



June the 6th, 2024

Crop processing and storage to avoid post-harvest grain spoilage



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- **Overview of FAO Société Nouvelle**
- **Pre-storage of crops**
- **Early harvest using a grain dryer**
- **Walk through a Turnkey Process Line**





Corporate profile





Corporate profile



Today!

- Family owned since 2012
- 100 employees
- 10 500 m² production facility
- Sales networks in France and Overseas



factory



Storage / Handling
Cleaning / Drying





Storage / Handling



Storage

- Silos
- Air cooling systems
- Loading bins
- Discharge pits



Handling

- Bucket elevators
- Chain and flight conveyors
- Augers
- Others



Cleaning / Drying



Cleaners

- Aspirators
- Purifiers
- Rotary drum cleaners (up to 250 t/h)

Dryers

- Continuous (up to 95 t/h)
- Batch dryers



Pre-storage phase: from field to silo



Race against the clock to clean and dry the grain.

Countdown: 24h after harvest

- Large wastes (chaff, cobs, hay, leaves, etc) saturated with moisture.
- Insects, larvae, eggs and other forms of damage including mouldy/diseased/discoloured grain, rodent damaged grain, broken grain, shrivelled grain, and impurities/foreign matter.
- Excessive grain moisture.





Early harvest using a grain dryer

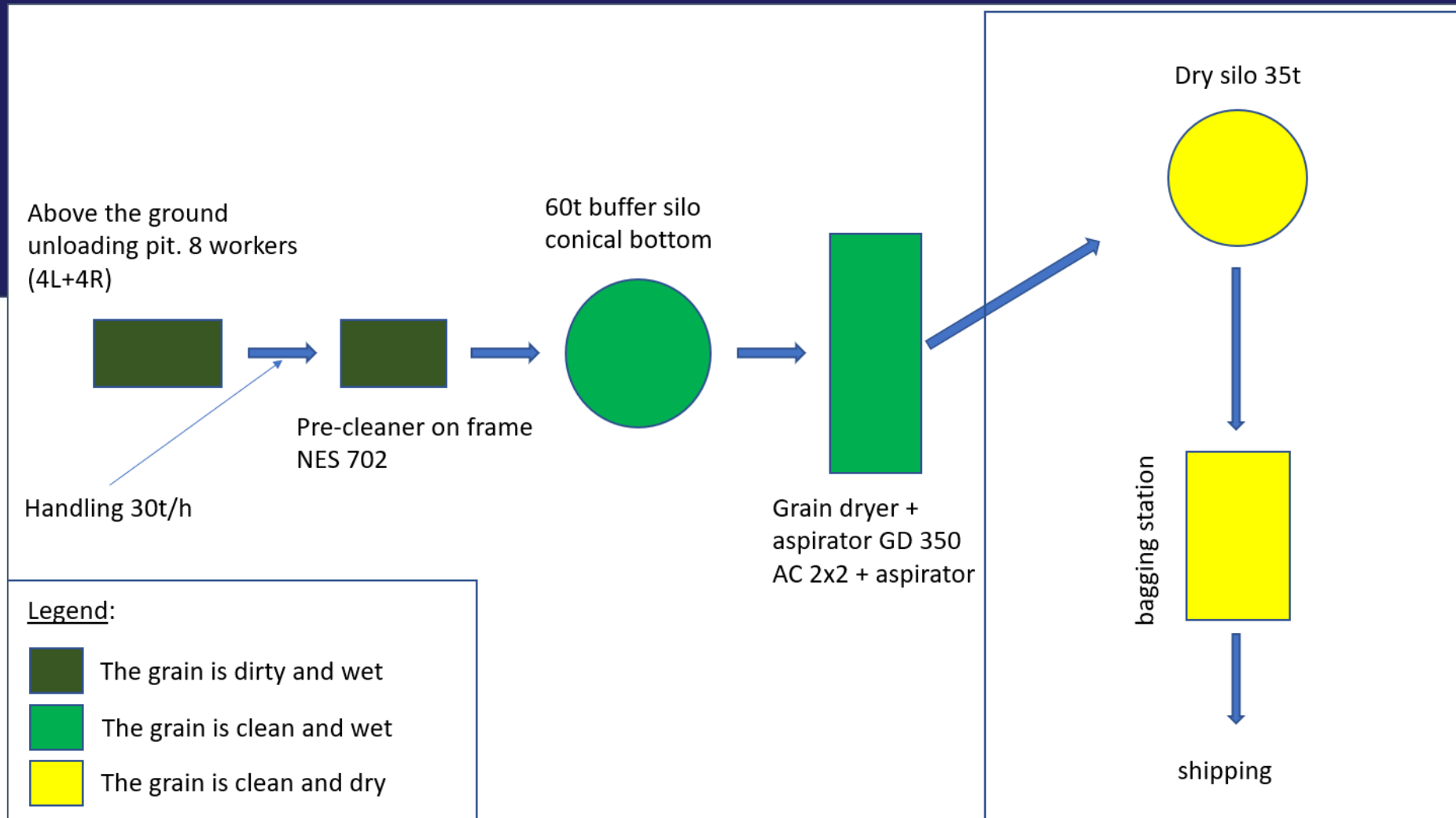
Advantages:

- Reduced loss of grain eaten by birds and rodents.
- Reduced development of pest.
- Less exposed to climatic hazards.
- Eliminates the risk of late soil preparation for sowing the next harvest.



