

# The new Art of Milling

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# ***Market environment.***

## ***Changing markets***

- Increasing world population and urbanization
- Changing eating habits, that means: more convenient food
- Demand for health and safe food
- New grain supply chain



# ***What is important to You ?***

- Make the best out of your raw material  
→ **High yield**
- Efficient plant operation  
→ **Low Production cost**
- Top technology and equipment  
→ **High quality products**
- High sanitation, plant engineering  
→ **Food Safety**



# **The 3 Pillars of a successful Milling Plant**

- 1. Equipment**
- 2. Technology**
- 3. Engineering**



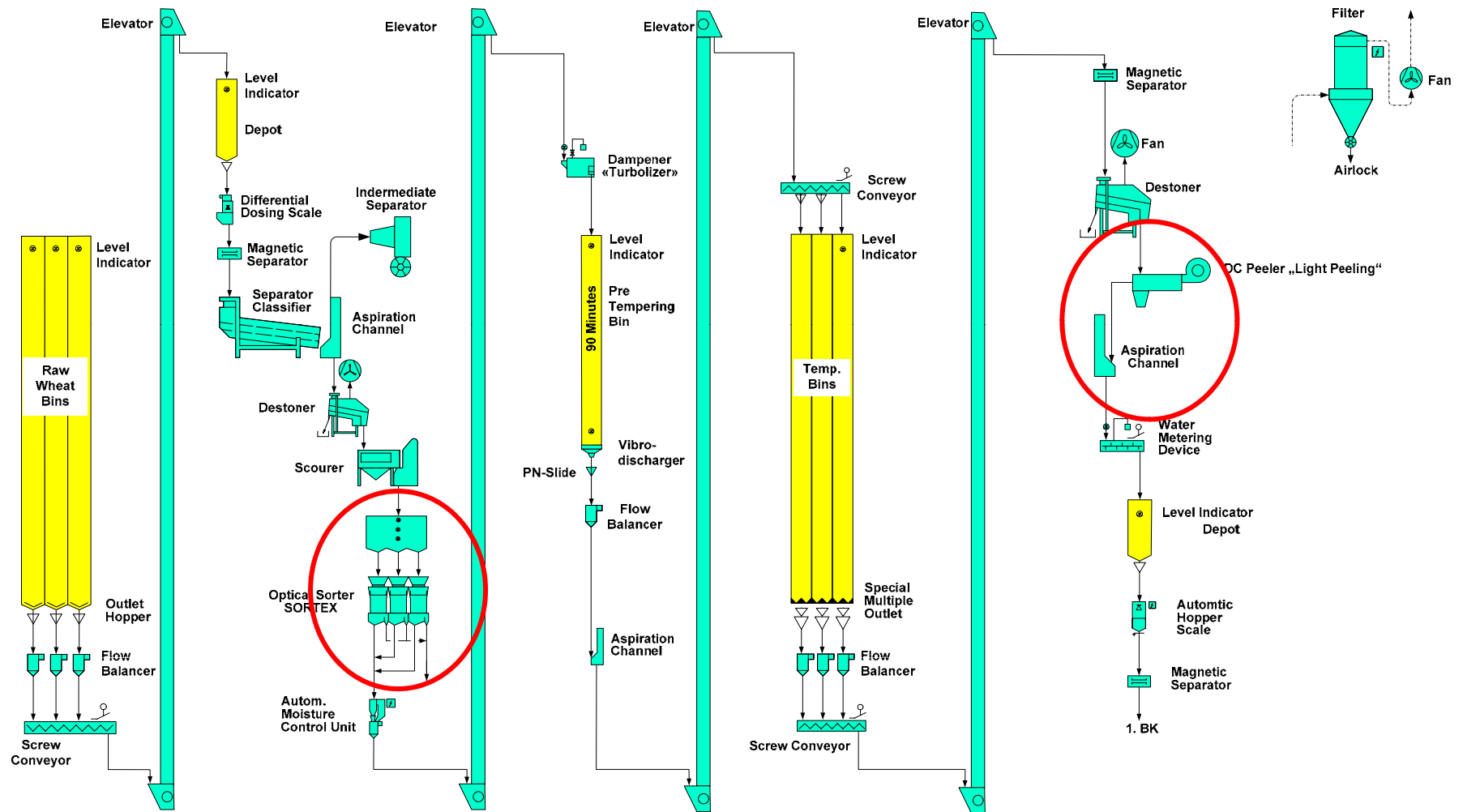


## ***Quality starts with the raw material.***

- Wheat is a natural product with variations
- Wheat contains impurities
- Wheat can be contaminated



