



GRAIN TECH LTD

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OFFERS TOTAL CAPABILITY IN
EQUIPMENT SYSTEMS & PROCESSORS FOR
Particle Size Reduction, Milling, Crushing, Sifting,
Classifying, Mixing, Pelleting, Agglomeration,
Extruding, Bulk Material Handling, Drying,
Cooling, Conveying & Packaging

DATA-TECH

UNIVERSAL GRAIN & SEED HULLING AND PROCESSING SYSTEMS

1. These Grain Tech universal systems are based on a modular processing arrangement which enables adaptation to meet the varying types of grain and seed hulling and processing requirements.

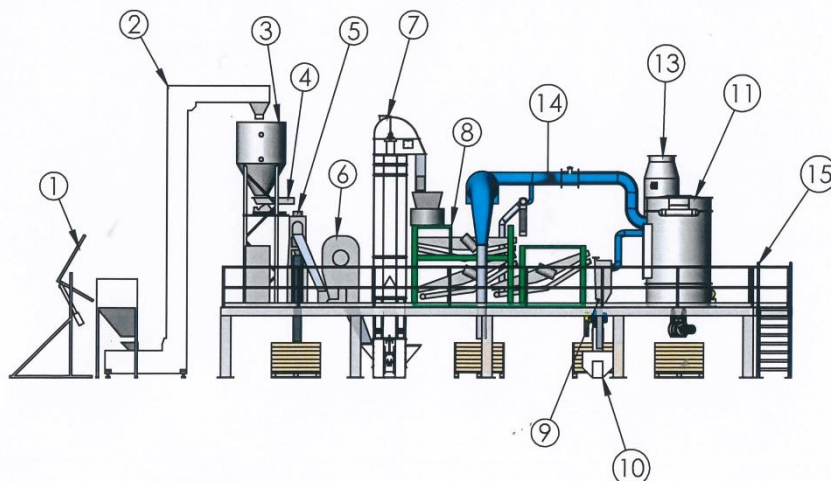
For each application the process follows three stages:

- Intake and pre-cleaning including size grading
- Hulling and classification including vibro screen separation
- Aspiration and hull collection system.

2. The types of grain and seed varieties which are readily handled on this equipment include:

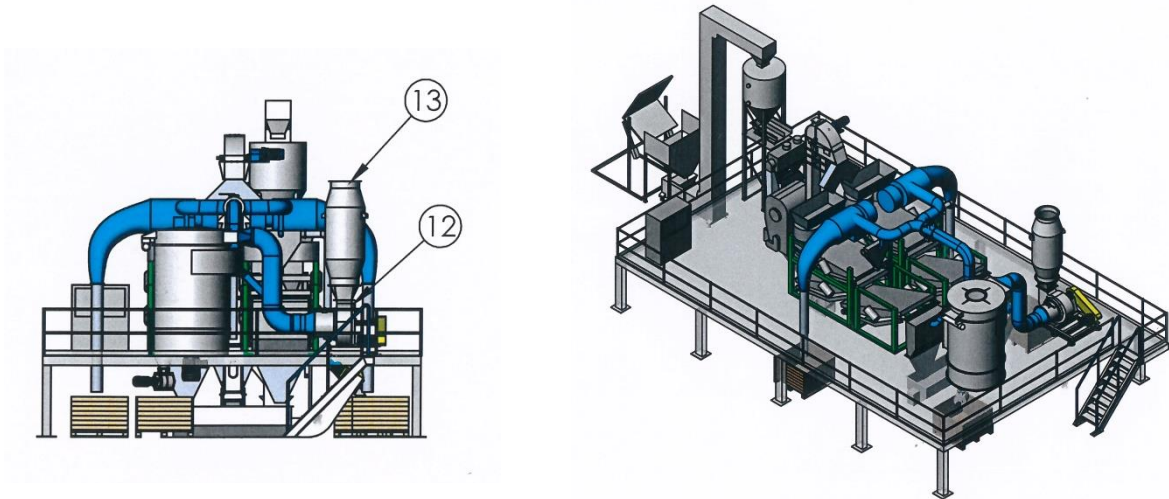
- | | |
|------------------|-------------|
| ○ Hemp Seed | ○ Soybean |
| ○ Sunflower Seed | ○ Buckwheat |
| ○ Pumpkin Seed | ○ Oats |
| ○ Sesame Seed | ○ Sorghum |
| ○ Rapeseed | ○ Quinoa |
| ○ Cotton Seed | |

