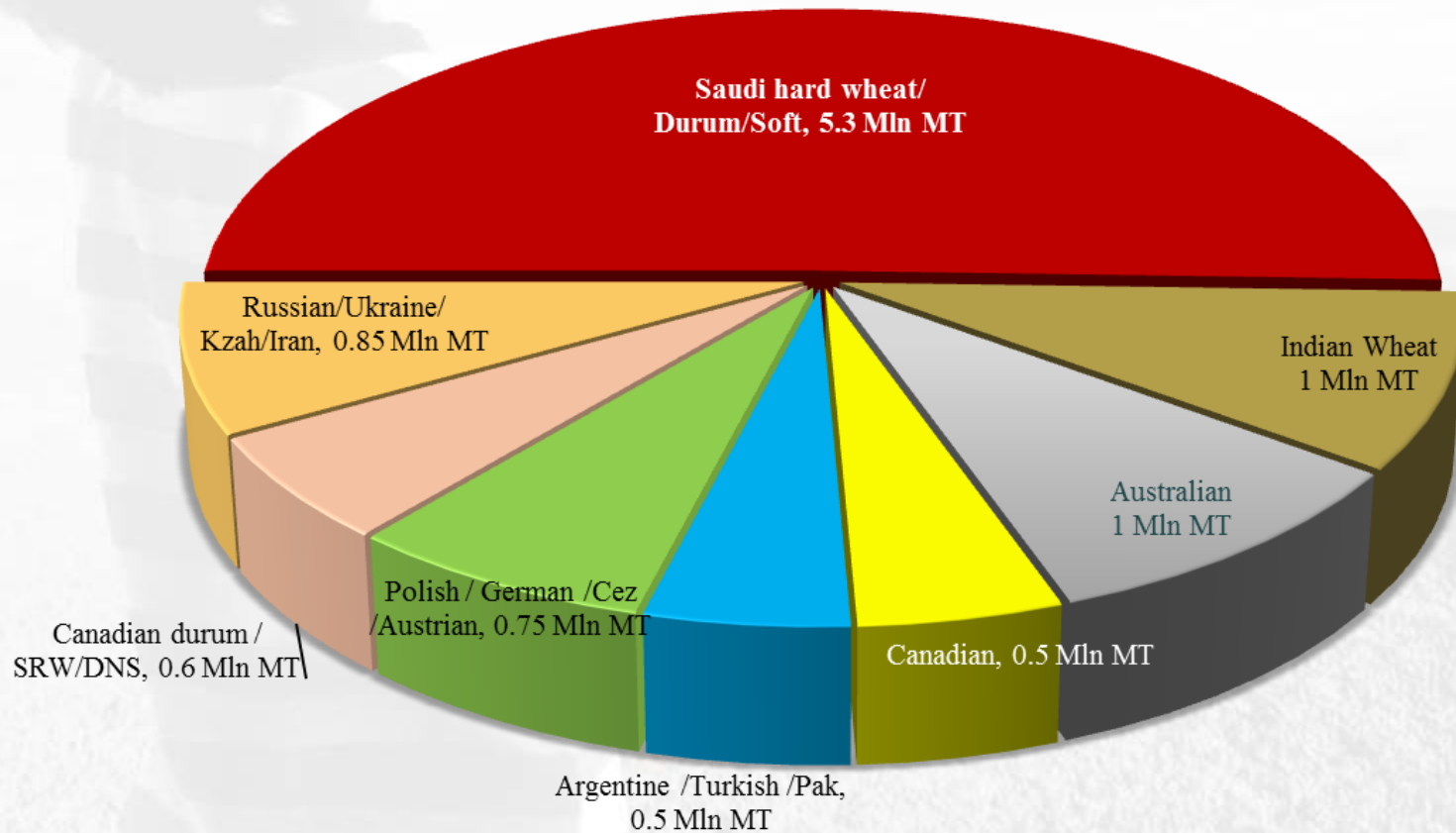


SMART MILLING- MILLER'S PRISMATIC VIEW

Matloob Ahmed

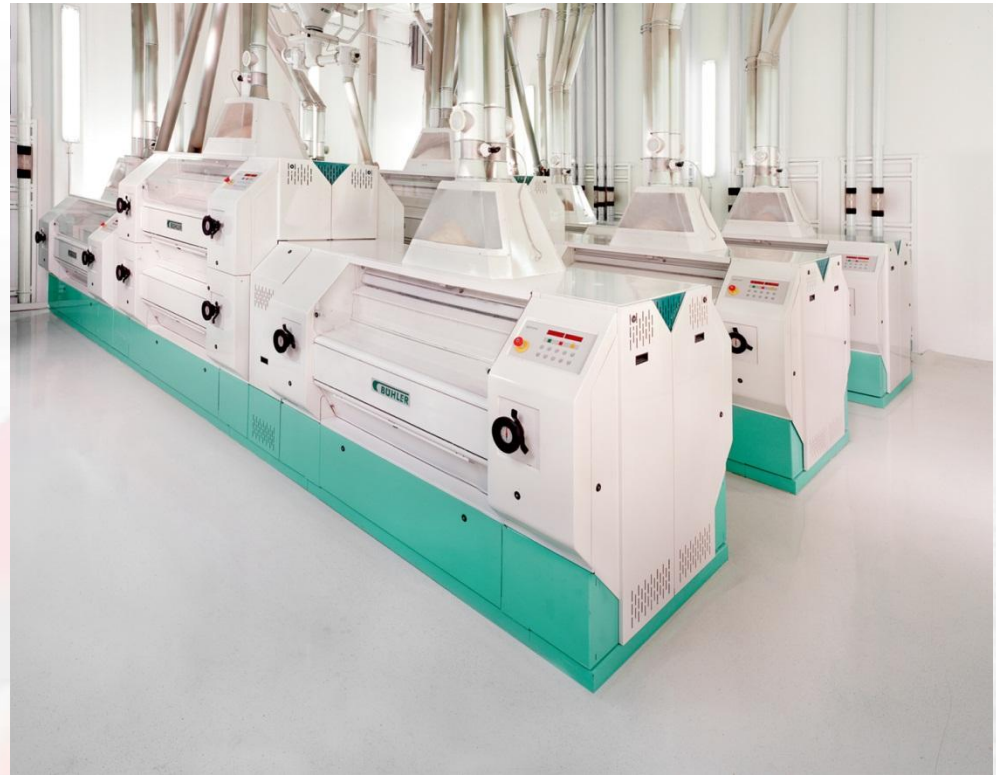


Prismatic view of a seasoned Flour Milling Engineer with over 17 years of hand on experience in operating world Biggest Buhler Plant Jeddah, KSA and **10.5 MLN MT** experience for innovation & improvisation of the milling industry.








SHARP

- ↪ Removal of Dockage
- ↪ Gristing of wheat
