Ömas

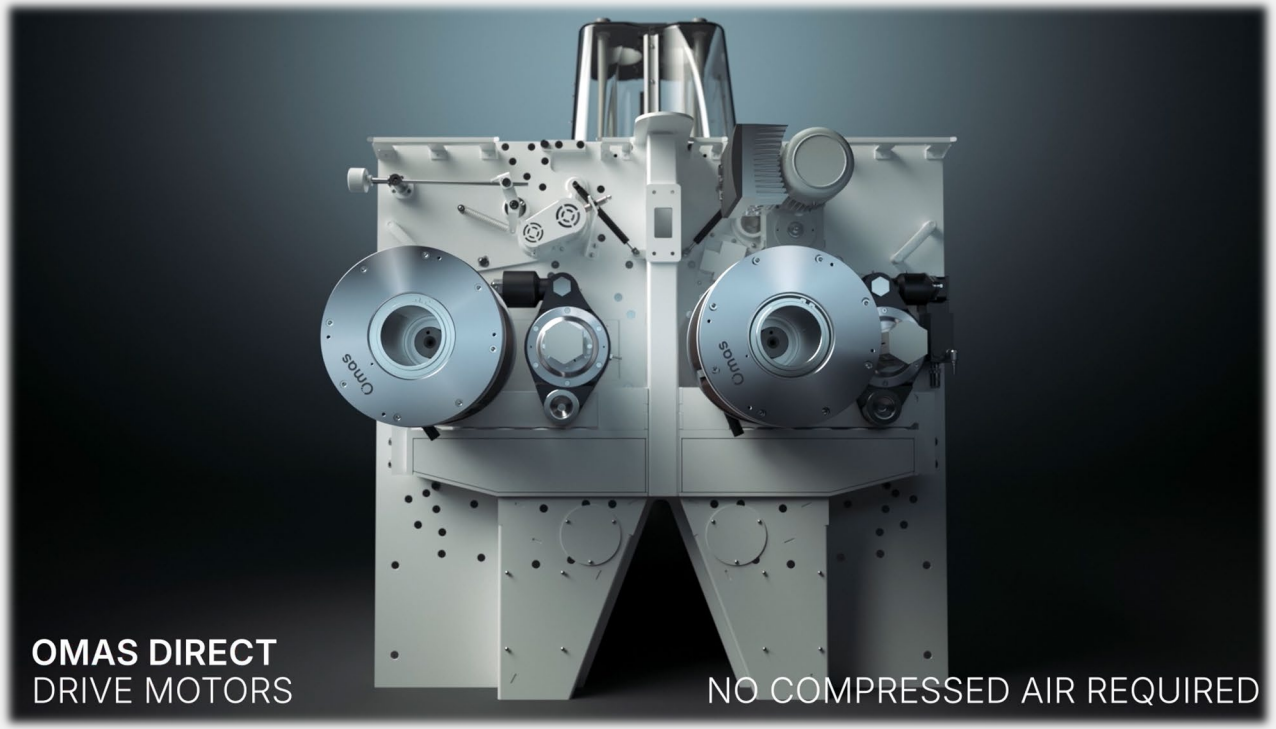
REINVENTING THE MILL.

FROM ONE FLOUR TO ANOTHER: OPTIMIZING CHANGEOVERS WITH THE EDGE

IAOM MANILA PHILIPPINE OCT 2025

THE SOLUTION: “EDGE” ROLELR MILL

We increase the efficiency of the entire milling plant by new technology.



Optimize the mill’s flours and reduce waste and mistakes By enabling centralized control of key parameters and recipe-based automation,