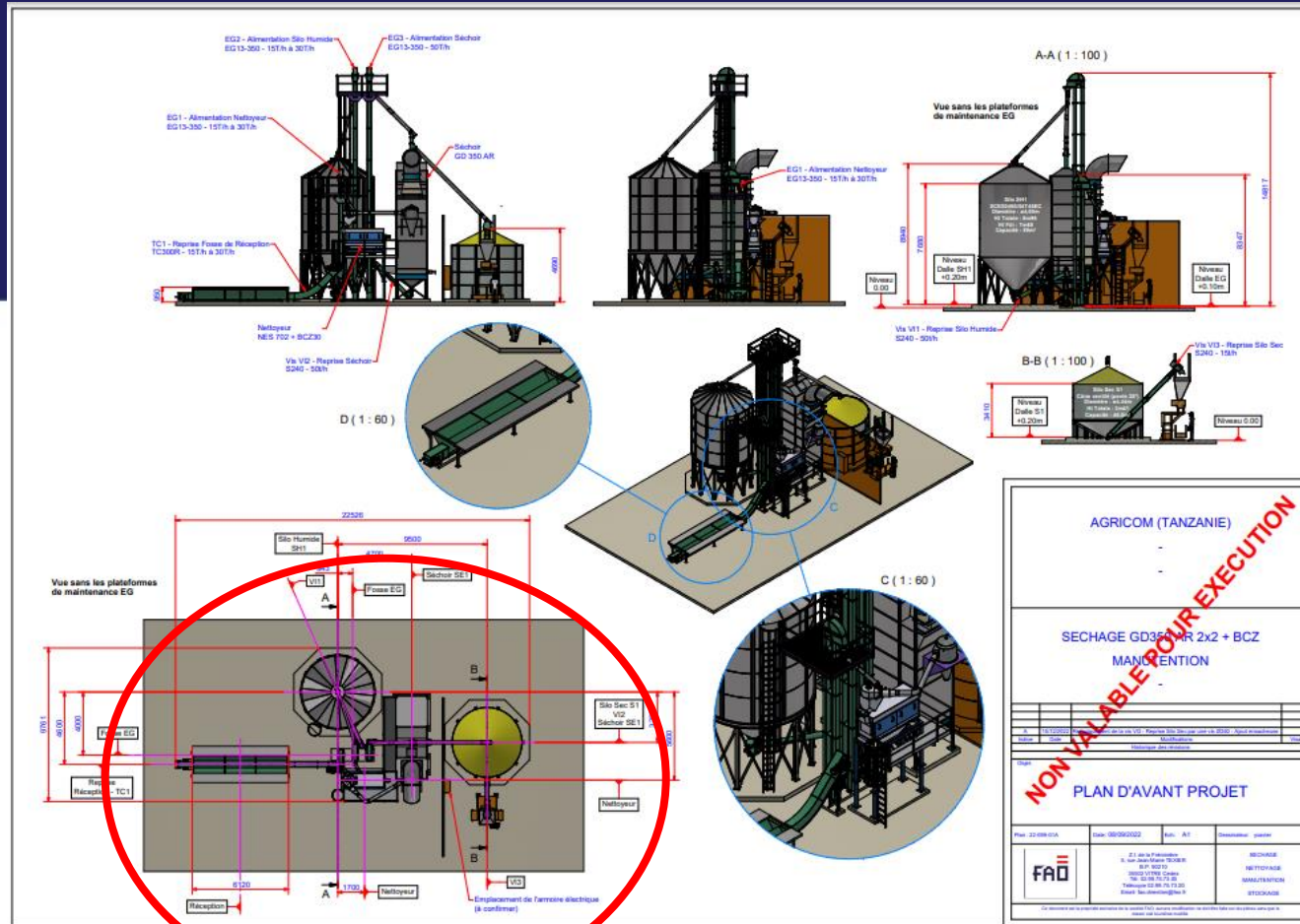


Turnkey process line





Turnkey process line



AGRICOM (TANZANIE)

SECHAGE GD350 AR 2x2 + BCZ
MANUTENTION

NON VALABLE POUR EXECUTION

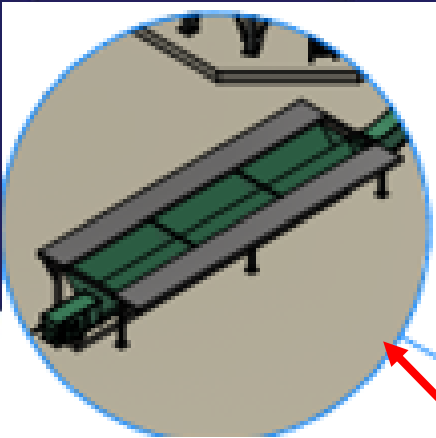
PLAN D'AVANT PROJET

Projet: 23/09/2024	Date: 08/09/2023	Rev: A/1	Document: plan
FAO	E. J. de la Vallée A. de la Vallée S. de la Vallée M. de la Vallée T. de la Vallée R. de la Vallée	SECHAGE NETTOYAGE MANUTENTION STOCKAGE	