- ↪ Shift the flow sheet
- ↪ Creation of product
- ↪ Utilization of plant
- ↪ Diagnosis of problem
- ↪ Solution to the problem



MECHANICAL FACTORS

-  Rinsing air
-  Pneumatic
-  Air locks
-  Compressed air
-  Lubrication
-  Vibrations
-  Bearings
-  Rolls Shaft drives

Yield

Effecting directly



ART OF MILLING

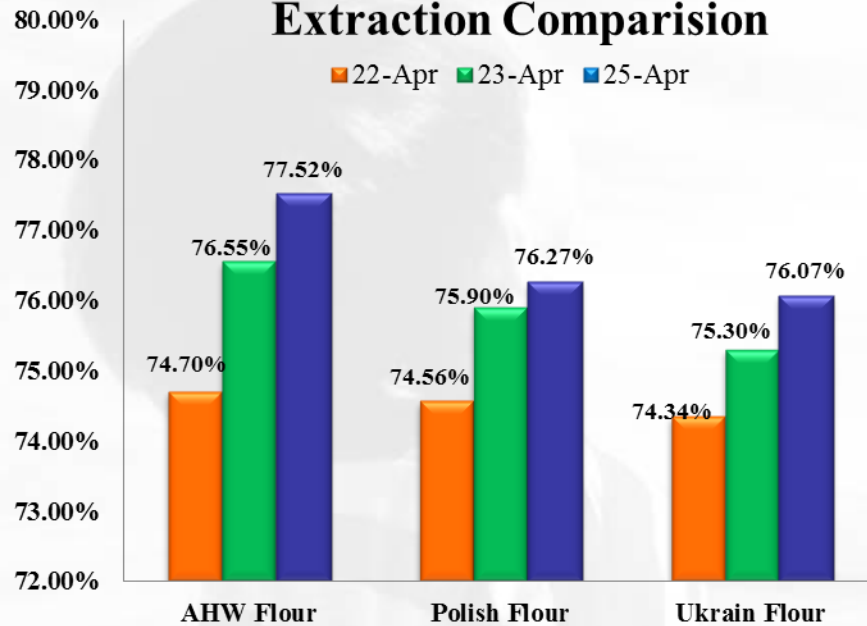
Milling is a science but execution of milling operation is an ART.