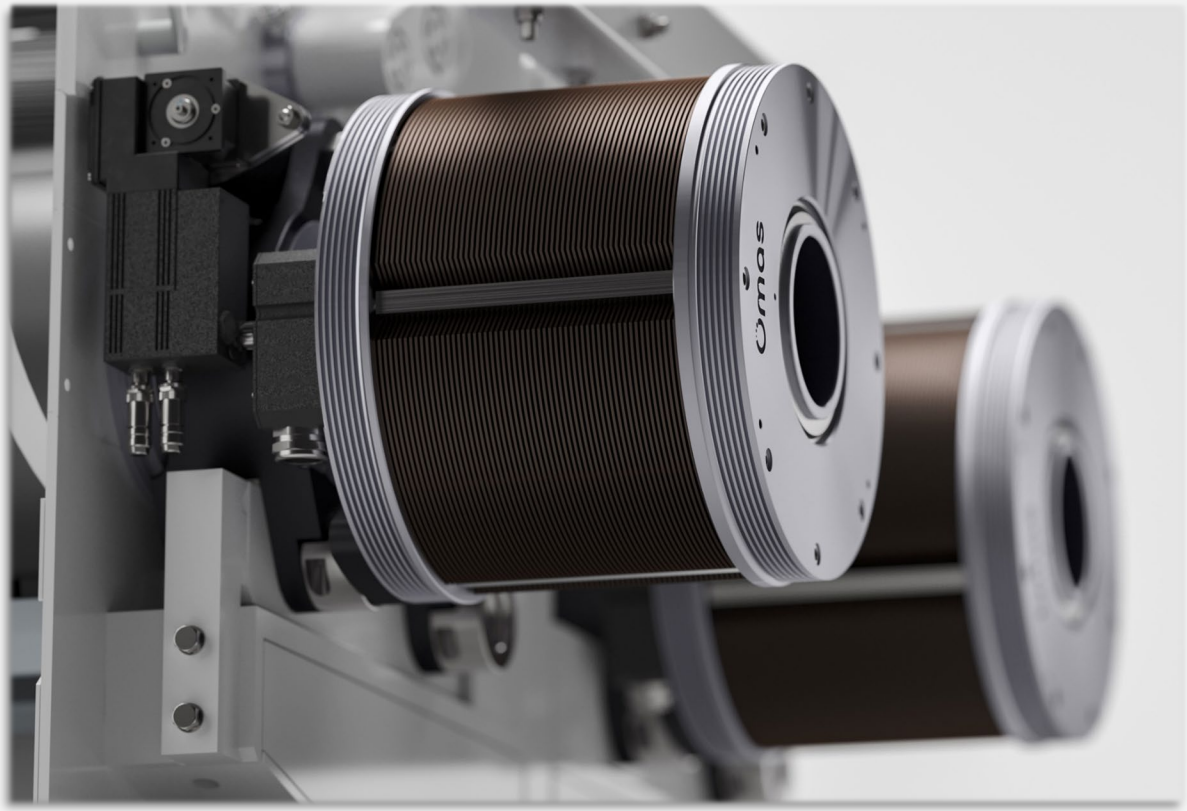
The EDGE helps reduce manual mistakes, minimize milling-loss during changeovers, and ensure CONSISTENCE EXTRACTION across flour varieties .

DIRECT-DRIVE MOTORS

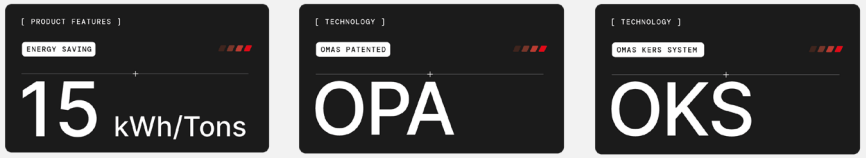
Advanced EDGE motorization:

- Controlling on each single cylinder!
- Automatic adjustments of speed and ratio without stopping the machine (consistence)
- Instant adjustment of cylinder speeds, gaps and pressure
- Change of grinding type in a few seconds
- Processing of different grains without changing the layout of the mill
- Automation, recipe storage, remote control via mobile application