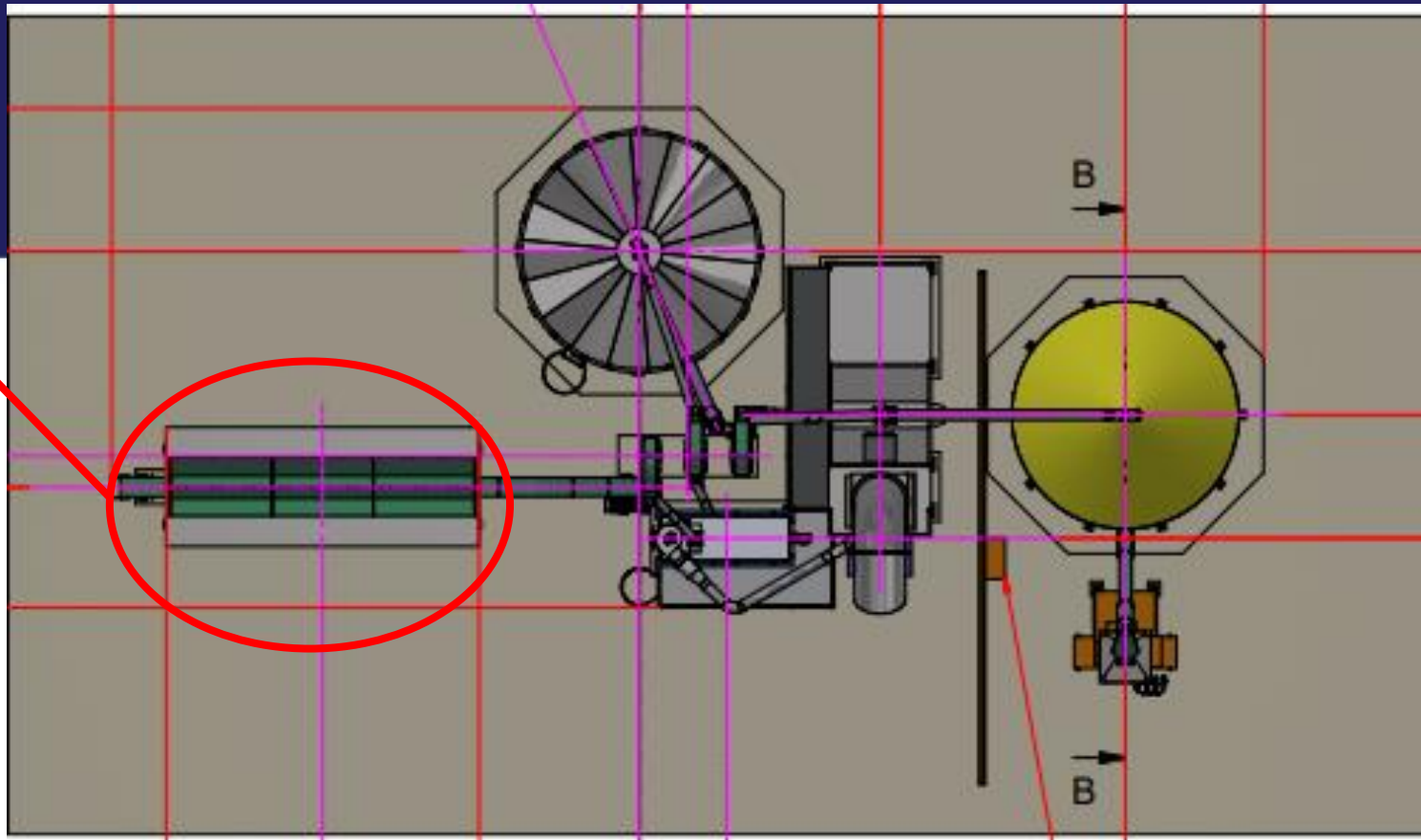




Turnkey process line

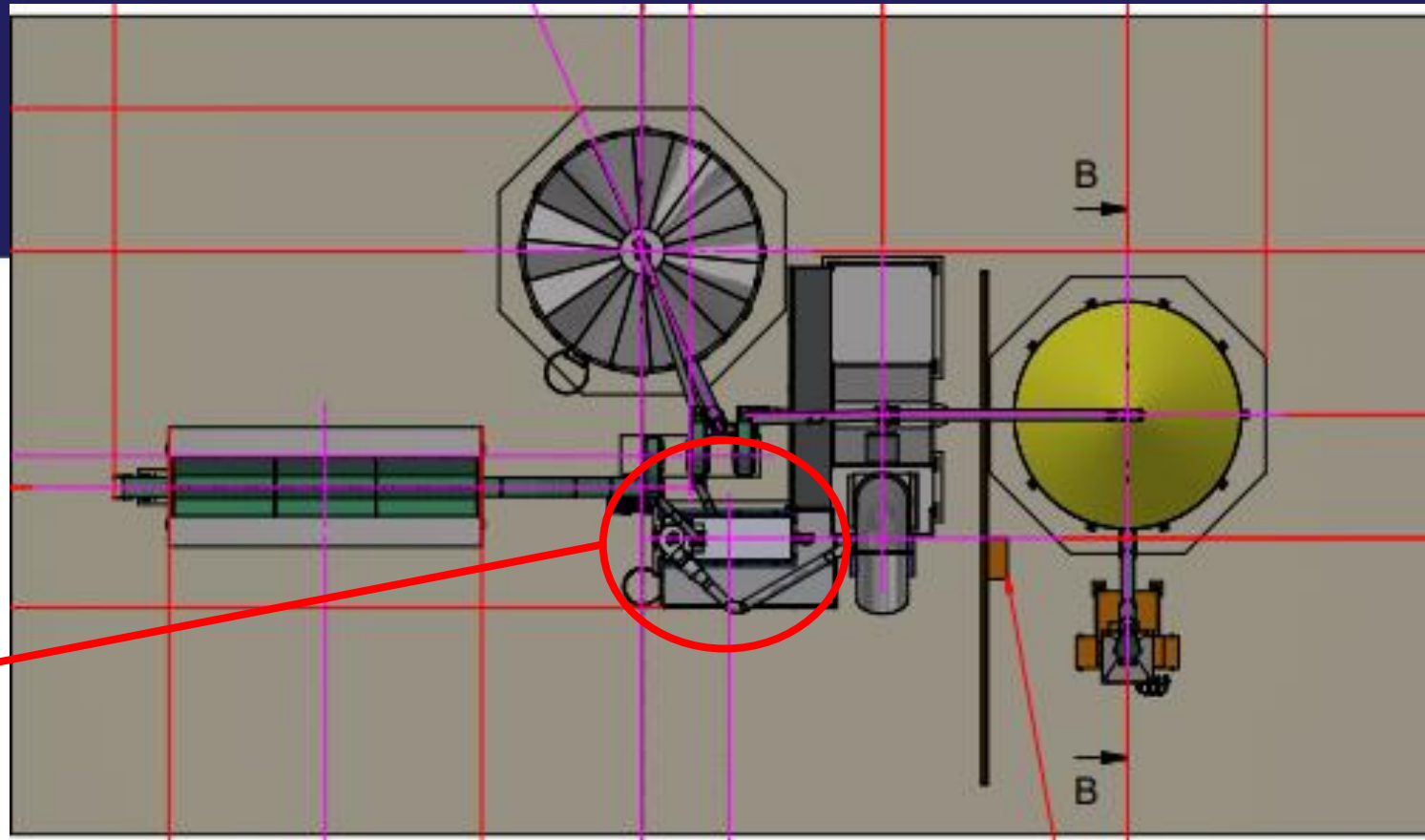


Grain unloading

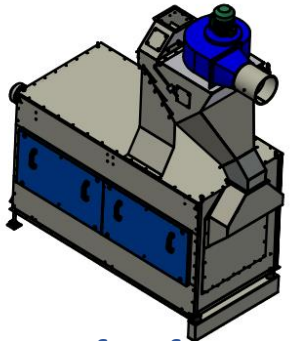




Turnkey process line



Grain pre-cleaning



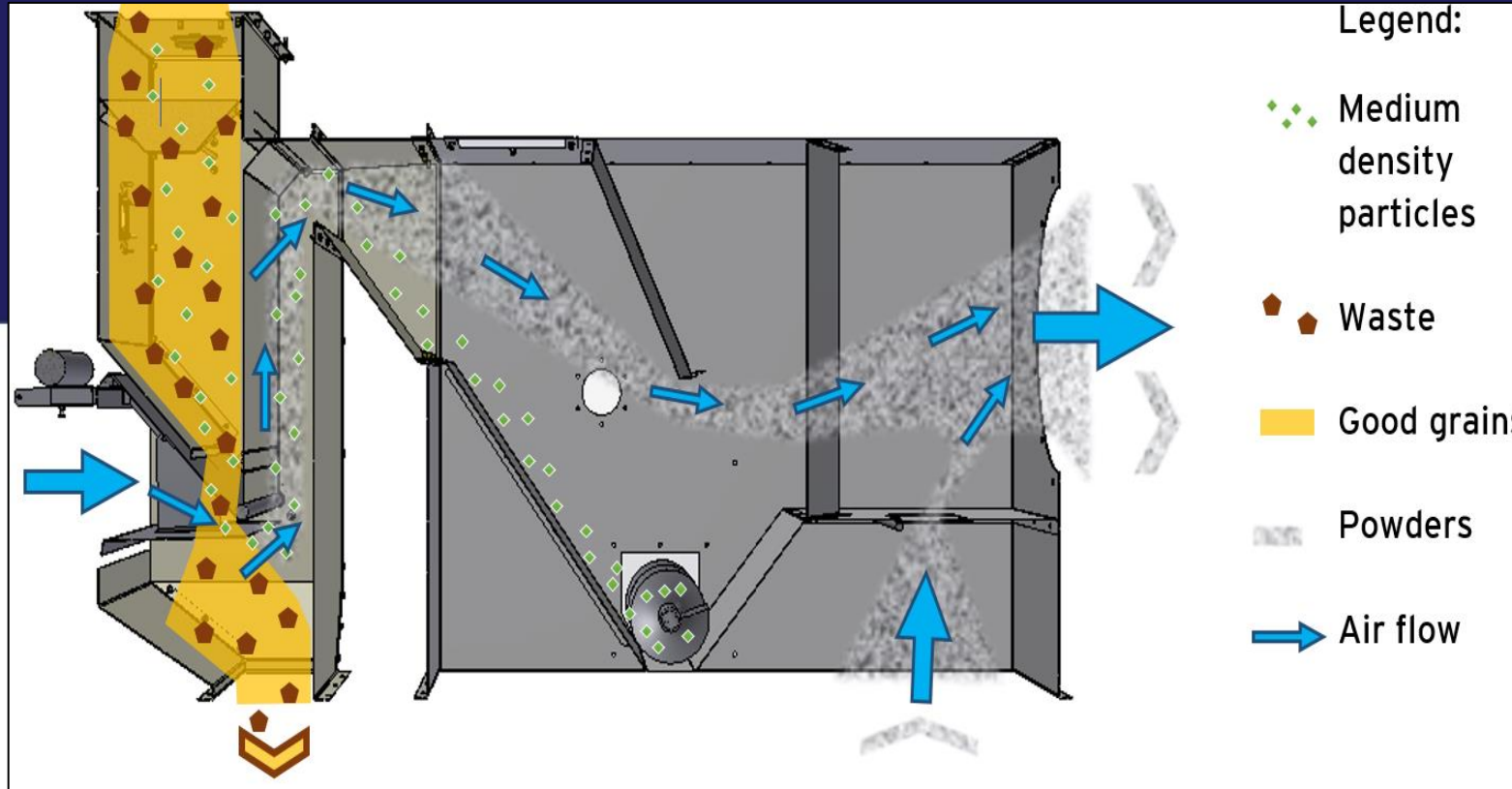


Purifier