# Flow sheet with colour grader SORTEX and light Peeling



Wheat Cleaning with  
Sortex Z+  
Optical Colour  
Sorter



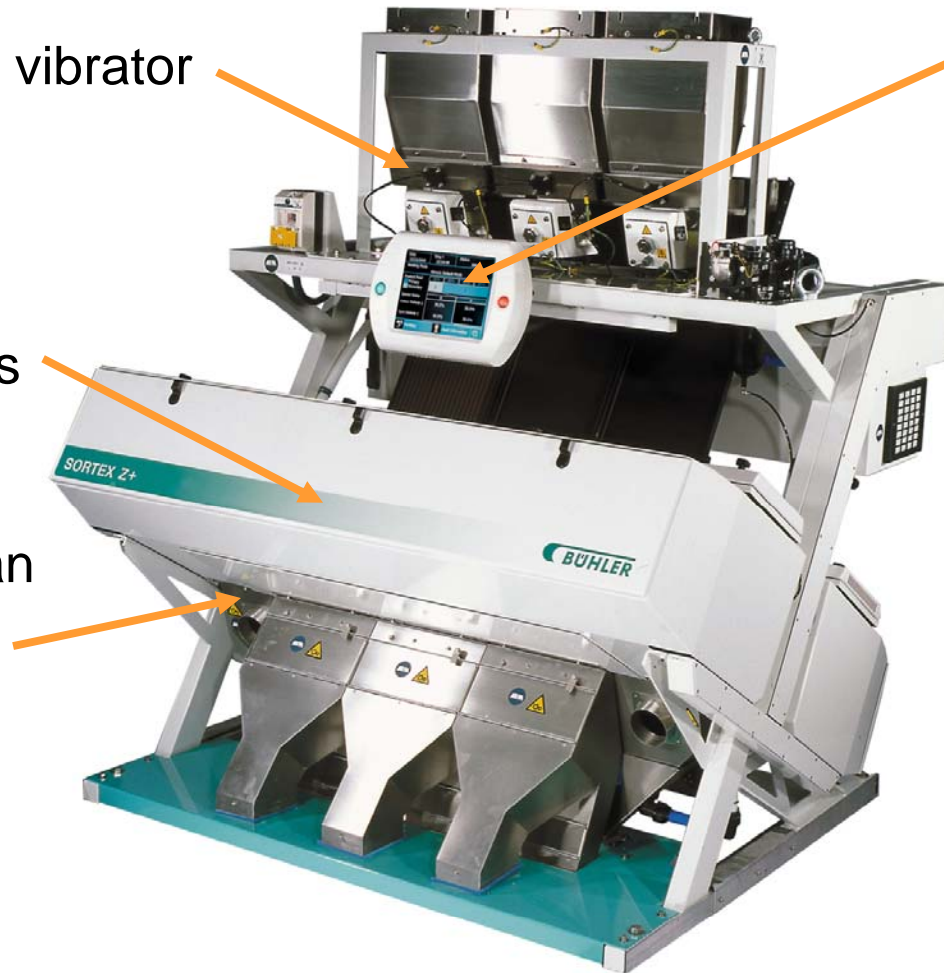
## ***New features of 'Sortex Z+'.***

high capacity vibrator

modified 21" colour  
user interface

new camera  
configurations