Productivity

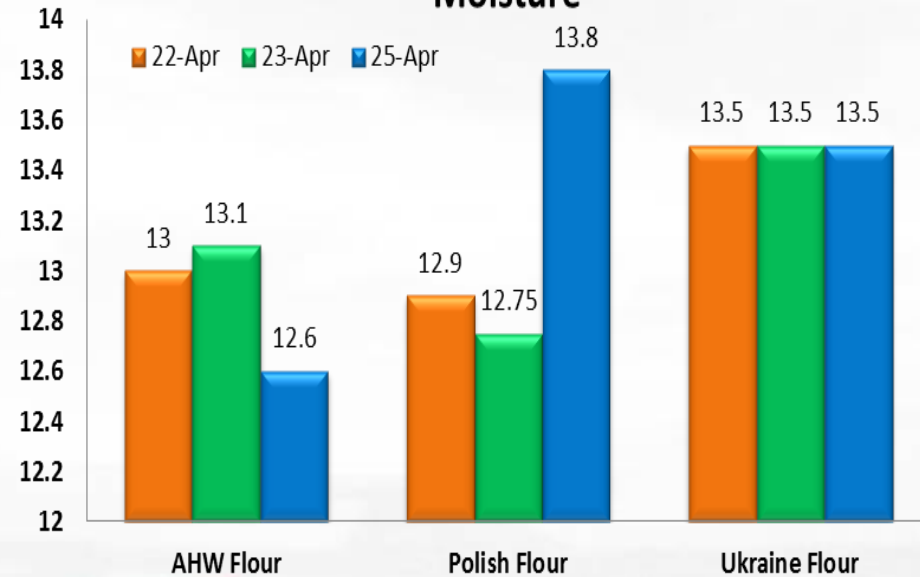
- ↪ Moisture
- ↪ Extraction
- ↪ Through put
- ↪ Breakdowns
- ↪ Flexibility of plant