Aspirator

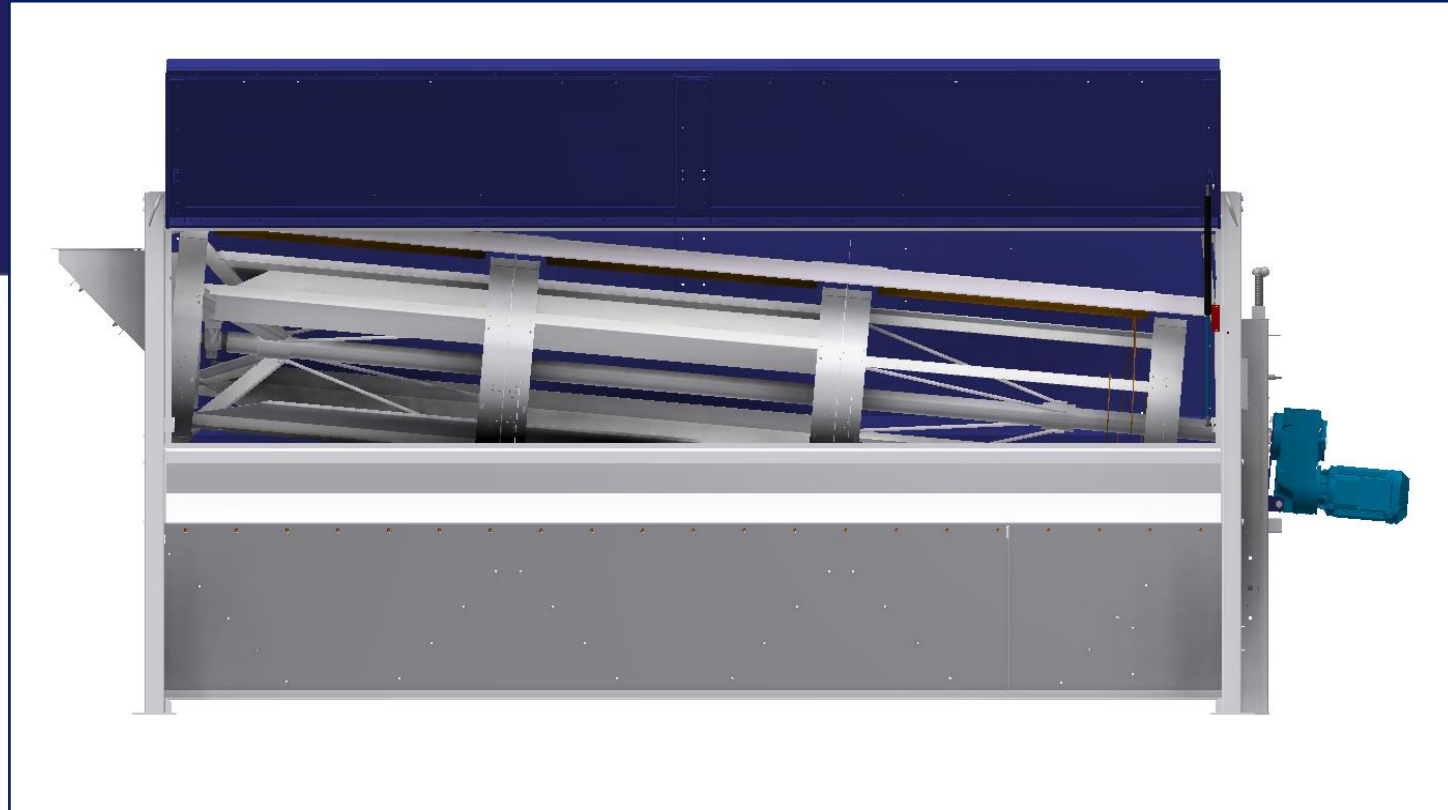


Operating principle



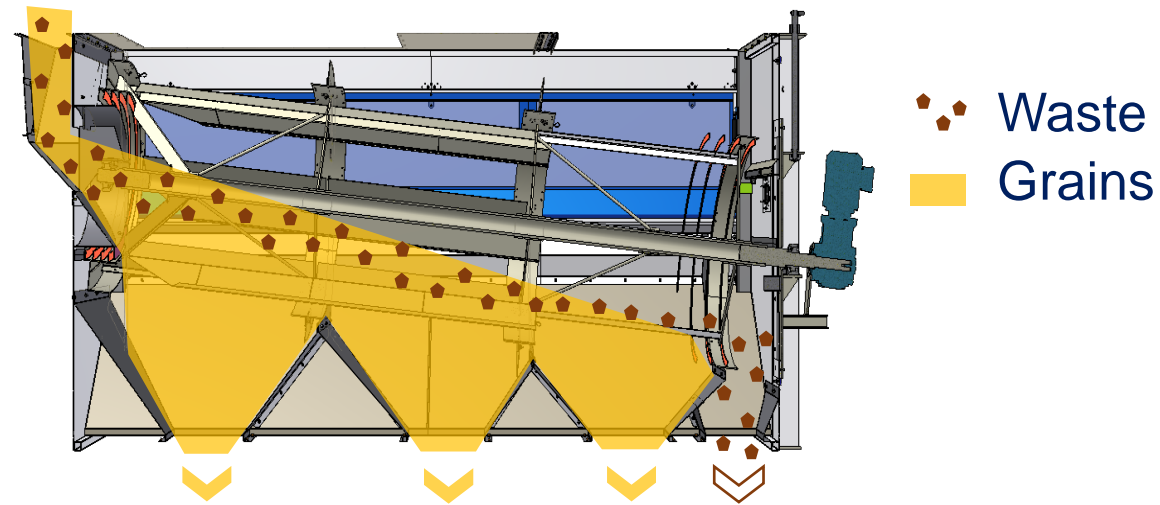


Rotary drum cleaner





Pre-cleaner



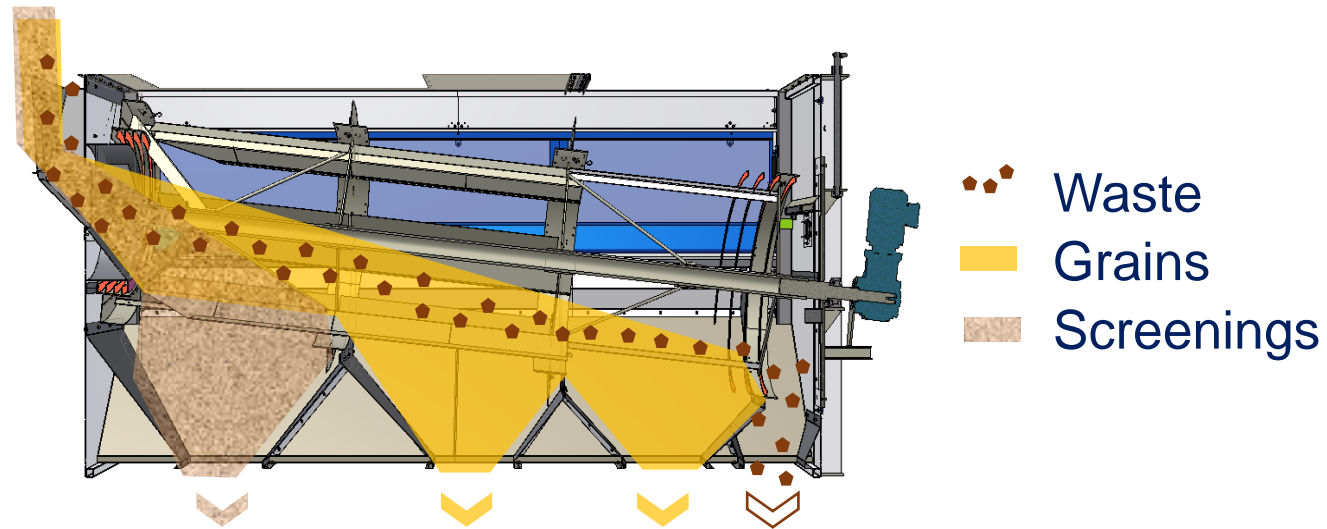
Purpose:
Elimination of large waste

Use:
Before grain drying