longer lifespan  
of ejectors





***Light + dark sort  
machine (VV).***

**optional  
light sort camera**

partially broken grain,  
straw, unthreshed grain

**front**

**rear**

**optional  
light sort camera**

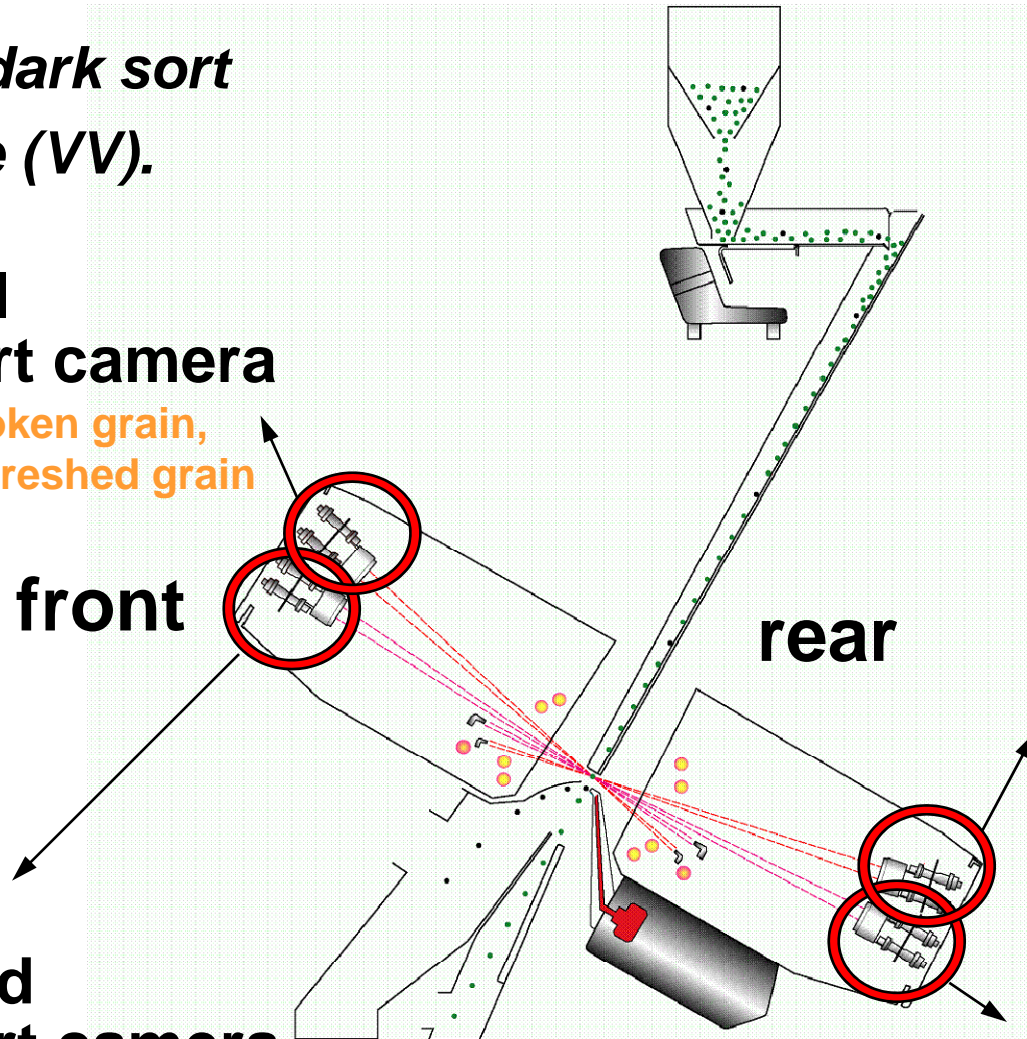
partially broken grain,  
straw, unthreshed grain