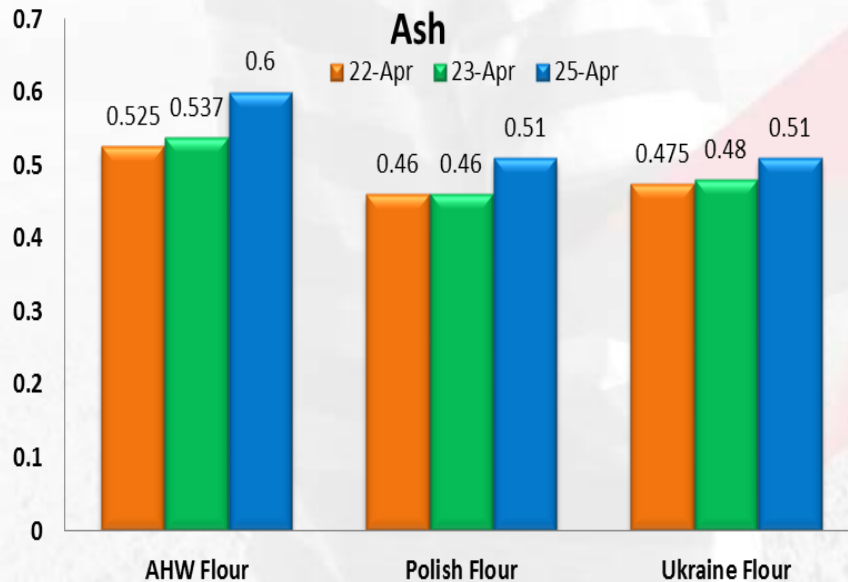
Extraction Comparison



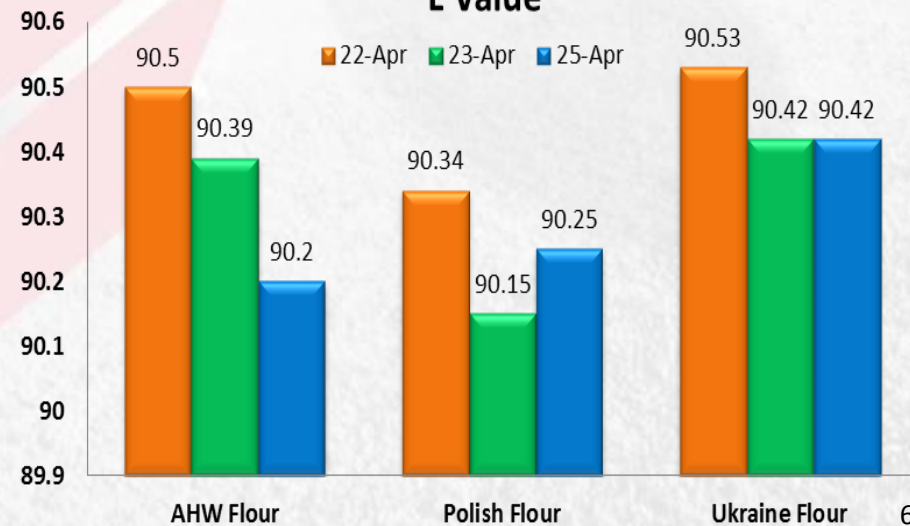
Moisture



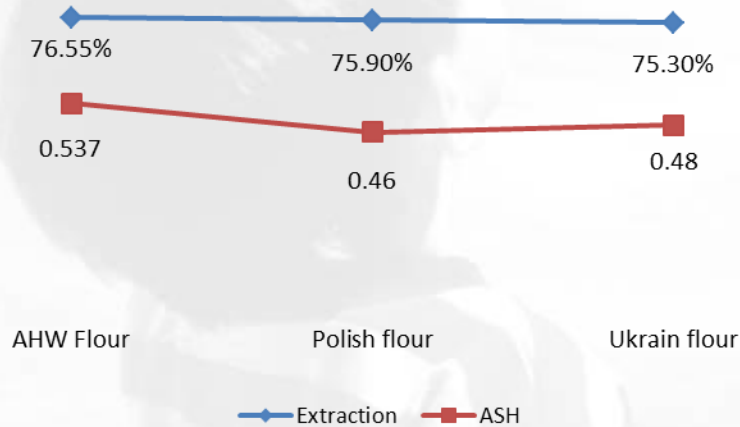
Ash



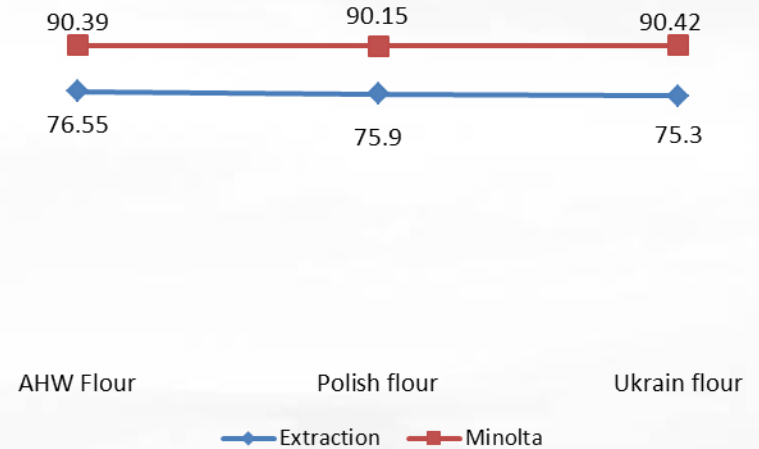
L Value