Ideal to avoid heavy fouling of the dryer





Cleaner



Purpose :

Elimination of fine elements (screenings and broken grain)
Elimination of large waste

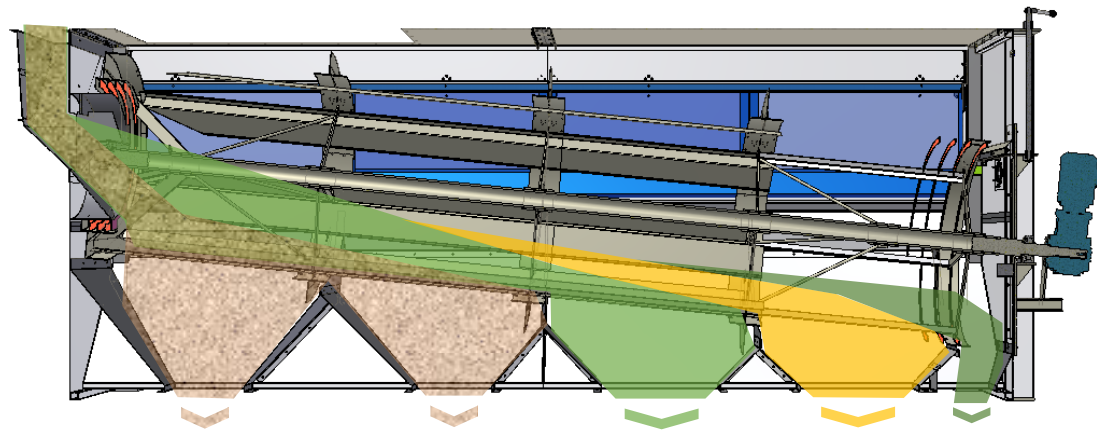
Use :

After grain drying
Before shipping





Calibrator



- Grains grade 3
- Grains grade 2
- Screenings

Purpose:

Elimination of fine elements (screenings and broken grain)
Sorting different types of grains

Use:

After grain drying
On pre-cleaned products
Grading grain on demand
Separate grain mixtures for organic applications
Suitable for malt barley and force-feeding corn