**standard  
dark sort camera**

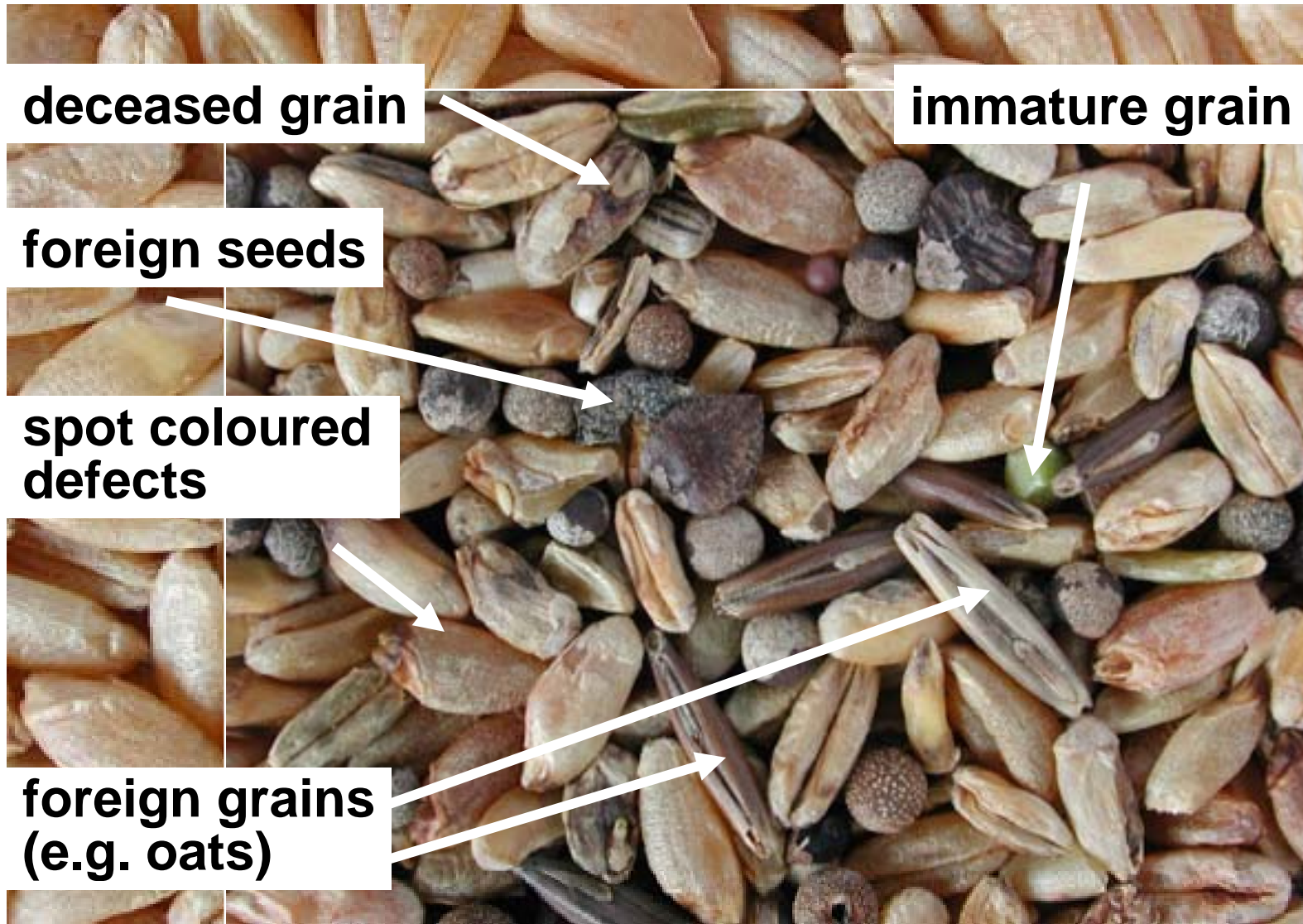
foreign grains and seeds  
spot coloured defects, etc.

**standard  
dark sort camera**

foreign grains and seeds  
spot coloured defects, etc.



## ***Dark sort defects.***





## *Light sort defects.*



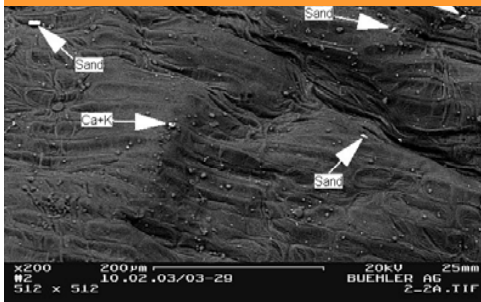
Light Peeling  
for intensive  
surface cleaning



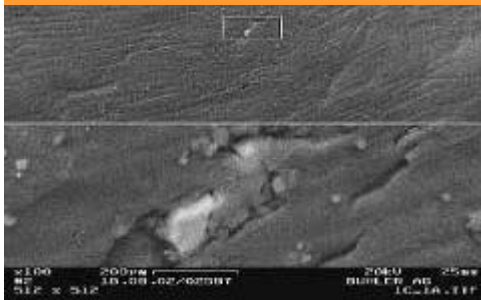


# Wheat kernel.

1st BK hard wheat  
kernel surface



Embedded sand



Epidermis  
Cross Cells  
Tube Cells  
Seed Coat  
Nucellar Tissue  
Aleurone Cells  
Endosperm  
Empty Layer  
Suction Epithel  
Scutellum  
Plumule  
Germ  
Rudimentary  
Leaves  
Primary Root  
Root Cap

