6.3.5.1 Kiln Best Demonstrated Practice (BDP) [t/day]

Description

The Kiln Best Demonstrated Practice (BDP) is a kiln specific value. It indicates the highest production rate of a kiln under optimal conditions.

Reference to Process

This indicator refers to:

- Main cost center 'Clinker Production'
- Product sub-segment 'Clinker and Cement'

Purpose

The Kiln BDP is used to calculate <u>Standard Clinker Capacity</u> and <u>Production Rate Index</u>.

Calculation

The kiln BDP is the BDP that was frozen at the end of 2007.

1. Revisions of kiln BDP

In the following cases the kiln BDP has to be revised:

a) Upgrade of an installation (CAPEX)

In case of a kiln upgrade, i.e. any substantial equipment modification (CAPEX) that increases the capacity of the kiln, the new kiln BDP is the value indicated by the new design capacity or performance test.

The revised BDP is the new frozen BDP and is valid from the following calendar year onwards.

b) Production Rate Index > 100 %

If the annual production rate index of the kiln is more than 100%, refer to the "Production Rate-Method to determine the kiln BDP" (see under Comments), using the last 24 months before the planning phase.

The revised BDP is the new frozen BDP and is valid from the following calendar year onward.

c) Additional clinker type/Aggregation

In case an additional type of clinker is budgeted and the BDP of the additional clinker differs by more than 5% from the BDP of the main clinker, the kiln BDP is the weighted average of the BDPs per clinker type, weighing with the budgeted yearly operating times.

2. New kiln system

For a new installation, the kiln BDP is equal to the design capacity. The design capacity is the value defined for the kiln performance tests. If the actual results of the performance tests lead to a production rate which is stable and higher than the design capacity, the kiln BDP will be equal to this actual production rate.

Comments and Examples

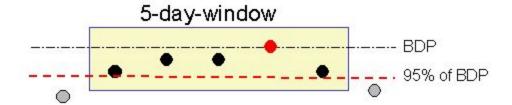
1. Production Rate-Method to determine the kiln BDP

The kiln BDP is the highest historical production rate (t/day) achieved during the last 24 months before the planning phase. The kiln BDP fulfils the following additional conditions (see also graph):

- A. It represents any of five consecutive days (5-day-window) within the considered time period of 24 months
- B. The lowest value of this 5-day-window is not below 95% of the highest value
- C. The downtime per day should not exceed 0.5 hours. If it is not possible to find such a 5-day-window that qualifies, the arithmetic average of the best five daily production rates has to be considered
- D. The considered production rates were not influenced by reporting or stock adjustment anomalies

Procedure to determine Kiln BDP:

- A. Take the average daily clinker production rates of the previous 24 months
- B. Determine the 5-day-window with the highest production rate and all other values not below 95% of it
- C. Check whether the downtime of each individual day in the window is less than 0.5 h



2. Exceptions or special cases

In case of doubt and for changes of kiln BDP the Group Company Management (the local CFO) and Cement Industrial Performance (CIP) (the Performance Manager) shall be contacted.

3. Impact on Standard Clinker Capacity:

- Each plant defines the standard clinker capacity volume once per year, during the budgeting process, based on the kiln BDP.
- Equipment which were idle during the last 12 months and are (not) planned to be used in the future 10 years according to the Business Plan (do not) have to be considered for the <u>Standard Clinker Capacity</u>.

Reporting Requirements

This indicator is not reported in SAP FC.