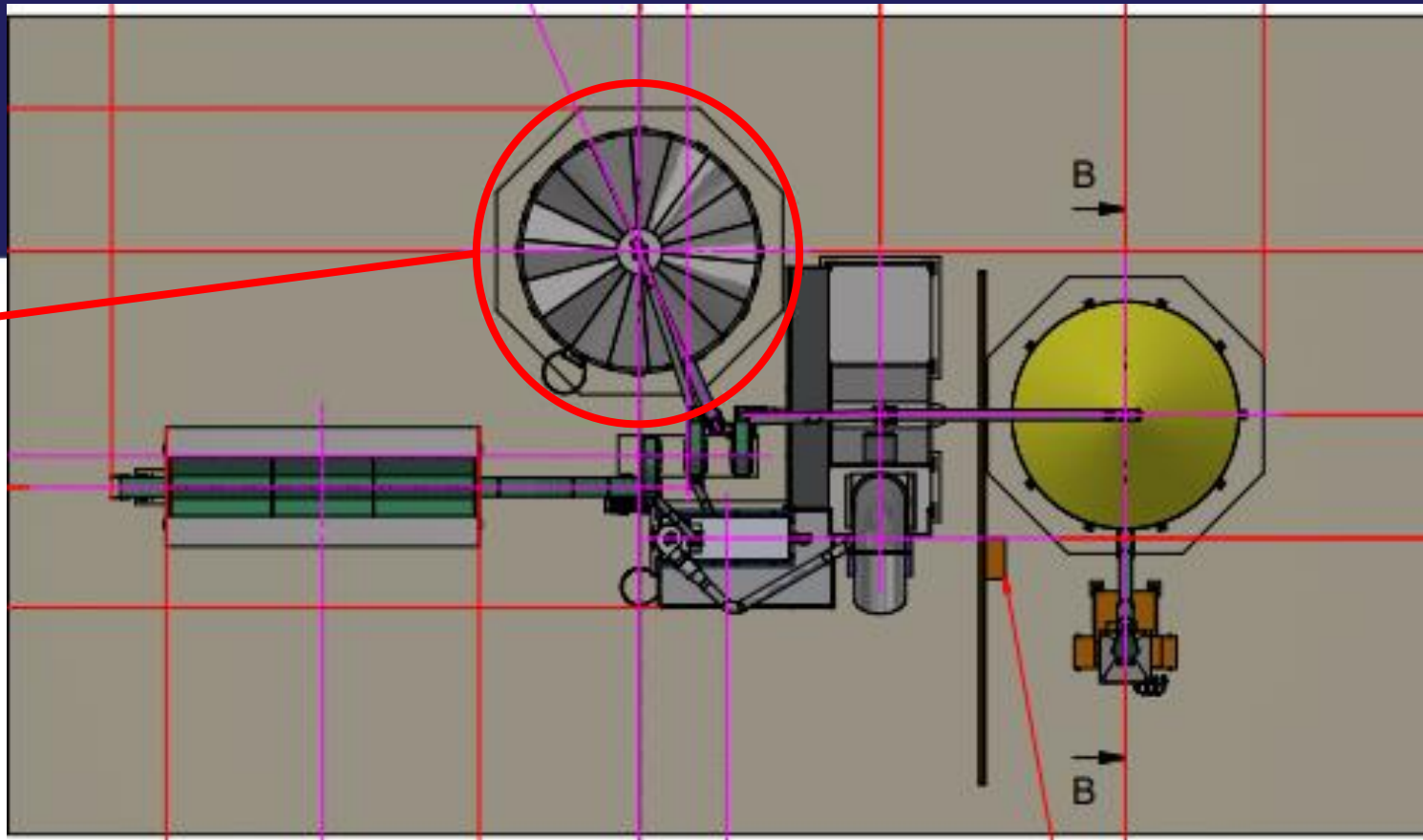




Turnkey process line



Buffer silo

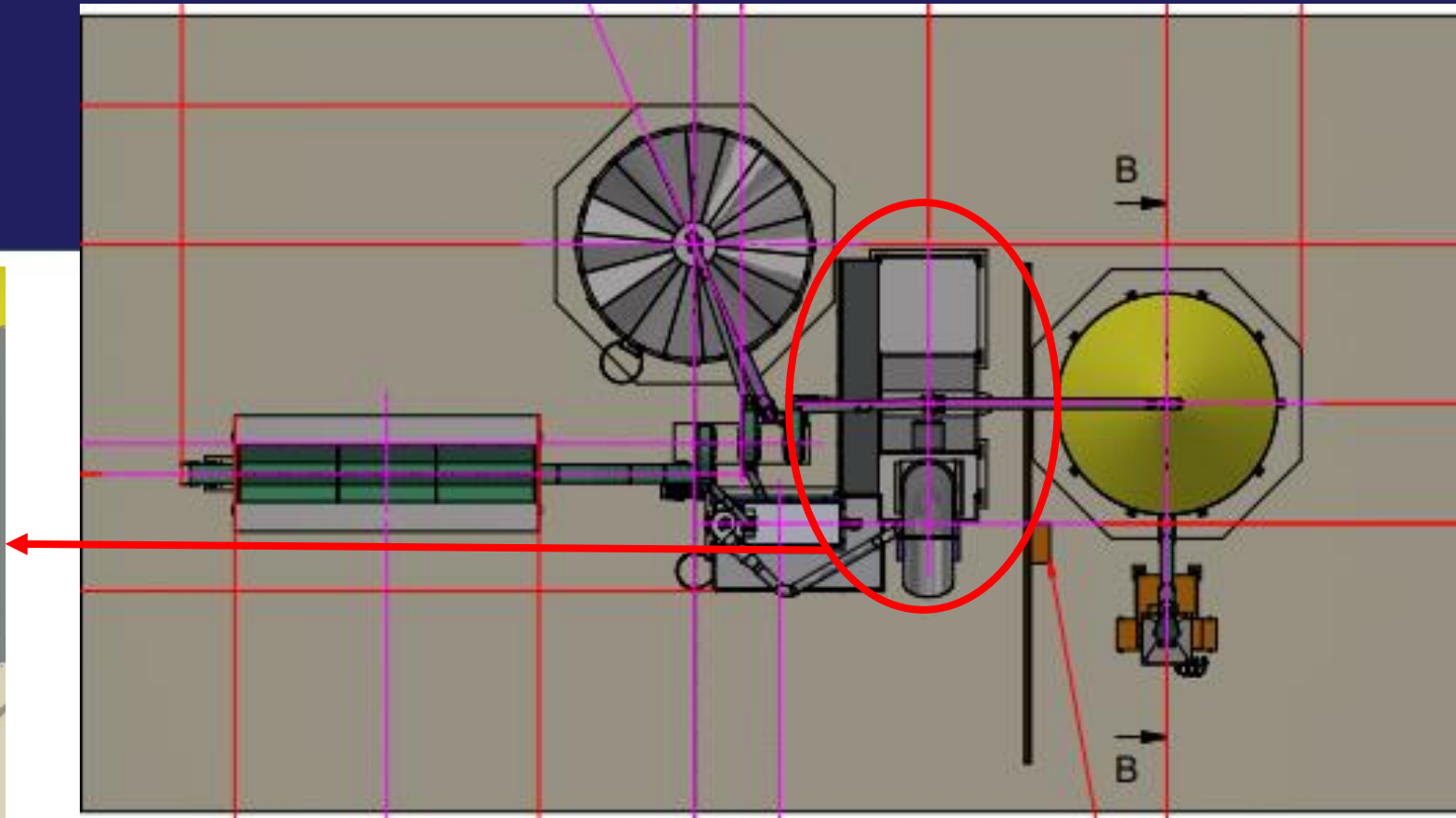
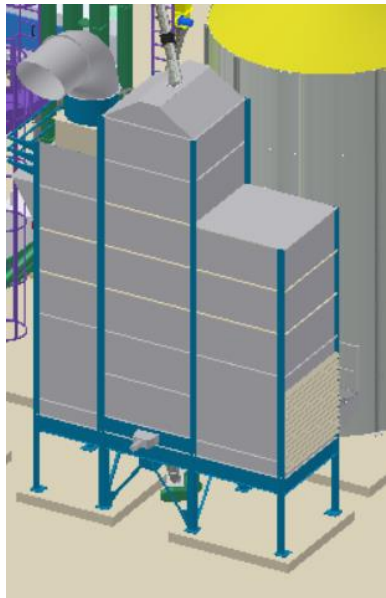




