

PREVENTING THE PARADE OF DELAYS IN TAKT PRODUCTION

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PARADES OF TRADE AND TAKT





PARADE OF DELAYS







Avoding and handling delays in Takt

- Robust plans
- Adjustments after the fact
- Last Planner System



RESEARCH PROBLEM

How can managers on site prevent delays proactively in executing the takt?



METHODOLOGY

- Case study of Norwegian contractor Consto
- Semi-structured interviews with seven informants
- Informants had varied experience using Takt
 - One hospital
 - One Airport
 - Several Schools and apartment buildings
- All projects examples were design build



RESULTS – CAUSES FOR DELAYS

Deliveries and logistics

- Orders made too late
- Too early deliveries
- Combined takt and transport areas

Errors

Rework

Incorrect estimation

- Underestimated amount of work
- Overestimated efficiency

Available staffing and crews

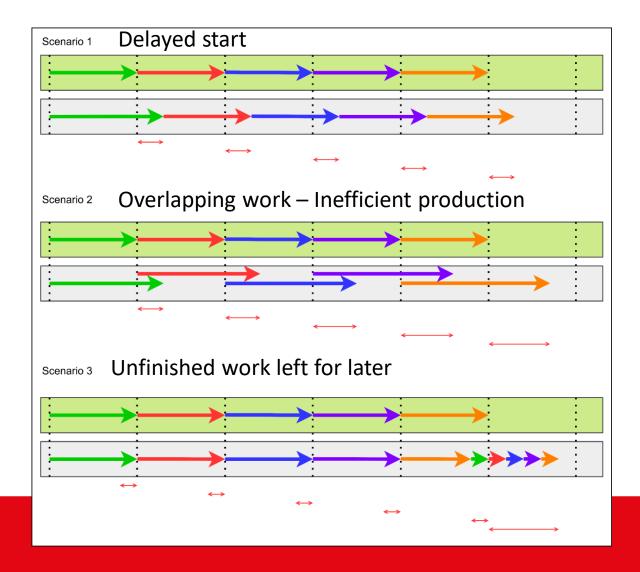
- Lack of workers
- Temporary labor inefficiency
- Illness and injuries

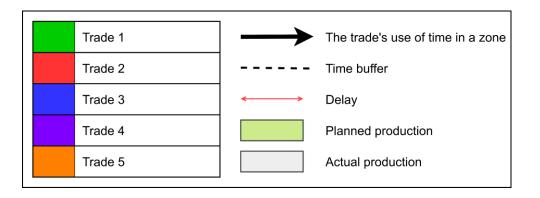
Communication and key roles

- Key personnel replaced between planning and execution
- Wrong people involved in planning



PARADE OF DELAY IN TAKT PRODCUTION







RESULTS – PREVENTING DELAYS

Proactive mechanisms in production

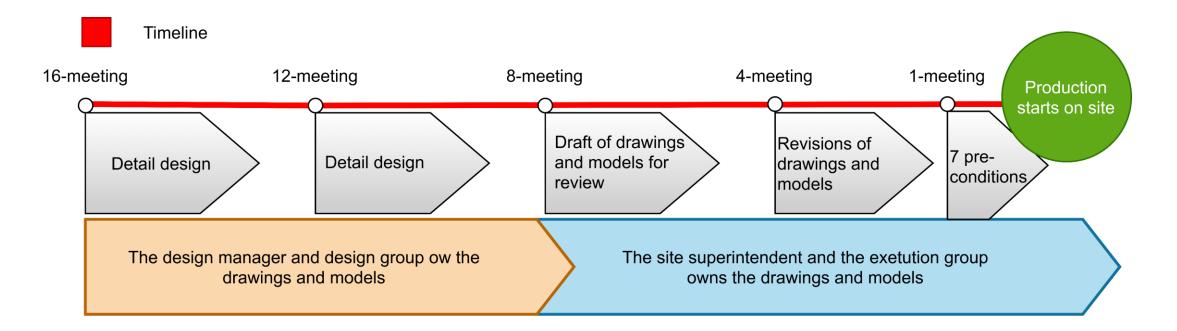
- Weekly Meetings
 - Could not handle all challenges
 - Trades too positive
- Daily Huddle
 - Eliminated need for weekly meetings
 - Led by site superintendent
 - Protected hour after the daily huddle

Planning phase

- Deliveries and logistics planning
- 16-12-8-4-1 meeting series



16-12-8-4-1 MEETING SERIES



The main goal is to ensure that the design's detail level is sufficient and that the preconditions for construction are adequate.



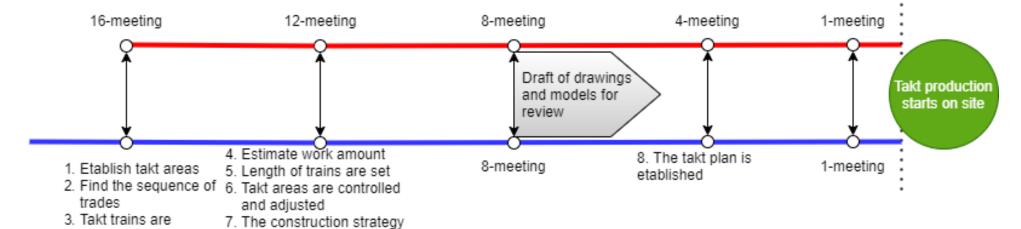
16-12-8-4-1 MEETING SERIES AND TAKT PLANNING

The 16-12-8-4-1 meeting series timeline

is formed

The takt planning timeline

etablished





CONLUSIONS

- The takt planning process is key to smooth takt production
 - Important to create ownership and commitment
- Good handover from design to production is essential
 - The 16-12-8-4-1 meeting series is an effective tool for quality assuring the design and making the trades familiar with it
- Parades of delays can have significant consequences
 - Delays should be prevented Not reacted on
- Frequent trade involvement is required to prevent delays
- Daily Huddles and Weekly Meetings are good tools
 - Beneficial to involve people who have an overview perspective of the project and decision-making mandate



THANK YOU!

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