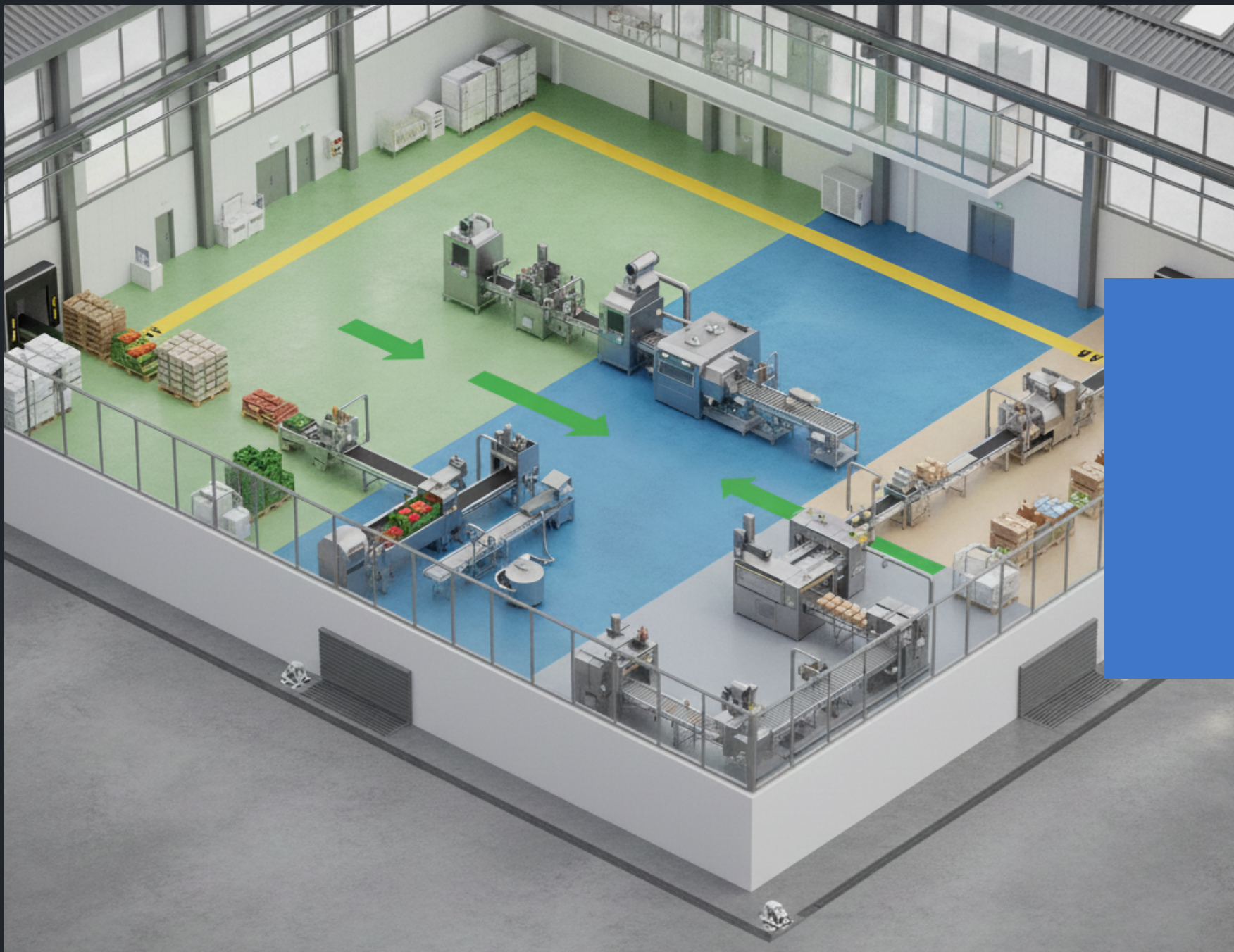




HYGIENE STARTS BEFORE THE FIRST BRICK IS CAST

Hygiene is not a cleaning activity.
It is a design mindset.