Hairs of  
brush

Bran

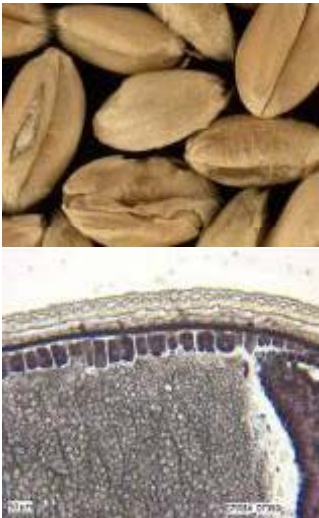
Germ



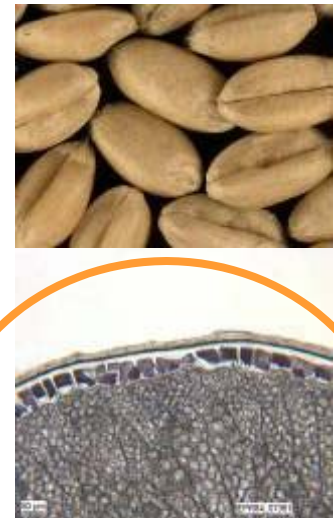
# Light Peeling process.

*Peeling with DCPeeler by “friction”*

before Light  
Peeling



after Light  
Peeling



## **Key Equipment in the milling Section**

- 1. Sifter**
- 2. Rollermill**
- 3. Purifier**



## *Plansifter MPAP*

- Robust Construction
- High sifting Performance
- Low Maintenance Cost



## ***Nova Sieve.***

- Increased sieving surface by 20%
- Easy maintenance and cleaning



## ***Roller mill MDDP/MDDQ.***

- Reliability by rugged components
- Sturdy design, proven solutions
- User friendly, easy to operate





## ***Roller mill MDDP/MDDQ.***

- Maintenance friendly
- Panelling easy to open
- Swing out feed modul for easy cleaning



## ***Purifier MQRF***

- Proven solution
- Sturdy design
- Efficient semolina purification



**SIRIUS Plansifter  
New Sieve  
Generation**

**NOVAPUR**



# ***The New Plansifter SIRIUS***

**Sifting Efficiency**

**Sanitation**

**Modularity**

**NOVAPUR**

## ***Sanitation.***

- Stainless steel housing  
➔ **hygienic operation**
- Insulated compartment  
➔ **no condensation**
- Standard version  
with up to 8 outlets  
➔ **high number of fractions**





# ***NOVAPUR – The New Sieve Generation***

## **PUR sieve frame with stainless steel insert frames**

- No wood, no joints, no fasteners  
→ **food safety**
- Easy and quick cleaning  
→ **less maintenance**
- Sieve area: 0.404 m<sup>2</sup>  
(4.34 ft<sup>2</sup>) per sieve  
→ **high performance**



# ***NOVAPUR – The New Sieve Generation.***

## **PUR sieve frame**

- Resistant against abrasion
- Less residual product, due to the smooth profile



## **Roller Mill Antares MDDR/T**



## ***Antares – Eight-Roller Mill MDDT.***



**From the design concept**



**to reality**



***We strive to exceed your expectations in terms of:***

- **Reliability**  
by rugged components
- **Sanitation**  
by easy cleaning
- **Product safety**  
by using stainless materials





## ***Top Sanitation***

**Hygienic design for ultimate sanitation and easy maintenance**

- Stainless steel combined with insulation
- Easy swing-up cover
- Swing-out feed module for residue-free discharge of the feed device



## ***Precise and Powerful.***

### **Constant grinding action**

- Stable roll pack with self-contained forces
- Precise settings
- Pneumatic engagement and disengagement
- Automatic roll gap adjustment (optional and retrofit possible)



