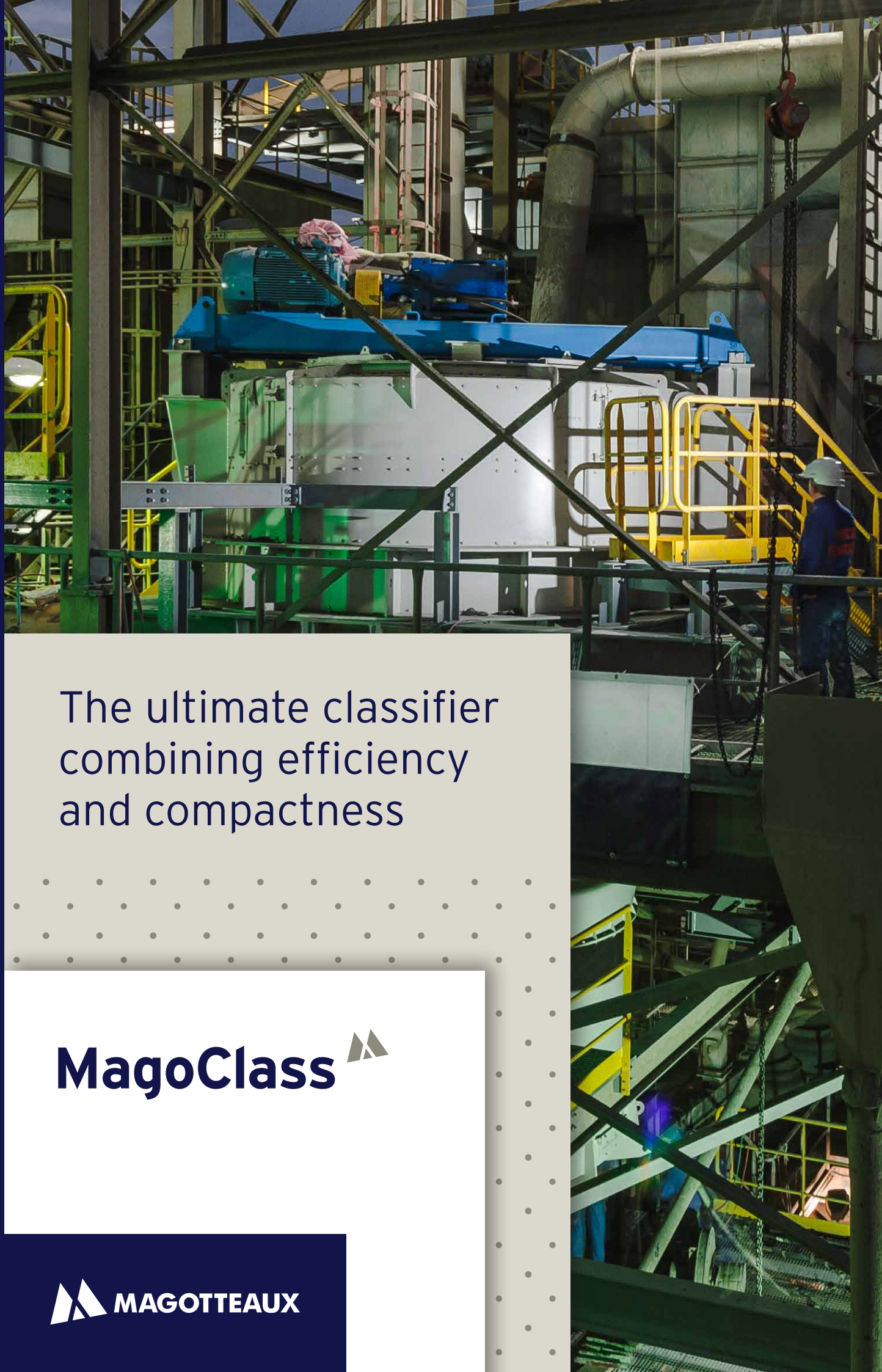


The ultimate classifier combining efficiency and compactness

MagoClass

MAGOTTEAUX

There is always a way to do better

Your business

- A grinding plant / a cement works (raw, cement, fly ash, slag, ...)
- An Original Equipment Manufacturer / An engineering office / A general contractor
- One or several locations / Producing from 20 to 250 tons per hour
- Committed to high quality standards

Your function

- You own or manage a cement plant
- You run a production or maintenance department
- You operate equipment
- You are a project quality manager or decision maker

Your targets

- Keep initial investment low
- Reduce power consumption
- Reduce maintenance costs
- Increase production
- Improve quality
- Reduce installation / commissionning / downtimes
- Avoid expensive building transformation costs
- Reduce clinker factor
- Meet sales targets
- Gain new markets

Whatever your business, function or targets, **the ultimate classification technology can fulfil your** most demanding **requirements.**

Why?