1. LAYOUT ENGINEERING



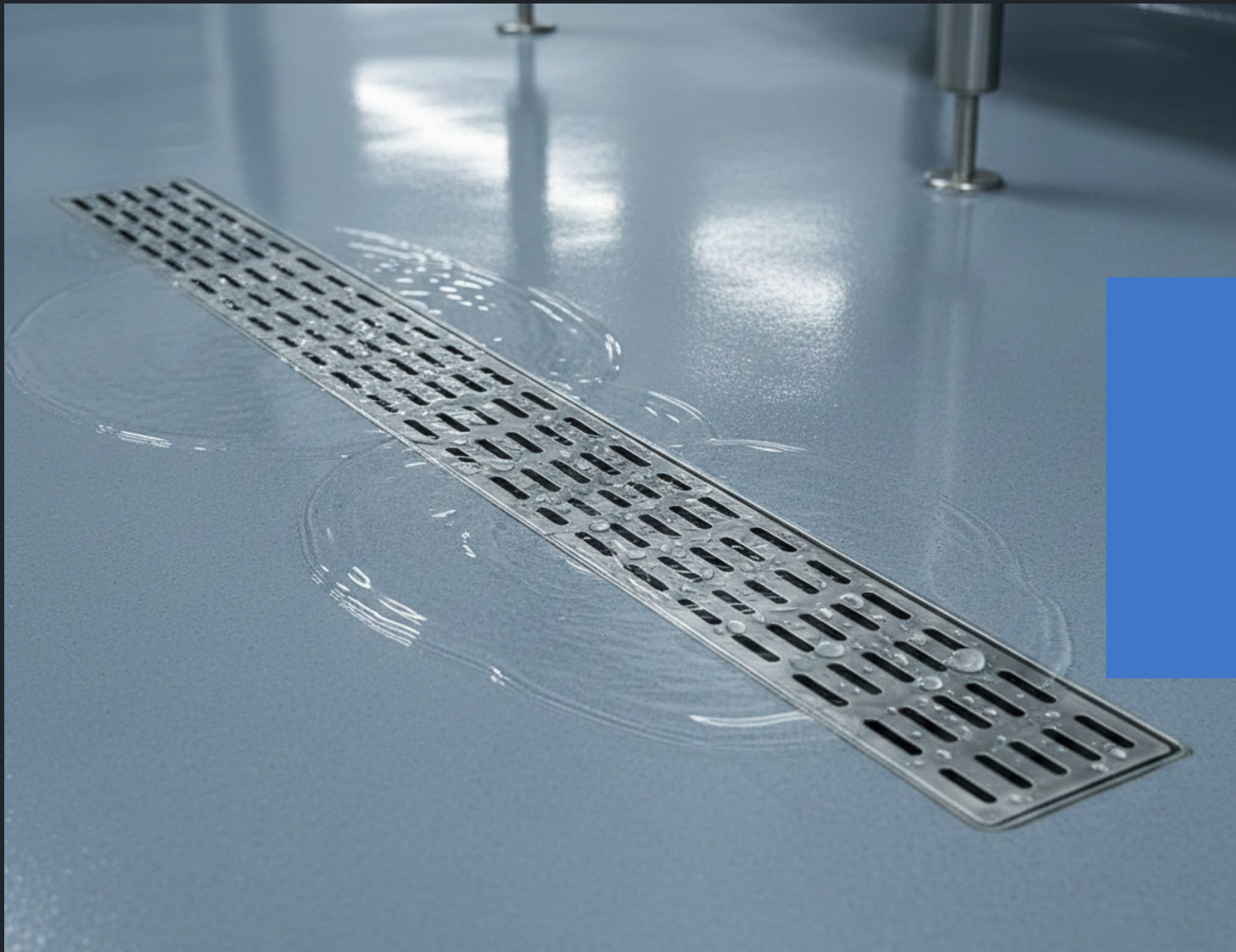
- Raw, semi-processed, and finished zones must be physically segregated

- Linear product flow prevents cross-contamination

- Personnel and material movement paths must never intersect unintentionally

ONCE BUILT, FLOW CANNOT BE CORRECTED BY SOPS

2. FLOOR & DRAIN DESIGN



- Minimum 1:100 slope toward drains

- Drains positioned away from equipment legs

- No dead pockets, no backflow zones

WATER FOLLOWS GRAVITY, NOT INTENTIONS

3. STRUCTURAL DETAILS



- Wall-floor junctions with coving radius
- No ledges, recesses, or horizontal dust traps
- Columns designed for full cleanability

WHAT CANNOT BE ACCESSED CANNOT BE CLEANED

4. EQUIPMENT & SERVICES PLANNING



- Adequate clearance for dismantling and sanitation
- Hygienic pipe routing with slope and drainability
- No utilities crossing high-risk zones unnecessarily

MAINTENANCE SHOULD NOT BECOME A CONTAMINATION EVENT

5. DESIGN VS OPERATIONS REALITY



- Cleaning teams can only clean what design allows

- GMP failures often originate from layout constraints

- Audits detect problems — design prevents them

FOOD SAFETY IS BUILT, NOT INSPECTED

PMG

ENGINEERING

Build World Class Food Factories

