



**THE FOOD
WASTE EXPERTS**



B1400 ROCKET COMPOSTER

THE B1400 HAS BEEN DESIGNED FOR THE GREATEST THROUGHPUT IN THE SMALLEST FOOTPRINT. A UNIQUE PATENTED “W” SHAPE HULL DESIGN WITH TWIN AGITATORS CREATES LESS COMPRESSION OF MATERIALS, BETTER AIR FLOW AND MORE MIXING. THE B1400 IS AN IDEAL SYSTEM FOR FOOD & GREEN WASTE COMPOSTING FOR SMALL SCALE MUNICIPALS

The B1400 Rocket, is a continual flow composting system and is capable of continuously processing a maximum of 2.2 cubic meters of material per day. An intuitive custom control system fully automates the process, continually monitoring parameters the PLC system will automatically feed from an attached bulk hopper to the composter and control the discharge of the finished compost, minimising operator interaction.

The B1400 has some unique design features, especially important the twin agitator shafts are wholly supported externally, so there's no obstructions to the internal material flow, or needs for maintenance requirements for internally mounted bearings.

Available as a stand alone portable organic waste solution, the B1400 can be specified with bio filtration, pre shredder & automated bulk feed hopper and can also be grouped as 2-3 units fed and controlled by the same PLC and feed hopper unit.

The B1400 Rocket Composters are suitable for the on-site processing of:

- Food wastes including: Cooked / Uncooked Meat, Fish, Fruit & Vegetables
- Effluent Sludges
- Green Wastes / Garden waste / landscaping
- Animal Waste (including some types of bedding)





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B1400 ROCKET COMPOSTER

TECHNICAL SPECIFICATION

MAIN VESSEL DETAILS:

| | | |
|----------------------------|--------|---|
| Size: | Length | 8.67m |
| | Width | 2.9m max |
| | Height | 2.62m (Excluding any loading conveyor) |
| Weight | | 7000kg (empty) 18,000kg (nominal full) |
| Vessel Shell Construction: | | 304SS—8mm thick wall “W” Shaped hull construction |
| Vessel Inspection Hatches: | | Qty x 2 units 600 x 600mm mounted on vessel roof centreline |
| Vessel Frame: | | V2 Galvanised heavy duty steel support frame with option for load cell fitment (not exceeding 2.9m transport width) |

| | |
|---------------------|--|
| PRE HEATERS: | Qty x 4 units of 2.0kw heater elements, each equipped with dual RTD Heat sensors |
|---------------------|--|

TEMPERATURE MONITORING:

6x 80mm Insertion type RTD sensors mounted in centreline,
1 x ambient air temperature and 1 x exhaust air temperature

INSULATION:

Insulation to a thickness of 50mm
to the main vessel shell and roof and including the front and rear bulkheads. Cladding: 1.2mm steel cladding with a leather grained finish

PERFORMANCE

| | |
|----------------|---|
| Throughput | 2275 litres per day (Determined by feed materials, loading frequency and operating conditions. Contact Tidy Planet for detailed advice) |
| Residence time | Approx 8 days |

MIXING SHAFTS / AGITATORS:

2 x shaft diameter of 220mm OD
10mm wall thickness 304SS

SHAFT DRIVE MOTOR / BEARINGS AND SEALS:

| | |
|----------|---|
| Drive: | 2.2 kw drive (x2) 1450rpm |
| Gearbox: | Planetary Inline Type EQ 4150 1 rpm nominal O/P speed, Torque 16,000Nm |

PROCESS AIR EXHAUST:

| | |
|--------------------|--|
| Extraction Points: | 3 x 110mm diameter points mounted on vessel roof centreline |
| Fan: | Poly Prop Centrifugal fan with external motor. (MB 14/5M2 – 0.25Kw) |
| Fan Performance: | 300 m ³ /hr at a total pressure head of 575 Pa |

AIR INJECTION:

| | |
|---------------------|--|
| Injection points: | 8 points supplied, easy removed pipework includes connection for compressed air to aid cleaning of nozzles |
| Blower performance: | 1.5kw side channel blower providing up to 400mb at max 38m ³ per hour. Equipped with pressure relief valve. |



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TECHNICAL SPECIFICATION

INTEGRATED COMPOST DISCHARGE

| | |
|---------------|---|
| Screw Dia: | 400 mm |
| Screw Length: | 2000mm |
| Construction: | 304ss trough & hardened mild steel spiral with UHMWPE Liner |

(OPTIONAL) COMPOST STOCKPILE CONVEYOR

| | |
|---------------|--|
| Length: | 6000 mm |
| Width | 450mm |
| Construction: | Heavy duty galvanised steel body, with chevron belt, support frame to allow the belt to incline to 30Degrees and stockpile the finished compost away from the vessel |

CONTROL SYSTEM:

| | |
|-----------------|--|
| Cabinet: | IP55 Floor standing cabinet, constructed from mild steel, painted, 1600 x 1200 x 400 with plinth. Equipped with cabinet mounted Estop & lockable isolator, USB Port for software upgrades and data downloads |
|-----------------|--|

| | |
|--------------------|--|
| HMI System: | Beijer Technologies X2, with a 10 inch full colour display. IP Rated touch screen interface: Displays & Capabilities: <ul style="list-style-type: none">• Current machine operating status• Vessel temperatures, motor load currents, current weight• Records and stores trends for temperatures, motor currents, weights*, alarm log and audit trail.• USB connector to down load data to flash drive mounted on Schneider cabinet• Programmable automatic transmittal of data by Email through connection to separate communication device |
|--------------------|--|





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ANCILLARY OPTIONS



BIN LOADER & LIDDED HOPPER

TIP CYCLE (SPEED) 50SEC~

TIP WEIGHT 100KG

BIN SIZE 120L



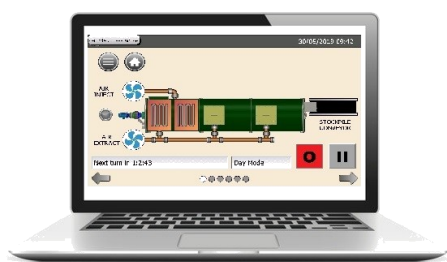
BIOMIXER FEED HOPPER WITH 6M CONVEYOR

CAPACITY 5000KG@0.5BD

POWER SUPPLY 415V 50HZ 3PHASE

CONFIGURATION VERTICAL

(MULTIPLE OPTIONS AVAILABLE)



GLOBAL REMOTE MONITORING PACKAGE

CONNECTION WIFI / ETHERNET / 4G

CLOUD DATA LOGGING 3YR

CLOUD NOTIFY PACKAGE 3YR



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ANCILLARY OPTIONS



INTEGRATED STOCKPILE CONVEYOR (SCREW)

| | |
|-------------------|-------------------|
| LENGTH | 6.0M |
| TIP HEIGHT | 2.5M~ |
| CAPACITY | 2TONNE /HR |
| PRICE | £POA |



COMPOST STOCKPILE CONVEYOR (BELT)

| | |
|-------------------|---------------|
| LENGTH | 6.0M |
| TIP HEIGHT | 2.0M~ |
| SPEED | 0.7M/S |

**(USED IN CONJUNCTION WITH EXISTING 1.1M
SCREW OUTFEED)**



BIOFILTER SYSTEM

| | |
|---------------------|---------------|
| CONSTRUCTION | 304SS~ |
| WEIGHT | 400KG |
| SIZE | 4800L |



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DIMENSIONS FOR ILLUSTRATION ONLY