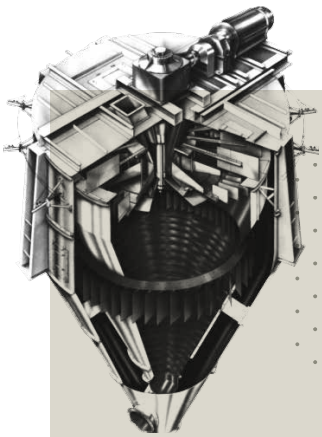
The ultimate classifier allows for:

- **Low initial investment**
- **Energy savings**
- **Lower global footprint**
- **Reduced operating costs**
- **High efficiency**
- **Compact design**
- **Quick and easy installation**

And, not less valuable

- Less steel for the unit / structure (baghouse & cyclone)
- No re-submission of Title V permit (closed system or using existing baghouse for cooling air)

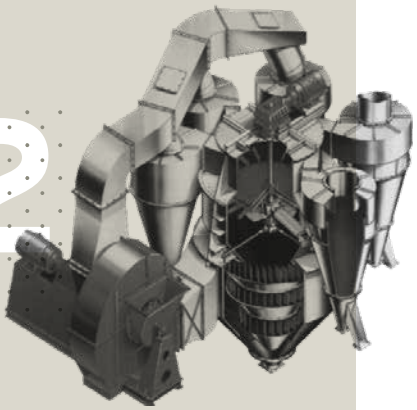
From 1st to 4th generation ...



1

1st Generation

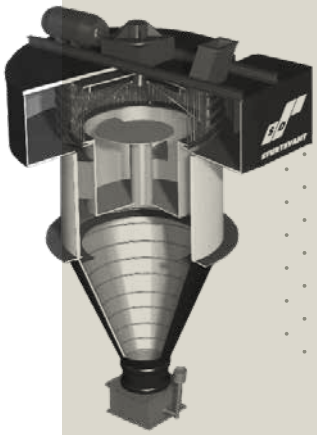
- Airflow: no control, inefficient fan
- Poor cycloning effect
- Distribution plate below selecting zone
- Very narrow selection zone
- Fineness: narrow range of adjustment
- Very compact arrangement



2

2nd Generation

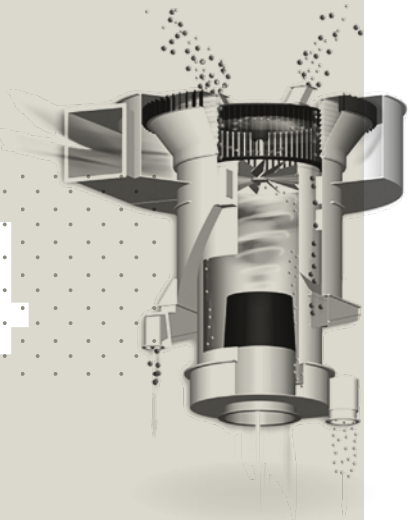
- External fan
- Several small cyclones
- Distribution plate below selecting zone
- Very narrow selection zone



3

3rd Generation

- External fan.
- Several cyclones or filter (cooling)
- Distribution plate above selecting zone
- Very wide selection zone
- Fineness: wide range of adjustments



