

How column diagnostics improve the availability and efficiency of your plants

Part 1: Shutdown planning and preparation

The smooth operation of an industrial plant is the goal of every plant engineer/plant manager. Ideally, the plant should continuously output a high-quality product. Unfortunately, this is not always the case. Wear and tear, fouling, process-related issues, fluctuations in raw material quality—many factors can affect production and product quality without being immediately detectable.

As a result, manufacturing facilities periodically shut down to inspect the mechanical integrity of equipment and the degree of fouling in internals, and to carry out any necessary repairs. Oftentimes, these shutdowns are legally mandated at regular intervals. With the help of our gamma scanning technology and in consultation with the relevant regulatory authorities, it's possible to avoid costly column inspections if our analysis confirms the mechanical integrity of internals and column shell.

By conducting a column scan prior to a shutdown, the following points can be clarified within just one day:

- Is it necessary to open/inspect the affected column at all?
- Which replacement parts for damaged internals should be ordered? Delivery times must be considered.
- Are the currently installed internals optimal for this process, or are there more efficient solutions?

Clarifying these points prior to shutdown allows for better planning. Replacement parts or new internals can be ordered in advance without time pressure or urgency surcharges. Unexpected extensions of the shutdown can be avoided.

Operators gain the following:

- Loss minimization.
- Increased bargaining power over suppliers.
- Reduction in the scope of shutdown, if scans confirm there's no need to shut down specific plant components.
- By monitoring the degree of fouling, emergency shutdowns can be avoided, as column scans enable early detection of hydraulic limitations in the columns.
- All of this results in optimized plant availability.

With our expertise and many years of experience in troubleshooting distillation plants, we are more than happy to support you in planning your shutdown.

Company Information

IBE Ingenieurbüro Esper GmbH
Bahnhofstraße 16, 67269 Grünstadt
Company domiciled in Grünstadt
Managing director Thomas Esper
Commercial Register Ludwigshafen am Rhein
Registered No. 65358
Tax-No. 27/652/03396
VAT-Ident No. DE181305783

Communication

Phone +49 6359 9493-90
+49 6359 9493-92
Fax +49 6359 9493-91
E-Mail ibe@ibe-engineering.com
Web-Site www.ibe-engineering.com

Bank Address

Commerzbank AG Grünstadt
IBAN DE19 6708 0050 0857 4273 00
SWIFT (BIC) DRESDEFF670

HypoVereinsbank AG Ludwigshafen
IBAN DE22 5452 0194 6500 3685 41
SWIFT (BIC) HYVEDEMM483