This is FLEXIBILITY in the grinding process



ENERGY SAVING



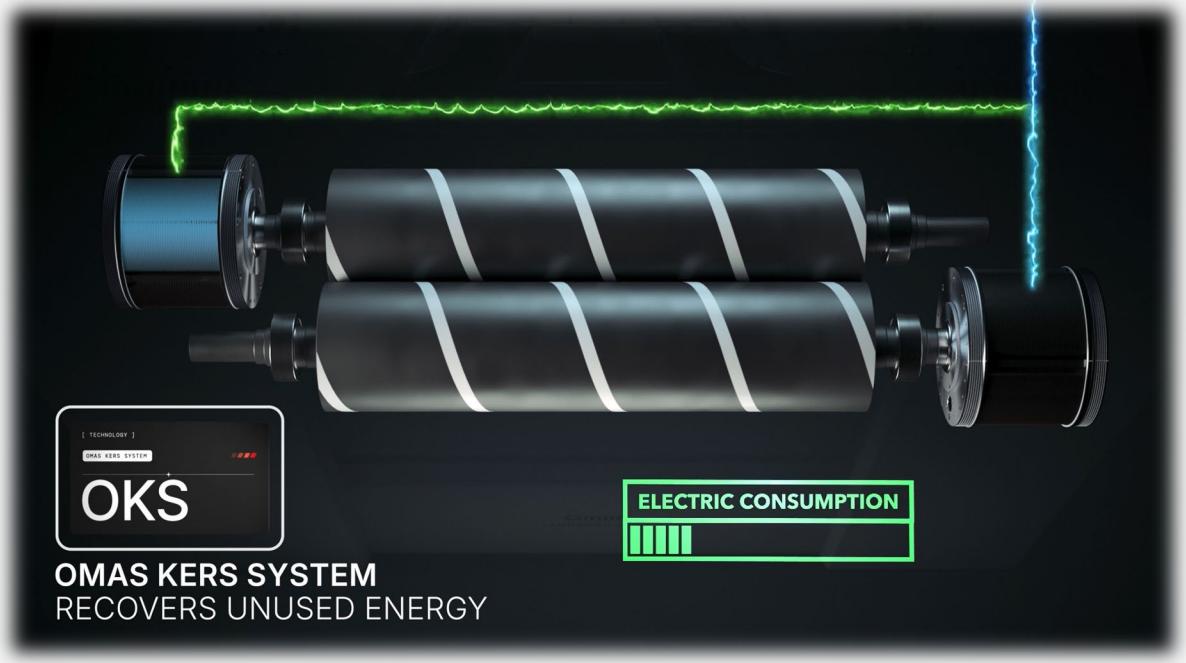
OKS (Omas **K**inetic **E**nergy **R**ecovery **S**ystem)

By comparative analysis reported Soufflé-Paris:

The mill electricity absorption :

30-35 KWH/H

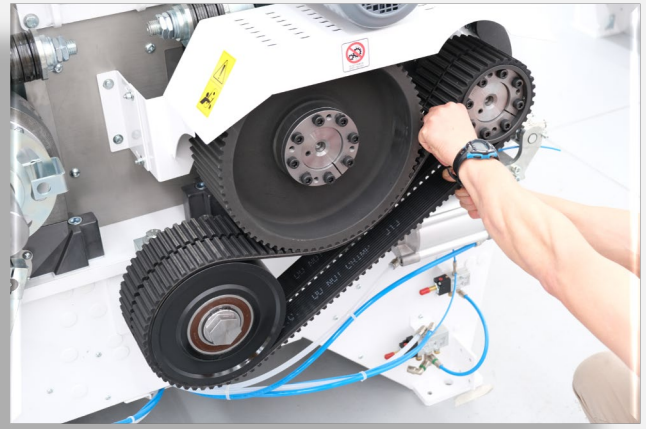
TO grind 1 TON OF WHEAT



This is the LOWEST ELECTRICITY absorption for a commercial mill's roller recorded!

CHANGEOVERS

The classic roller is a **FIX** speed driven by belt and pully during milling.