4

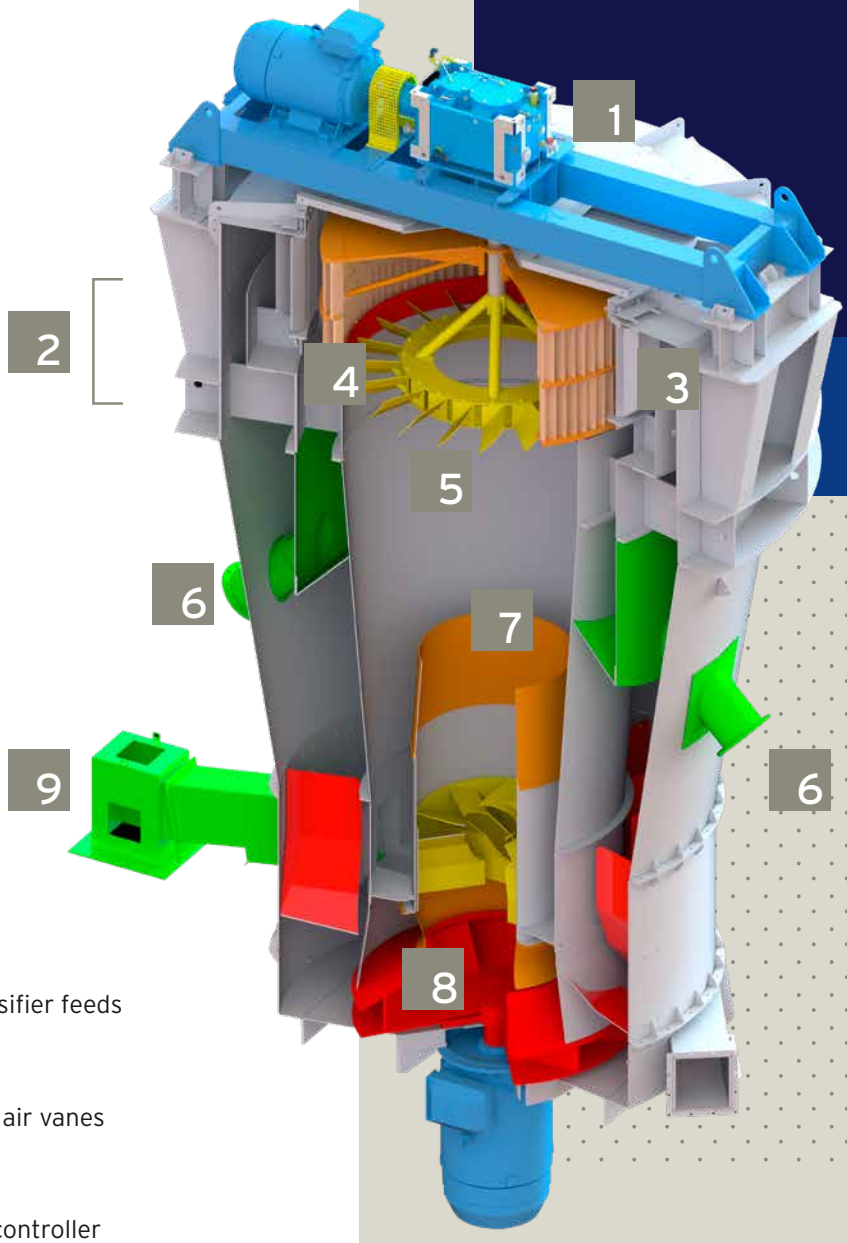
4th Generation

- No external cyclone
- No process filter
- No external fan
- No ducts
- Direct fines recovery
- 1st generation separator compactness
- 3rd generation separator efficiency

MagoClass

Latest generation

… and beyond



1 Two classifier feeds

2 Volute

3 Vertical air vanes

4 Cage

5 Vortex controller

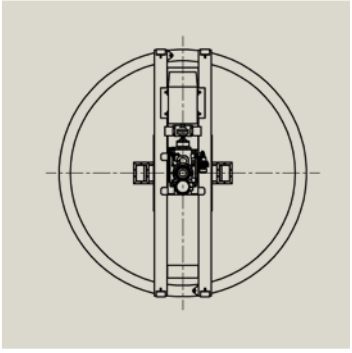
6 Two reject outlets

7 Integrated cyclone

8 Integrated fan

9 Fines outlet

View from above:
Full integration of elements



To do better we carefully revised each element

Our customers rely on us ...

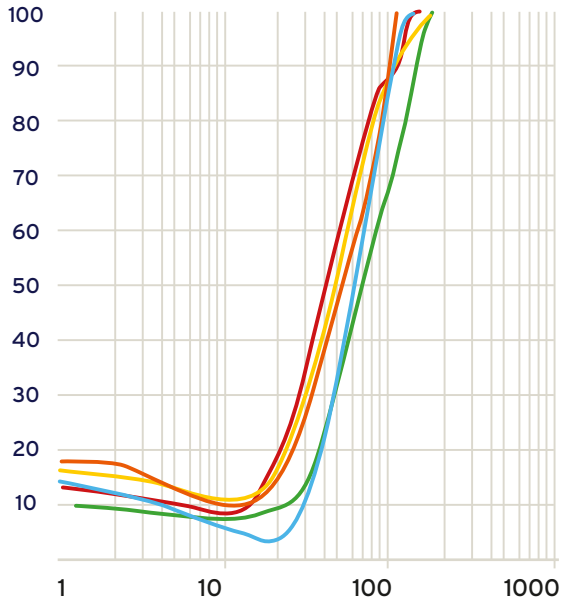
Over the last twenty years, Magotteaux sold over 200 classifiers all around the world, to customers producing all cement types (from 3000 to 6000 Blaine) as well as raw or slag.

... for unique results ...

Typical results	before	after
Output (t/h)	22.9	30.3
Fineness - Blaine (cm^2/g)	5200	5280
%P 8.6µm	50.5	50.1
%P 30µm	5.2	2.7
Circulating load	4.7	3.5
Mill absorbed power (kW)	1500	1515
Separation absorbed power (kW)	65	195
Mill specific energy (kW/t)	65.5	50.1
Workshop specific energy (kW/t)	78.8	63.9

for cement CEM I 52.5 R

... with reason!



Vertical axis: Probability (%) for a particle of a given size to be selected as coarse.
Horizontal axis: Particle size (µm).

From workshop to plant: quick & easy!

Process features

Air inlet chamber

- Cylindrical shape leading to better symmetry
- Adjustable vertical air guide vanes to control air tangential speed
- Better air distribution around the selection cage
- Low pressure drop design

Selection cage design

- Selection blades
- Vortex control device

Reduced cage height/diameter ratio

- Thinner material layer
- Better air distribution on cage height
- Lower material concentration around the cage

Coaxial fines recovery chamber

- Symmetry of air flow leaving the cage
- High fines recovery efficiency
- Adjustable cleaned air suction pipe
- Fines discharge device
- Low pressure drop design

For more information and a detailed analysis of your installation or specific needs:

- visit our website: www.magotteaux.com
- send your query to info@magotteaux.com

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