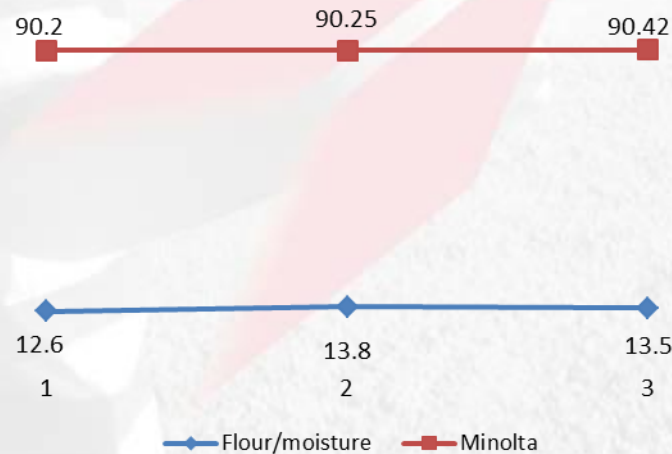
Extraction Vs. Ash Content



Extraction Vs. L value

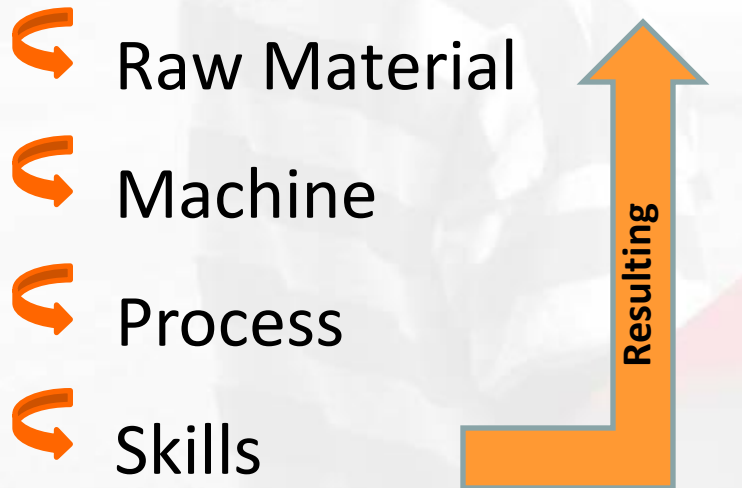


Flour Moisture Vs. L value



Resources

Optimization of resources intelligently.