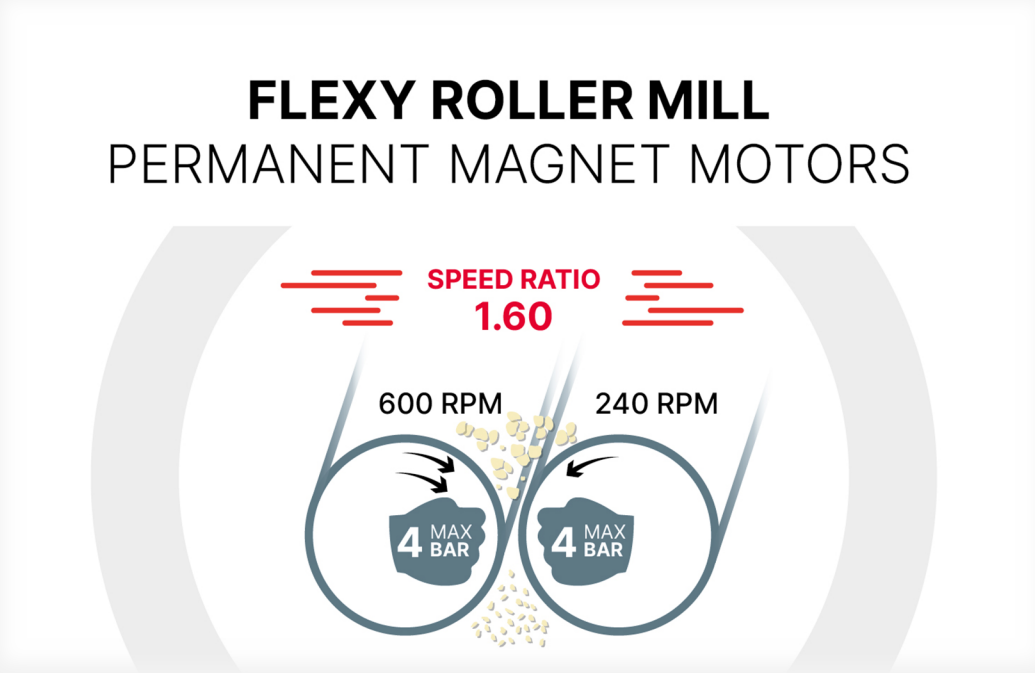


CHANGEOVERS

How Omas bring the possibility to change the ratio IN-TIME (INSTANTLY) ?

The Direct-Drive roller's speed ratio is under control by miller!

Millers also can store/memorized in their automation the recipes base on wheat types and targeted flours.



CHANGEOVERS IS ONE MORE TOOL

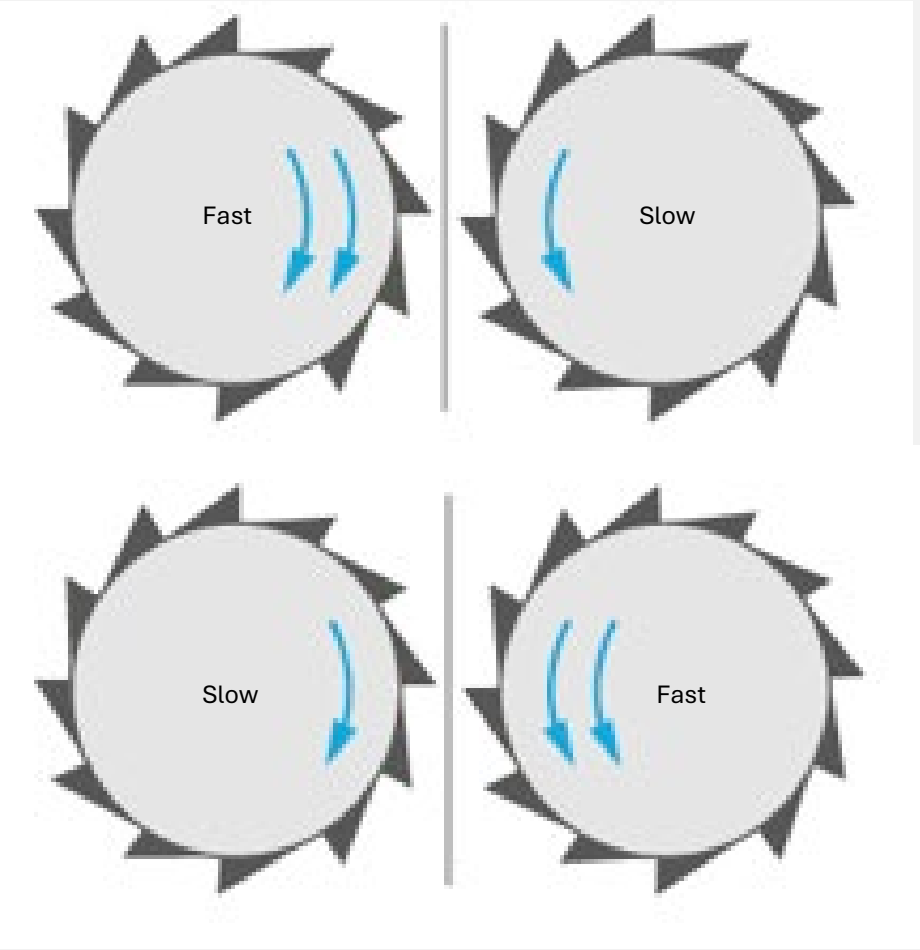
How Omas bring the possibility to change the ratio IN-TIME (INSTANTLY) ?

With Omas solutions you can:

Change the impact of corrugated passages,

It means change the grinding ratio from SHARP TO SHARP impact switch DULL TO DULL impact of flutes and vice versa in a few of seconds!