***Solid.***

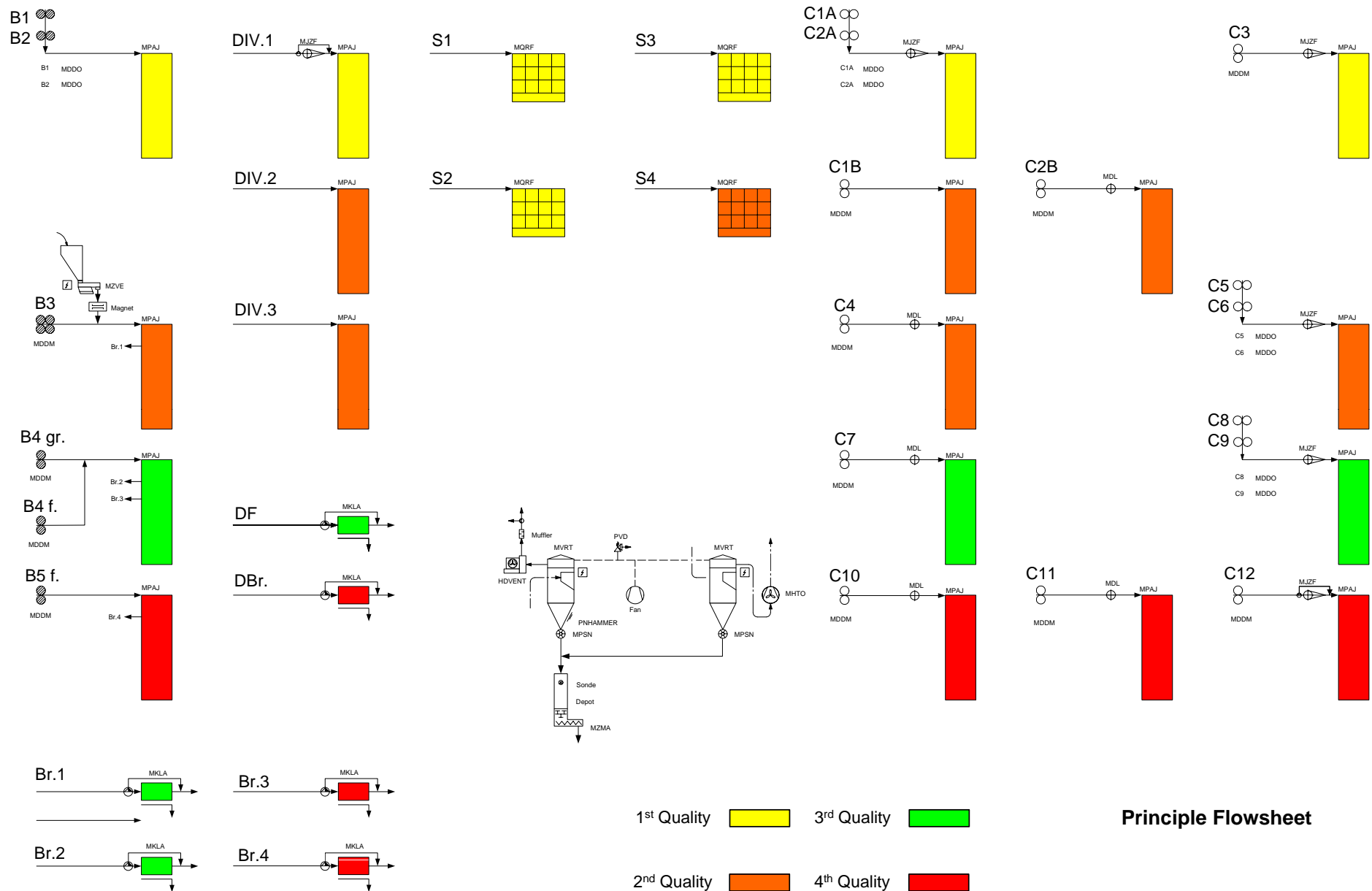
**Oil-free belt transmission  
Easy maintenance**

- Heavy duty profiled timing belt
- Identical belt length for all passages
- Adjustable belt for different roll diameters



## ***New Purifier Polaris – MQRG.***





## Finished Products Section





## *Flour silo with mixing plant.*

- Batch Mixing
- Continuous Mixing



# ***Batch mixing and continuous Blending for consistent Flour Quality***

- Bread mixes
- Biscuits, cakes, muffins
- Enriched flours
- **Taylor made flours**























**Thank you for your attention!**