3. The typical installation design for an integrated hulling and processing arrangement is shown here:

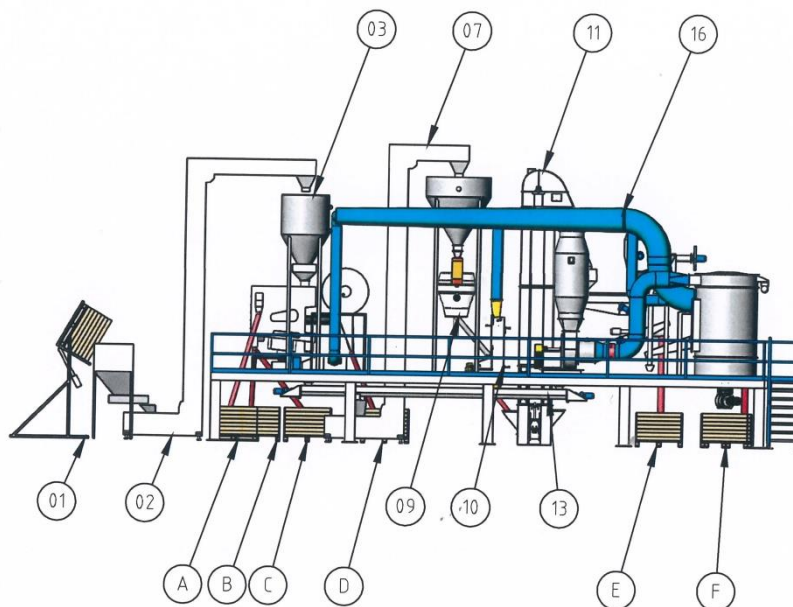


Equipment List:

1. Box Tipping Station
2. "Z" Type Bucket Elevator
3. Balance Supply Bin
4. Vibratory Feeder
5. Brush Machine
6. Recycle Aspirator
7. Transfer Bucket Elevator
8. Grading/Classifying Unit
9. Air Leg Separator
10. Transfer Belt Conveyor
11. Filter Collector Dust Receiving System
12. Exhaust Fan
13. Exhaust Fan Silencer
14. Set of Exhaust Ducting
15. Mezzanine Support Structure
16. MCC

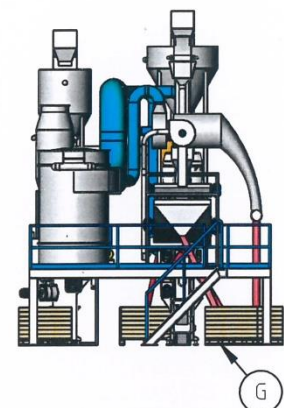
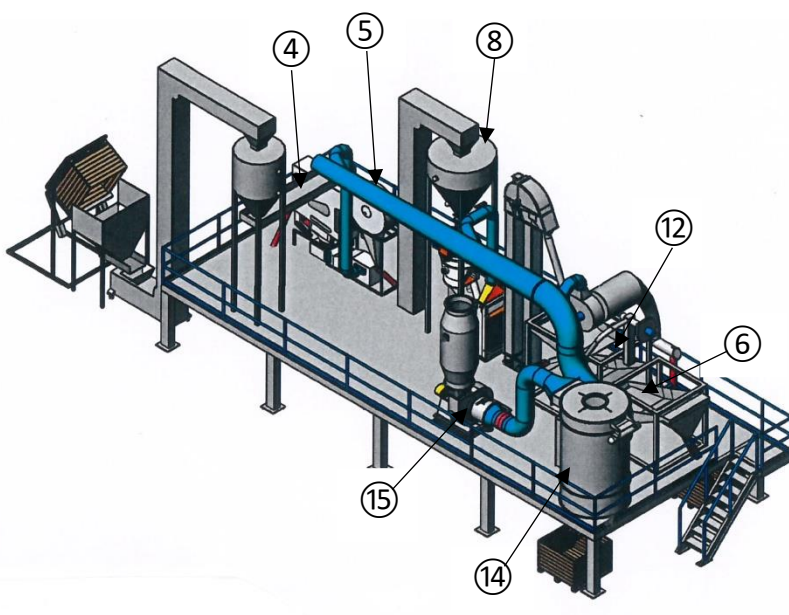