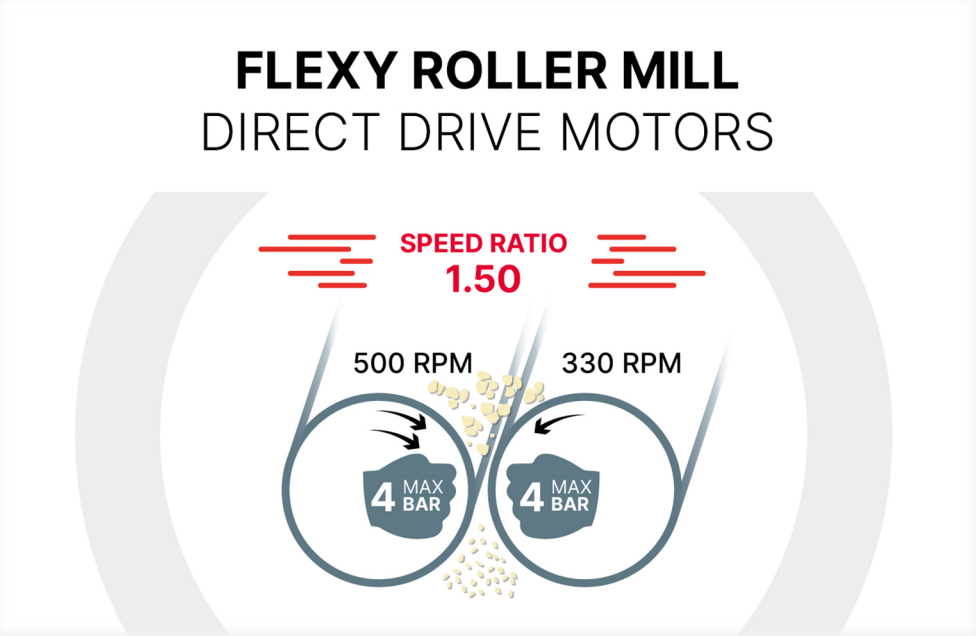
So you can changeover for targeted production of semolina/coarse flour or fine flour.



CHANGEOVERS ROLLER MILL SETTINGS

So millers can adjust roller mill settings based on the specific grain to process:

1. Number of grooves per cm – Affects semolina size and flour yield.
2. Working angle – Influences the percentage and size of extracted semolina.
3. Roller configuration (D-D, S-S, D-S, S-D) – Determines the proportion of semolina, flour, and bran.
4. Groove inclination – Controls the cutting angle, impacting flour production.
5. Peripheral speed of the fast roll – Regulates milling capacity per passage.
6. Grinding ratio – Grooved rolls (1:2.5) and smooth rolls (1:1.25) affect bran size and starch damage.
7. So possibility to FINE TUNE the reduction passage not only by rolls pressing but also with changeover rolls ratio to control more the starch damage.



