4. What optimization advice you will get daily?

You will get an email, in about 30minutes to 2 hours, telling

1. What is current yield and what is possible higher yield, while meeting all property/quality specifications. E.g. current yield is 78% and it is possible to get 80% yield by just adjusting parameter settings
2. Exact changes to be made for optimal. Eg. Increase COT by 1 Dec C, decrease reflux flow by 2%, increase product A flow by 5%, decrease product B flow by 4%, etc.

3. Impact of these optimal changes on property/quality. E,g purity of product A will increase by 1%, purity of product B will decrease by 1%, etc.

5. Who will validate and how?

Validation will be done by you, BENCHMARK will not question

1. Validate the effect of setting optimal parameter in plant every day- from plant, lab data, validated by your peer/supervisor. Submitted to BENCHMARK every day
2. The summary of 30-day exercise- will be made by you, and validated from plant, lab data, validated by your peer/supervisor. Submitted to BENCHMARK after validation

6. Who will decide winner and how?

Winner will be solely decided by BENCHMARK and no details of any plant will be made public., only winner name and company will be made public on Website. No complaints or claims to be winner will be entertained by BENCHMARK. Following are the criteria for deciding winner

1. Completed the 30-day trial professionally and validated by peer/supervisor
2. How many days the activity was done out of 30 days
3. Professionalism in participation
4. Percentage improvement in yield/profits
5. Degree of difficulty in doing this exercise
6. Whether APC/any other optimizer already working in plant
7. Level of instrumentation and lab analysis