Technique



Power of Drives



Flutes Profile



Rolls Diameters



Terminal Velocity

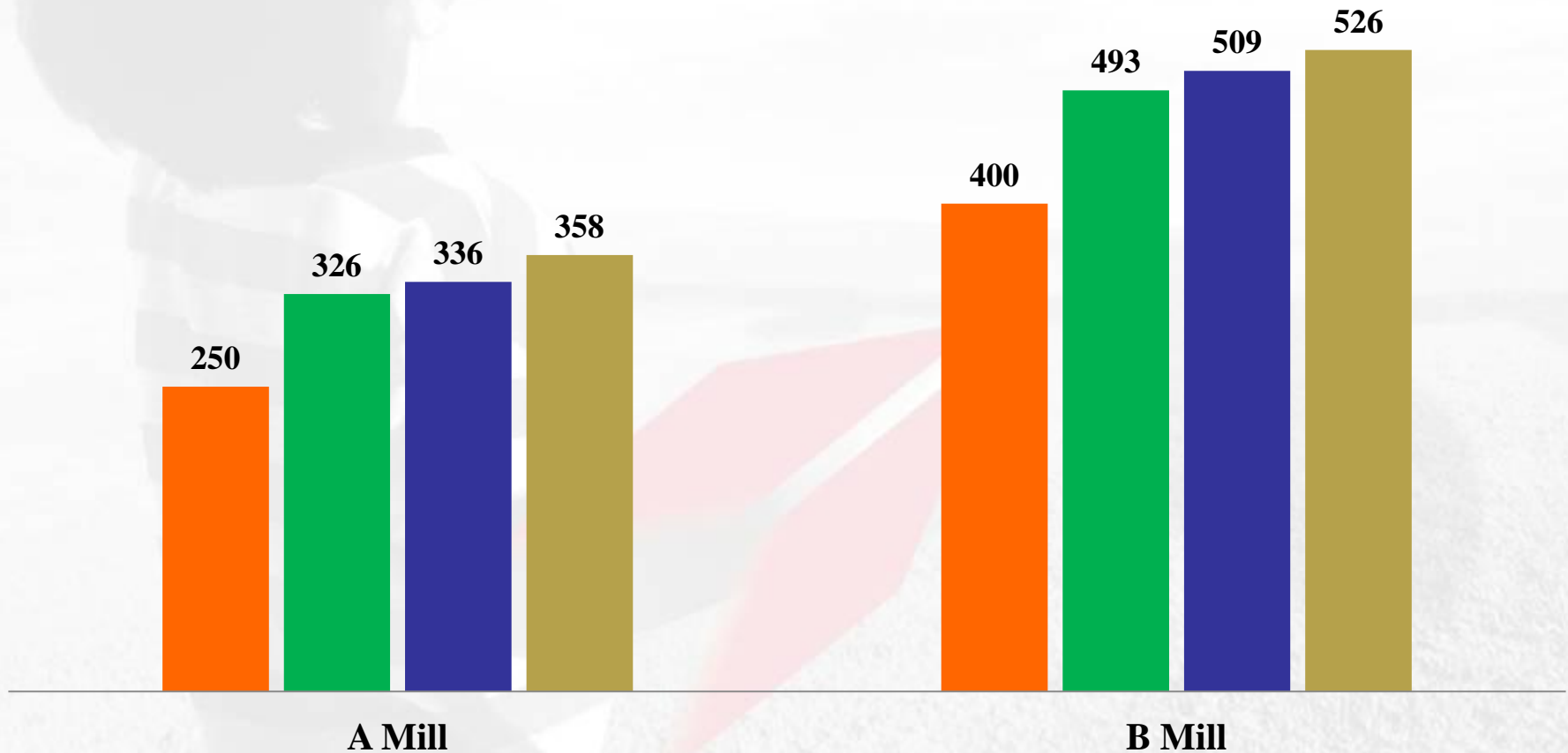
Enhanced
Capacity

Resulting



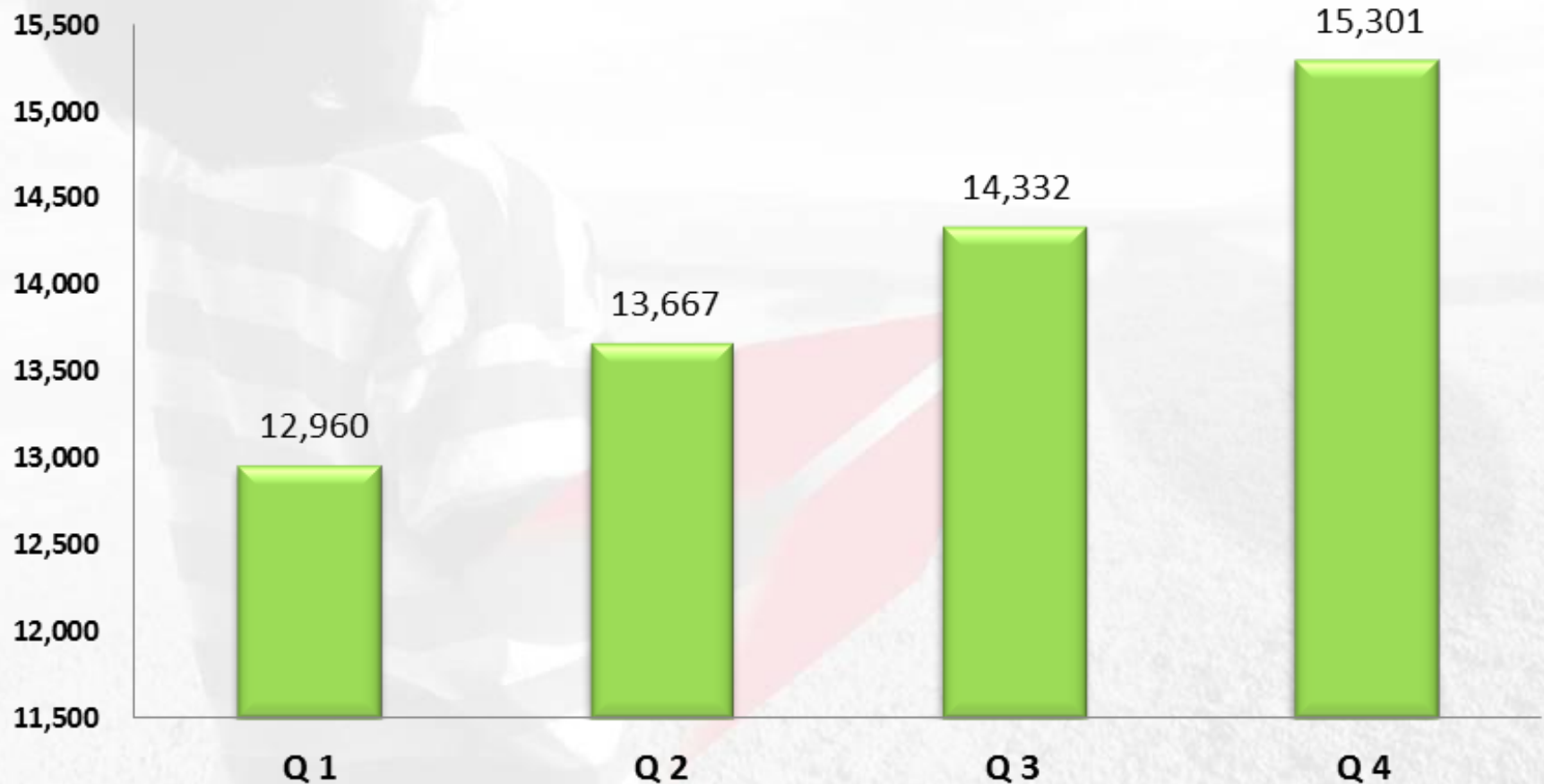
Capacity Achievement (MT/Day)