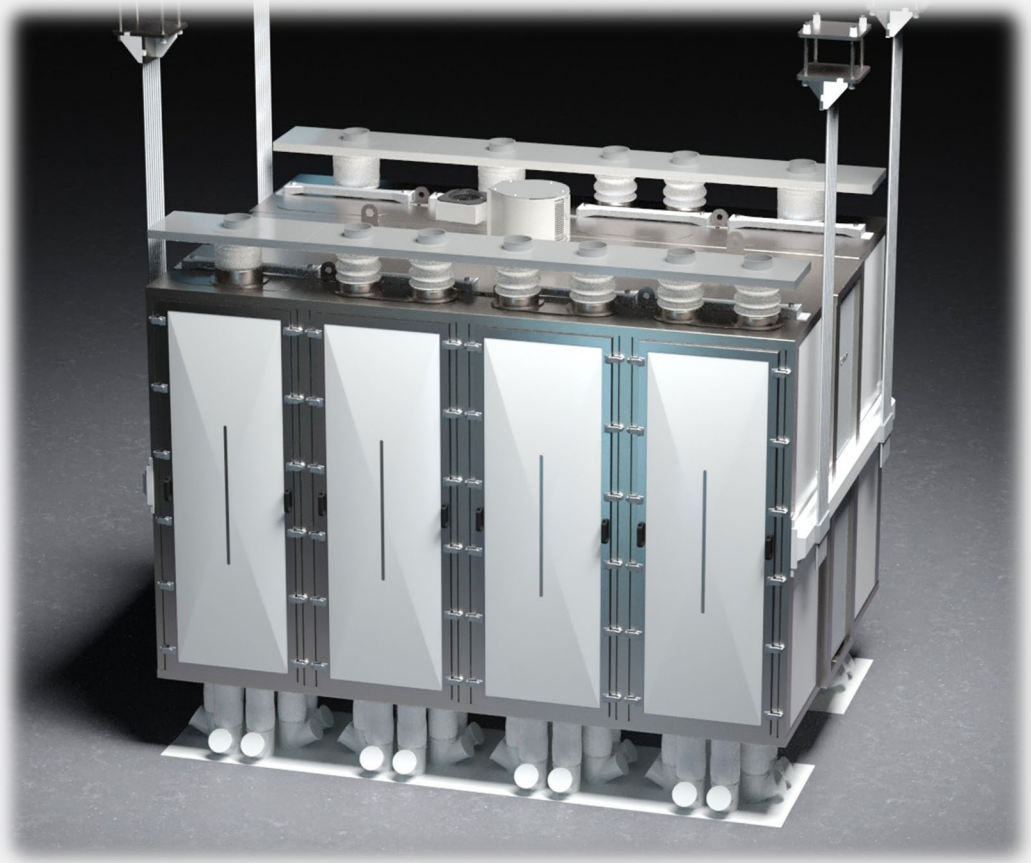
CHANGEOVER - PLANSIFTER

It is a dew-free Plansifter contributing to improved internal insulation.

then also has:

The application of the Direct-Drive System for varying the rotation speed based on the product.

Thereby optimizing energy efficiency and adjusting the effective force on passing particles.

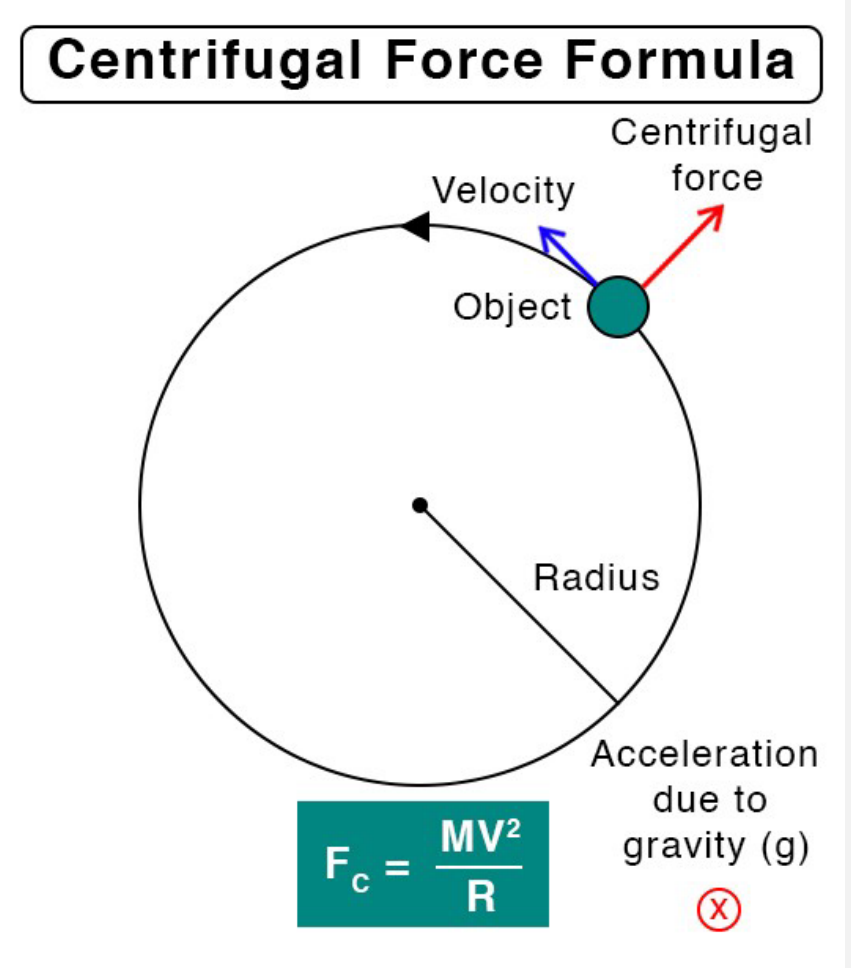


CHANGEOVER - PLANSIFTER

Thereby optimizing energy efficiency and adjusting the effective force on passing particles.

- ✓ 250 rpm for common wheat
- ✓ 230 rpm for semi-hard wheat
- ✓ 220 rpm for durum wheat

-High speed for C/C MODE: **C**leaning **C**ompartments



Ömas

REINVENTING THE MILL.

