

# ENGINEERING EXPERIENCE IN A SMALL FACTORY REQUIRES A HANDS ON APPROACH

GERARD NAUGHTON  
FLAT BREAD COMPANY

MEETA ANNUAL CONFERENCE

ENGINEERS IRELAND, CLYDE ROAD, DUBLIN



---

# ENGINEERING EXPERIENCE REQUIRES A HAND'S ON APPROACH

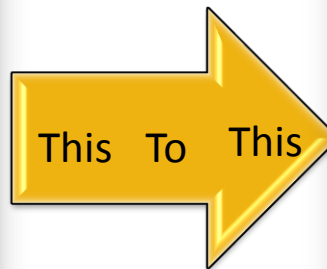
## STARTING OFF IN A NEW COMPANY....PROBLEMS ENCOUNTERED

- Finance
  - Breakdown Maintenance
  - Lack of structure in approach to projects
  - Critical spare parts
  - Relationships with reliable external contractors
  - Efficiency & Preventative Maintenance
  - Just get the product out the door!
-

# ENGINEERING EXPERIENCE REQUIRES A HAND'S ON APPROACH

## FOUNDATION OF MY EXPERIENCE....

- 2010 – Improvements To Cooling Conveyor



# ENGINEERING EXPERIENCE REQUIRES A HAND'S ON APPROACH

## FOUNDATION OF MY EXPERIENCE....

- 2010 – Improvements To Cooling Conveyor



# ENGINEERING EXPERIENCE REQUIRES A HAND'S ON APPROACH

## FLAT BREAD COMPANY PROCESS STEPS...

1. MIXING
2. CHUNKING
3. DIVIDING
4. PROVING
5. PRESSING
6. DOCKING
7. BAKING
8. COOLING
9. CUTTING

THE 4 PROCESS  
WHOSE TIMING  
IS CRITICAL TO LINE  
SPEED & CAPACITY



---

# ENGINEERING EXPERIENCE REQUIRES A HAND'S ON APPROACH

## EXPERIENCE BRINGS A MORE STRUCTURED APPROACH....

- All projects have a proposal to management
  - Built up good relationships with external contractors
  - More aware of critical spare parts
  - Technically more capable
  - Able to identify & deal with problems
  - Embracing new technologies
  - Continuous learning....
-



# ENGINEERING EXPERIENCE REQUIRES A HAND'S ON APPROACH

## PROCESS EXPLAINED...

PROOFER FEEDS DOUGH ONTO A LOADING PLATE



HYDRAULIC PRESS PRESSES THE PIZZAS & TORTILLAS



# ENGINEERING EXPERIENCE REQUIRES A HAND'S ON APPROACH

## SOLUTION....

- 2013 – Addition of V1040 Unitronics HMI/PLC to Production Line....





---

# ENGINEERING EXPERIENCE REQUIRES A HAND'S ON APPROACH

## EXPERIENCE...BRINGING BETTER RESULTS

- Line capacity increased by 6%
  - Concentrate on new products
  - Tighter process control
  - Process alarms
  - Staff have a user-friendly control point
  - Helps with preventative maintenance
  - Data Acquisition and recording capabilities
  - Prolongs life of asset
-

---

# ENGINEERING EXPERIENCE REQUIRES A HAND'S ON APPROACH

## MAINTENANCE IN A SMALL COMPANY REQUIRES YOU TO:

- Learn from experience
  - Expect problems
  - Eliminate persistent problems
  - Must be willing to multi task
  - Have an open mind to problems solving
  - Never be afraid of change or improvement
  - Efforts will be rewarded....
-