Standard Cap 03-Feb-09 07-Feb-09 10-Feb-09

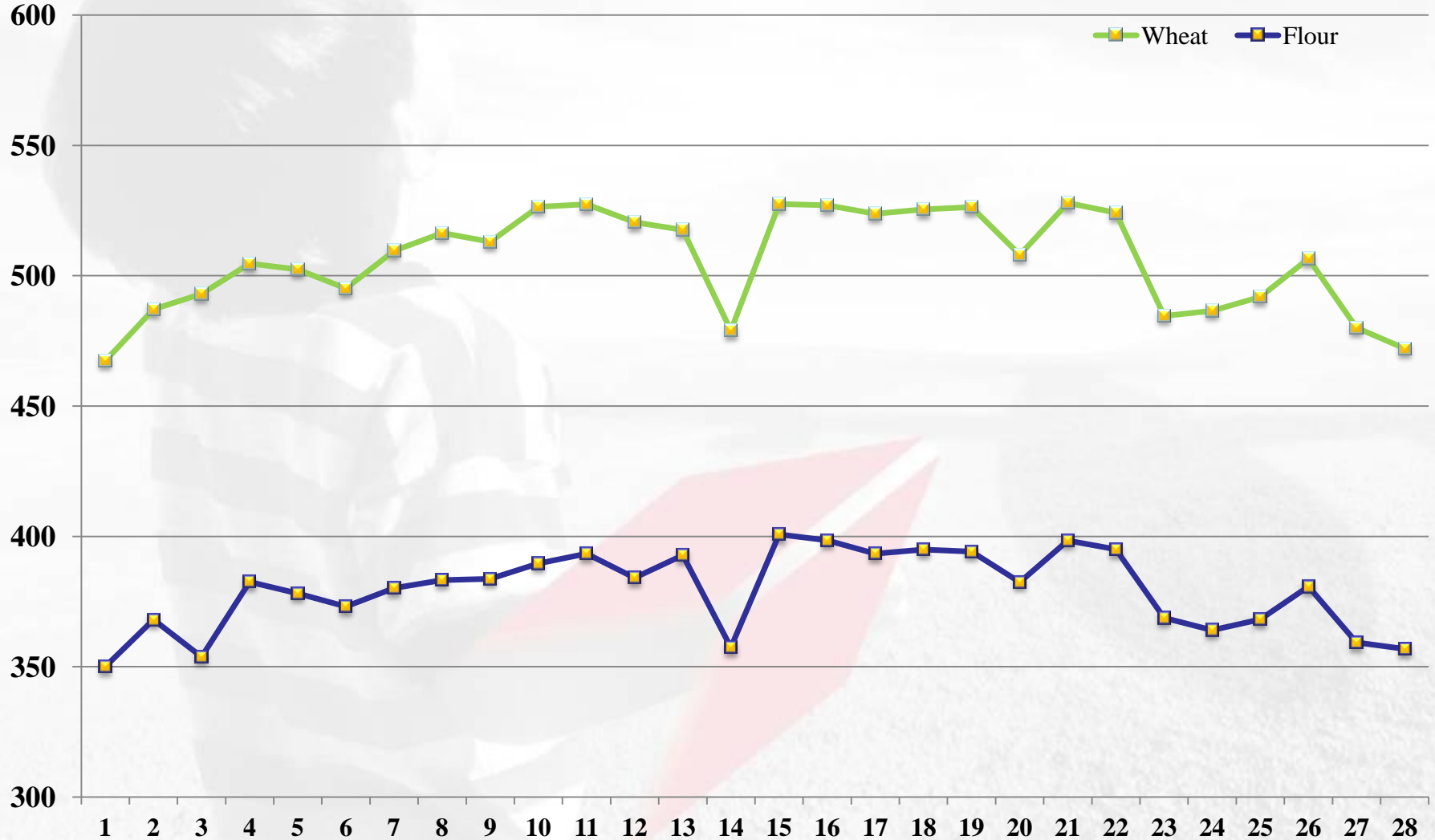


Technique

400 TPD Mill transformed in to 500 TPD



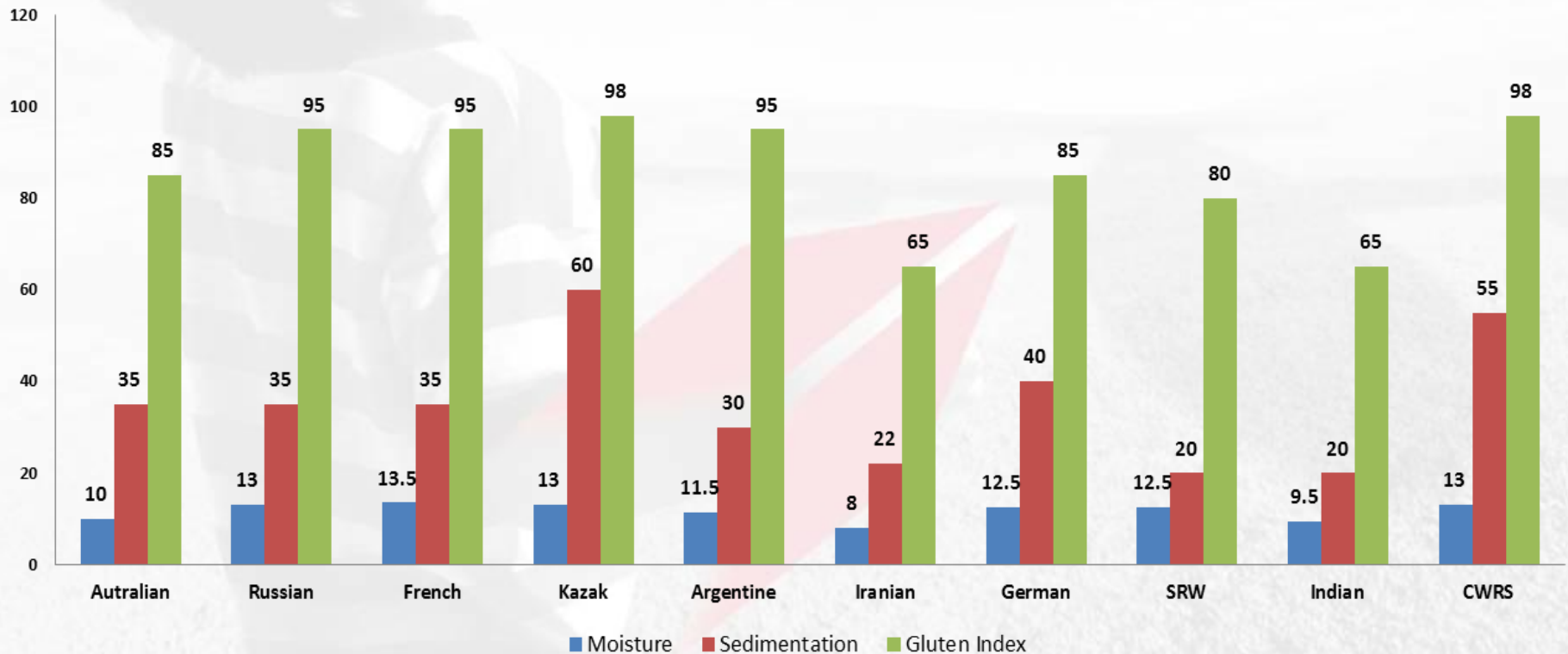
B Mill Production (MT, Feb Month)



Wheat:

1. Selection of right type of wheat at the right time.

Wheat Comparison



2. Smart miller focus on:

- a. Initial moisture of wheat
- b. Test weight
- c. Dockage percentage

All three factor makes a commercial value:

- a. Lower the initial moisture- Higher the Milling gain
- b. Increase in test weight – Higher the extraction
- c. Higher the Dockage- Lower the capacity .

Manpower - Enriching Manpower in techniques

Mechanism - Invest in technology & automation.

Thank You