A CASE HISTORY

“Moulins Soufflé” PERFORMANCES GOALS

- Omas has chosen by Moulins Soufflet in reason that embodied the philosophy of 900 TPD/day –24/24 hours
- Enhance technical and quality standards
- Strict safety and reliability criteria
- Energy savings -30% in milling
- Reduce maintenance costs -50%
- 4.0 generation mill /Block-chain
- Extraction rate of 78.5% at B1

  for a T55 flour (ash content < to 0.60%)

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LEONARDO COSUMPTIONS

TRADITIONAL MOTORS

MODEL B1 4 CYLINDRES PASSAGE B1

CAPACITY [T/H]	SPEED [RPM]
4,6	550

TRADITIONAL MOTORS CONSUMPTIONS [A]	[kW]
39,5	24

MODEL C1 4 CYLINDRES PASSAGE C1

CAPACITY [T/H]	SPEED [RPM]
1,5	550

TRADITIONAL MOTORS CONSUMPTIONS [A]	[kW]
18	11

DIRECT DRIVE MOTORS

MODEL B1 4 CYLINDRES PASSAGE B1

CAPACITY [T/H]	SPEED [RPM]
4,6	550

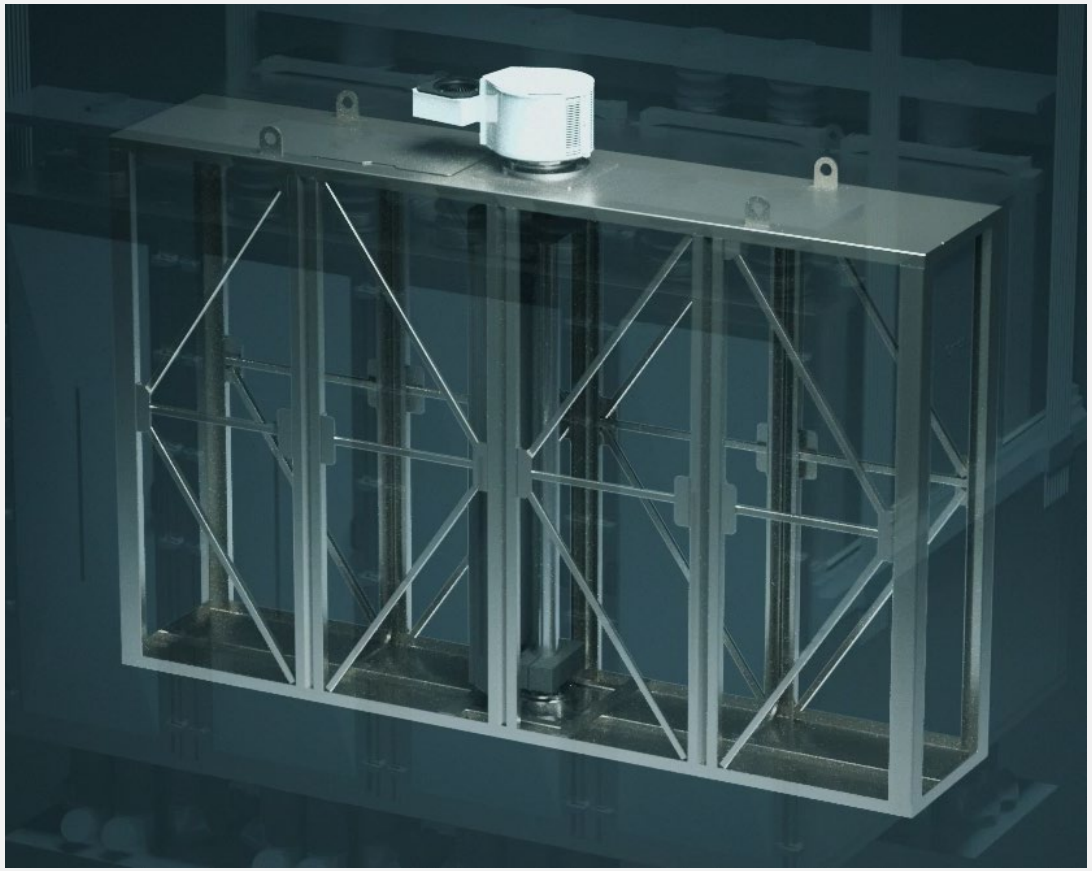
TORQUE MOTORS CONSUMPTIONS [A]	[kW]
30	18,5