Typical hemp seed hulling and processing installation arrangement

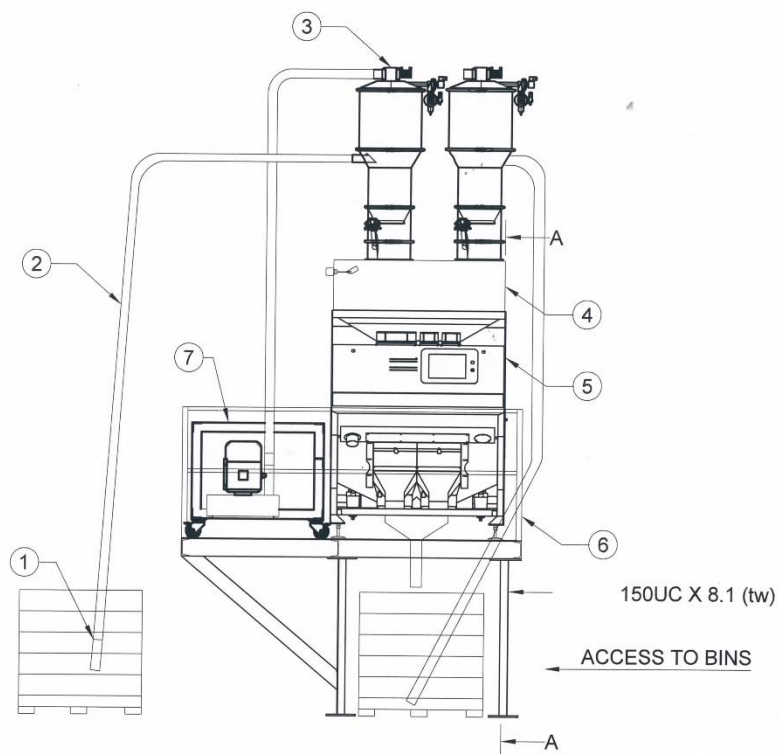


Equipment List:

- A. Coarse Screenings
- B. Stones
- C. Fine Screenings
- D. Light Screenings
- E. Hulls
- F. Hearts
- G. Hulls/Dust
- 1. Box Tipping Station
- 2. "Z" Pattern Bucket Elevator
- 3. Balance Hopper c/w H/L + L/L Sensor
- 4. Vibro Feeder
- 5. Combi-cleaner c/w Recycle Aspirator
- 6. Screw Conveyor
- 7. "Z" Pattern Bucket Elevator
- 8. Balance Hopper c/w H/L + L/L Sensor
- 9. Impact Huller
- 10. Air Leg Aspirator
- 11. Bucket Elevator
- 12. Grading/Classifying
- 13. Screw Conveyor
- 14. Dust Collector
- 15. Exhaust Fan c/w Inlet Valve + Silencer
- 16. Ducting
- 17. MCC

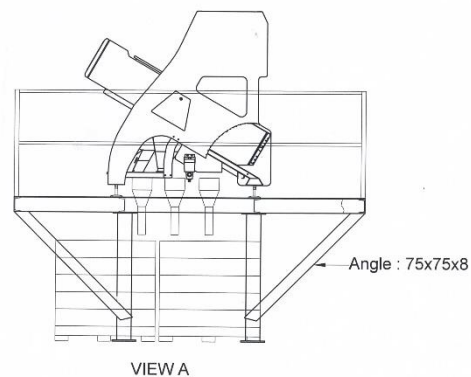


Typical integrated oat and buck wheat grain preparation, grading, hulling and classification installation arrangement



Equipment List:

1. Suction Wand
2. Flexible Piping
3. Vacuum Receiving Unit c/w Discharge Flap Valve
4. Discharge Hopper c/w High Level Sensor
5. Colour Sorter
6. Support Stand
7. Vacuum Pump

