

# Semi-continuous batch systems (KCS)

## Advantages

### “Inline” production:

The production process is performed inline with the semi-continuous loading system, i. e. there is no processing delay between filling and packaging.

### 100% separation between low and high risk areas:

The airtight transfer zone between the entry and exit sides allows the separation of production and packaging areas (“low-risk”, “high-risk”).

### Integration:

The system can be integrated into the production area due to upstream and downstream automation.

## Characteristics

### Use:

Each of the process chambers are separated by an intermediate transfer zone (hinged or vertical lifting doors). A system may consist of two or more zones.

### Possible processing:

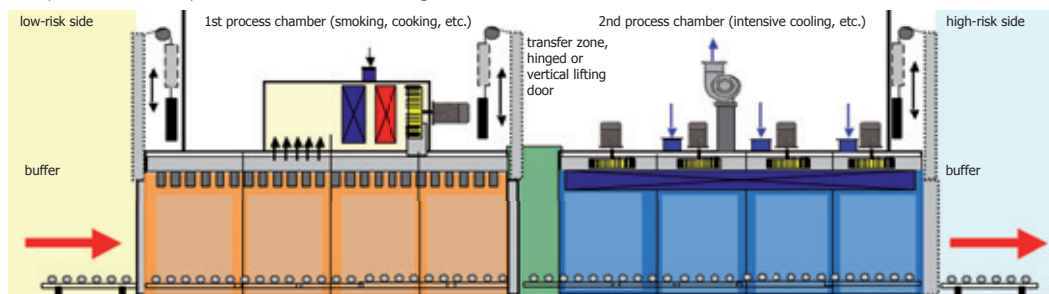
- Drying/smoking/cooking transferred to intensive cooling downstream
- Cooking transferred to intensive cooling downstream
- Other combinations on request

### Floor transport/roller or overhead rail conveyor:

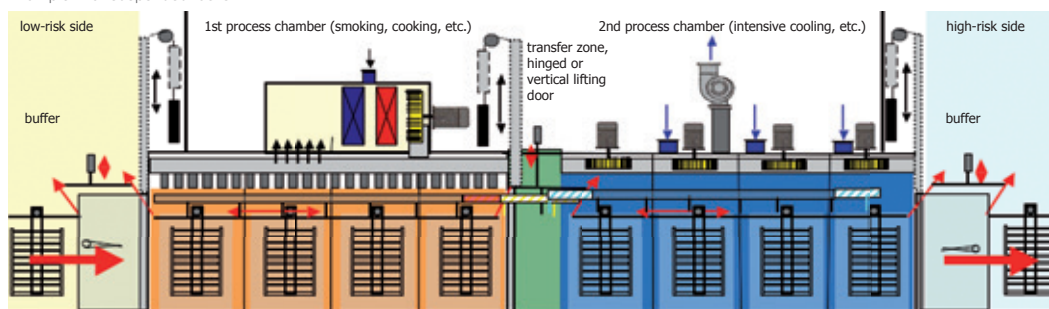
An electric drive system ensures smooth transportation.

# Semi-continuous batch systems

Example with floor conveyor installations (racks or smoking carts)



Example with suspended racks



|          | Number of trolleys | Cabinet dimensions (incl. extension) (cm) |  | Minimum ceiling height for hinged doors (cm) |                    | Minimum ceiling height for vertical lifting doors (cm) |                    |
|----------|--------------------|---|--|--|--------------------|--|--------------------|
|          |                    | length with hinged doors in transfer zone | length with vertical lift doors in transfer zone | without overhead rail                        | with overhead rail | without overhead rail                                  | with overhead rail |
| Tandem   | 4 + 4              | 1052                                      | 967  | 400  | project-related    | 500  | project-related    |
|          | 5 + 5              | 1274                                      | 1189   | 450  |                    | 500  |                    |
|          | 6 + 6              | 1496                                      | 1411   | 450  |                    | 500  |                    |
|          | 7 + 7              | 1718                                      | 1633   | 480  |                    | 500  |                    |
| Parallel | 8 + 8              | 1940                                      | 1855   | 480  | project-related    | 500  | project-related    |
|          | 6 + 6              | 830                                       | 745  | 450  |                    | 500  |                    |
|          | 8 + 8              | 1052                                      | 967  | 480  |                    | 500  |                    |
|          | 10 + 10            | 1274                                      | 1189   | 500  |                    | 500  |                    |
|          | 12 + 12            | 1496                                      | 1411   | 500  |                    | 500  |                    |

| Features <sup>⊖</sup>    | Description                           | Standard | Options | Entry                          | Transfer | Exit | Remarks                                 |                                     |
|--------------------------|---------------------------------------|----------|---------|--------------------------------|----------|------|---|-------------------------------------|
| Transfer zone (optional) | hinged doors (S)                      | →        |         | see below for possible designs |          |      |   |                                     |
|                          | vertical lifting doors (L)            |          |         |                                |          |      |   |                                     |
| Floor transport          | buffer on low-risk side               |          | x       | L                              | S/L      | L    |   |                                     |
|                          | entry from 1st position               | x        |         | S/L                            |          | S/L  | S/L                                     |                                     |
|                          | over transport to the following zone  | x        |         |                                |          |      |   |                                     |
|                          | transport to the last position        | x        |         |                                |          |      |   |                                     |
| Roller conveyor          | buffer on high-risk side              |          | x       | L                              | L        | L    |   |                                     |
|                          | buffer on low-risk side (1 place)     | x        |         |                                |          |      |   | Manual transportation to the buffer |
|                          | buffer on low-risk side (n places)    |          | x       |                                |          |      |   |                                     |
|                          | entry from 1st position               | x        |         |                                |          |      |   |                                     |
|                          | over transport to the following zone  | x        |         |                                |          |      |   |                                     |
|                          | transportation to the buffer position | x        |         |                                |          |      |   |                                     |
| Overhead rail system     | buffer on high-risk side (1 place)    | x        |         |                                |          |      | Manual onward transport from the buffer |                                     |
|                          | buffer on high-risk side (n places)   |          | x       |                                |          |      |   |                                     |
|                          | buffer on low-risk side               |          | x       | L                              | S/L      | L    |   |                                     |
|                          | entry from 1st position               | x        |         |                                |          |      |   |                                     |
| Overhead rail system     | transport to the last position        | x        |         | S/L                            | L        | S/L  | Transport system always required        |                                     |
|                          | transportation from last zone         |          | x       |                                |          |      |   |                                     |
|                          | buffer on high-risk side              |          | x       | L                              |          |      | L                                       |                                     |

<sup>⊖</sup> for basic system information, see relevant flyers