MODEL C1 4 CYLINDRES PASSAGE C1

CAPACITY [T/H]	SPEED [RPM]
1,5	550

TORQUE MOTORS CONSUMPTIONS [A]	[kW]
13,2	8,2

PLANSIFTER COSUMPTIONS



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SPEED [RPM]
254

TRADITIONAL MOTORS

TRADITIONAL MOTORS CONSUMPTIONS [A]	[kW]
14	8,6

DIRECT DRIVE MOTORS

TORQUE MOTORS CONSUMPTIONS [A]	[kW]
10	6,5

SUMMERY

EBITDA ↑

OPEX ↓

-30%
mill building cost

+1%
flour production per day

33kWh
Per TON of wheat

-90%
maintenance cost – absence of belts

+95-97%
plant efficiency per year

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BEFORE Moulins Soufflé/PARIS

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AFTER Moulins Soufflé/PARIS

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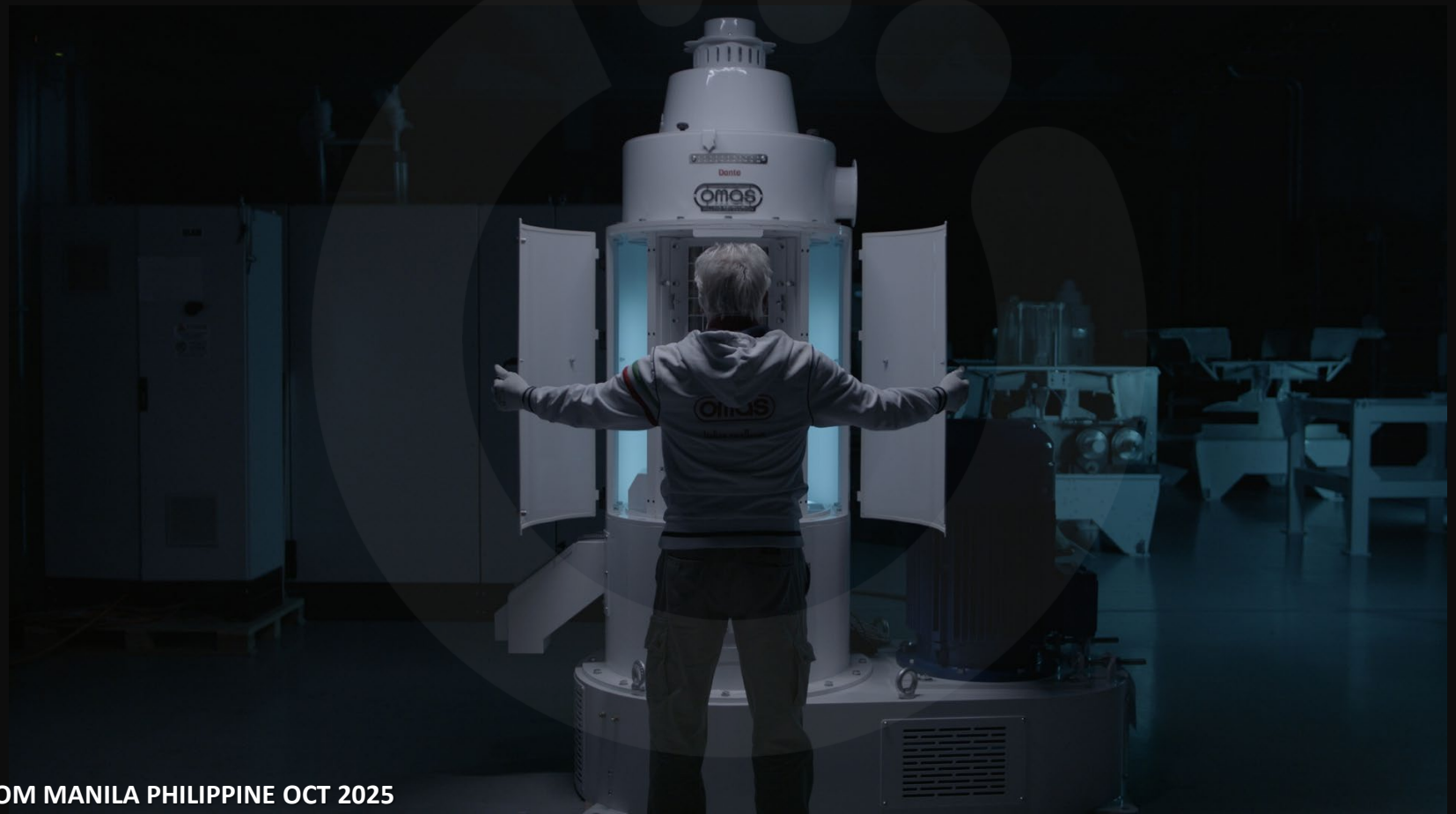
The innovation *whirlwind*



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