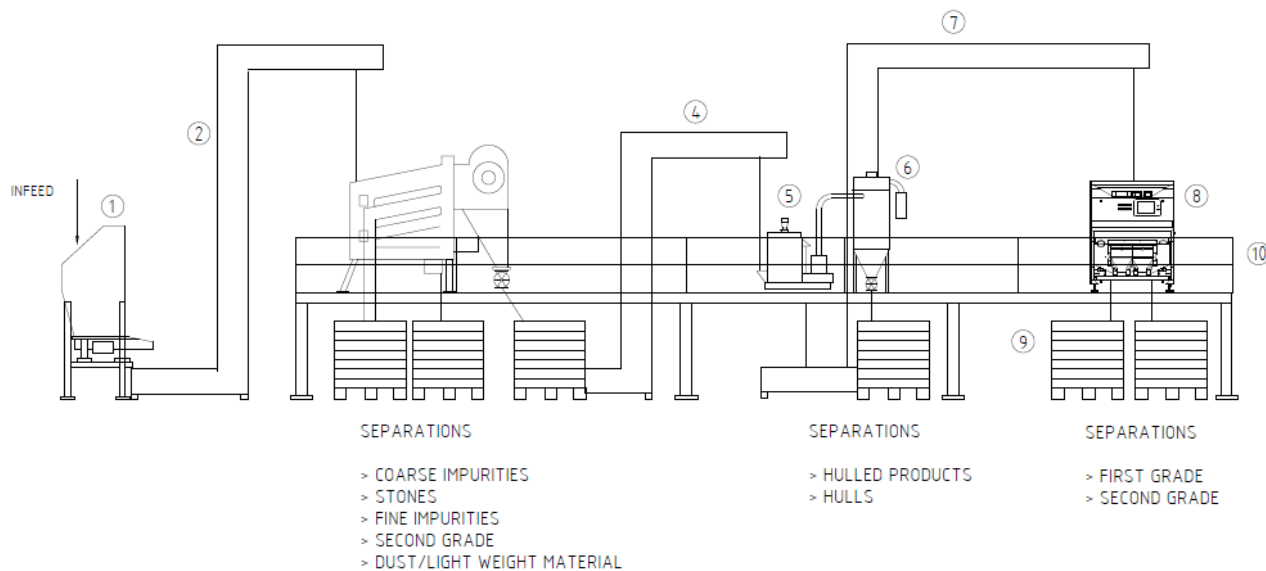


For optimum finished product quality and colour, the preference is to run the line over a colour sorter where precise separations are achieved

Typical Quinoa cleaning & grading arrangement installation

ITEM KEY

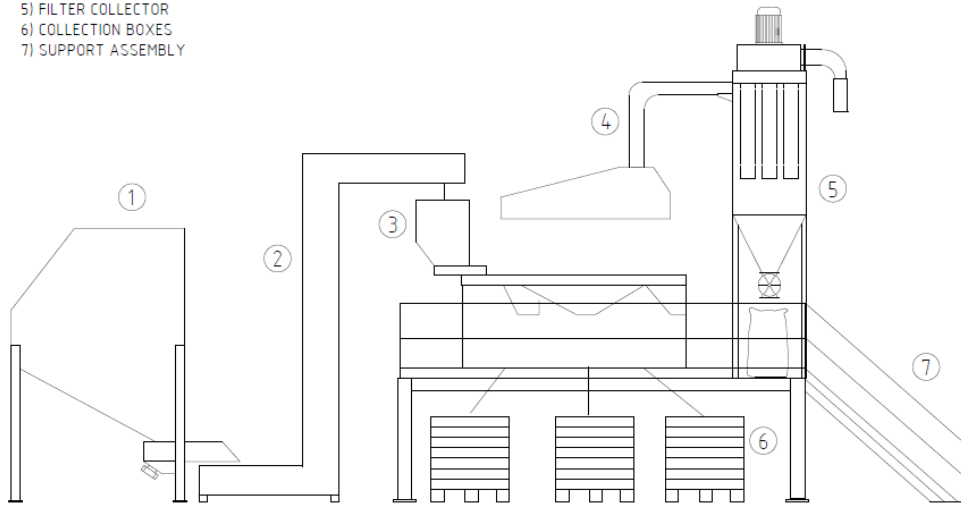
- | | |
|---|--|
| 1) RECEIVING TIP HOPPER
C/W VIBRATING FEEDER | 6) FILTER COLLECTOR
C/W EXHAUST FAN |
| 2) "Z" TYPE BUCKET ELEVATOR | 7) "Z" TYPE BUCKET ELEVATOR |
| 3) COMBI-CLEANER | 8) COLOUR SORTER |
| 4) "Z" TYPE BUCKET ELEVATOR | 9) COLLECTOR BOXES |
| 5) HULLER/ABRADER | 10) STRUCTURAL SUPPORT STAND |