Turnkey process line



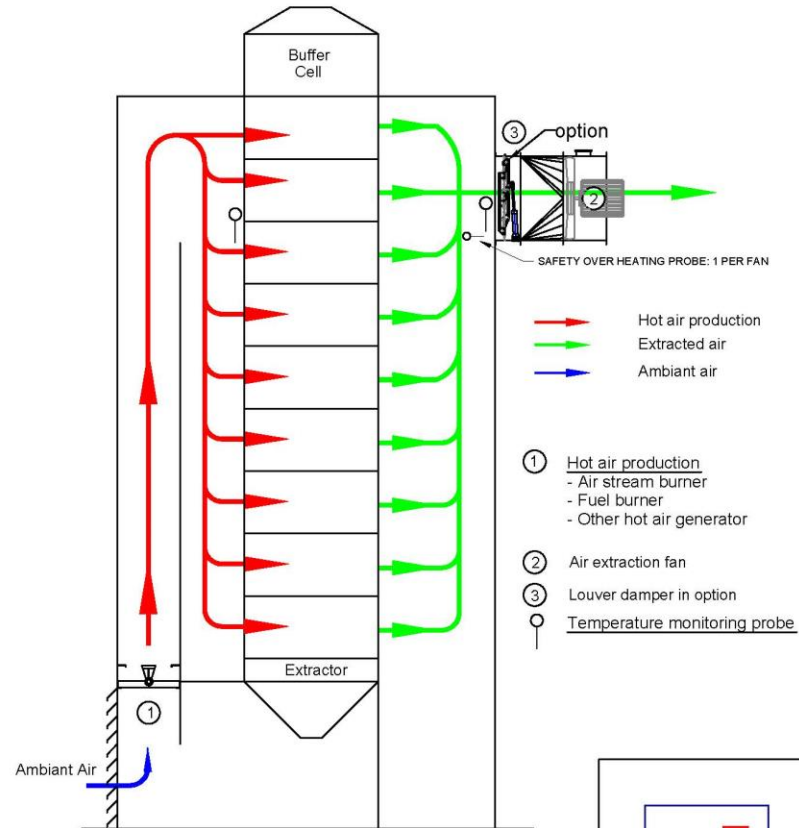
Grain dryer





RECIRCULATION GRAIN DRYER RANGE : AR

Flow sheet

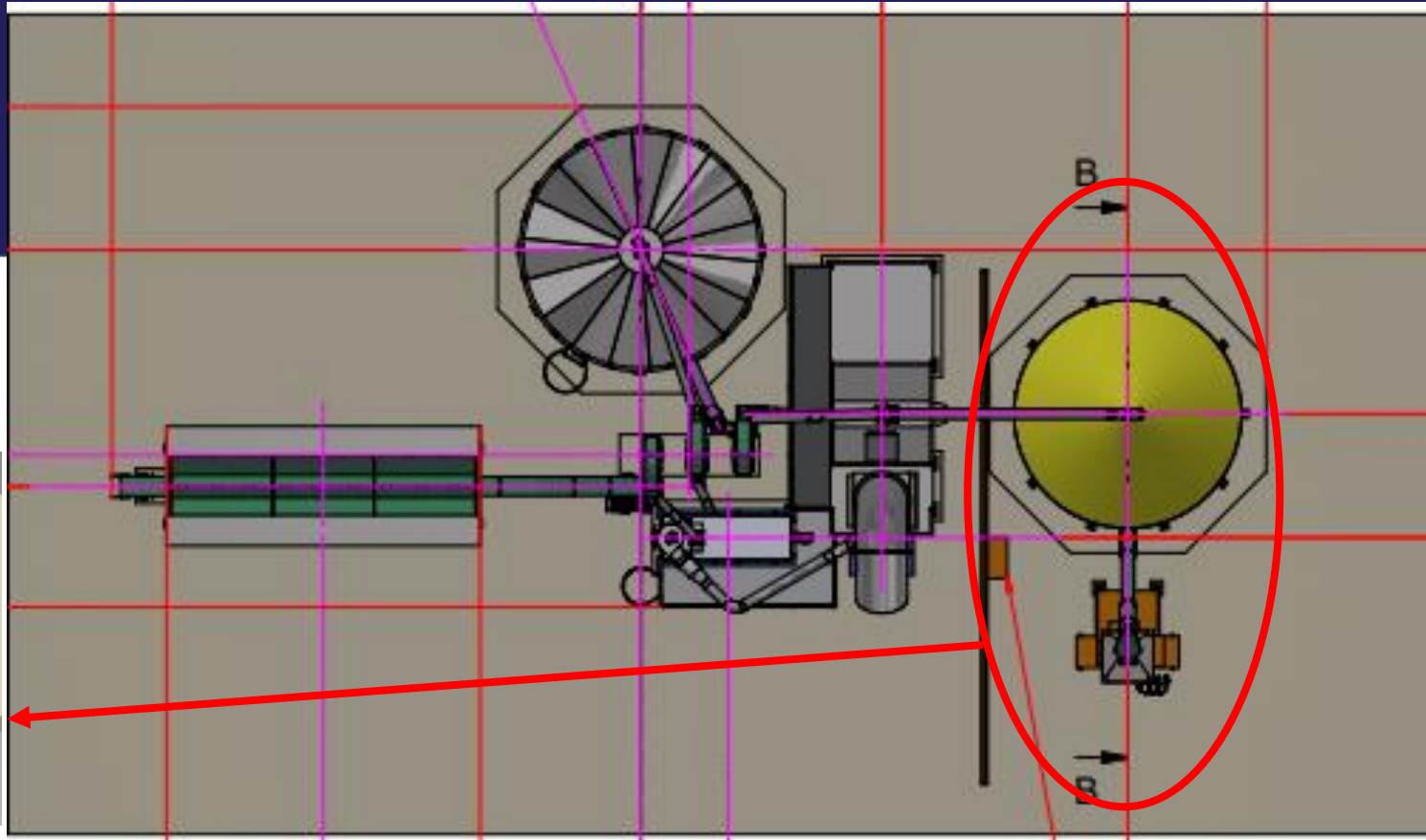




Turnkey process line



Dry storage area
Bagging station
Shipping deck





Turnkey process line



3D





Turnkey process line



Thank you