Typical Gravity Separator installation arrangement

ITEM KEY

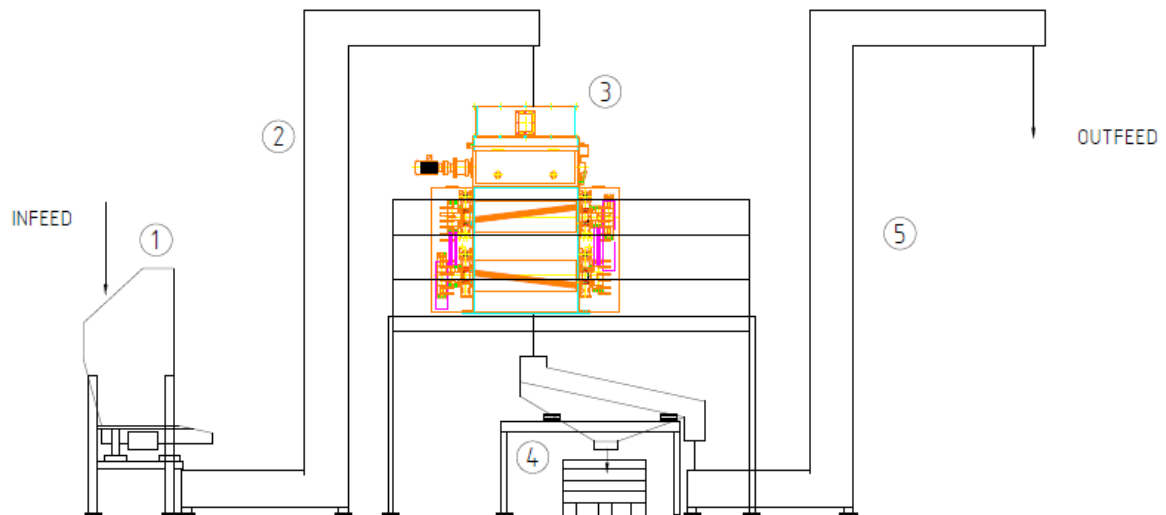
- 1) RECEIVING TIP HOPPER
- 2) "Z"TYPE BUCKET ELEVATOR
- 3) GRAVITY SEPARATOR
- 4) EXHAUST HOOD
- 5) FILTER COLLECTOR
- 6) COLLECTION BOXES
- 7) SUPPORT ASSEMBLY



SEPARATIONS

- > HEAVY GRADE
- > MEDIUM GRADE
- > LIGHT GRADE
- > DUST MATERIAL

Typical Quinoa Flaking & Screening arrangement



ITEM KEY

- 1) INTAKE HOPPER
C/W VIBRATING FEEDER
- 2) "Z"TYPE BUCKET ELEVATOR
- 3) FLAKING ROLLERMILL
- 4) SCREENER
- 5) "Z"TYPE BUCKET ELEVATOR

QUINOA FLAKING & SCREENING ARRANGEMENT

4. Equipment items incorporated within these processes include:



Combi Cleaner



"Z" Type Bucket Elevator



Brush Machine



Air Recycle Aspirator



Bucket Elevator



Huller



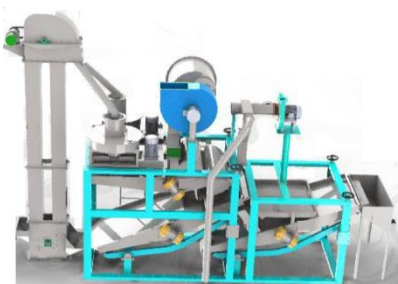
Pre-cleaner



Filter Collector



Colour Sorter



Grader / Classifier



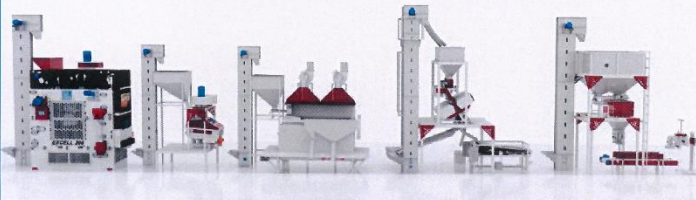
Packer



MCC

ALTERNATIVE FUTURE CROPS

PROCESSING EQUIPMENT & INSTALLATIONS



Grain Tech has more than 33 years' experience and expertise in providing processes for cleaning, grading, sorting, hulling, preparing and handling seeds, grains, spices, pulses, oil seeds, fruits and vegetables.

For complete details of how Grain Tech can help in processing your future crop, visit www.graintech.co.nz | call 09 263 6926 | email admin@graintech.co.nz