



DUST BALER

Dust Baler - ToronBale™ DB

Dust baler compacts fine collected dust into solid cylindrical briquettes, replacing the manual bagging that dust collector discharge normally requires. Torontech supplies the ToronBale™ DB in three configurations, all rated at 15 tons, producing briquettes of 90 mm or 140 mm diameter at 10 to 60 kg per hour. The unit sits directly under a bag-type dust collector and takes the fines as they drop. Machine weights are 1,200 kg and 1,300 kg.

Loose collected dust is difficult to move without losing some of it. Every transfer into a sack, drum, or skip puts fine particles back into the air, and the operator handling that transfer stands in the middle of it. Briquettes remove the problem at its source. A solid unit can be picked up, carried, and tipped without generating the cloud that loose fines produce.

The machine runs at a low, continuous rate rather than in large batches. A separate 1.5 kW feed motor draws material from the collector into the press. The 4 or 5.5 kW hydraulic unit then does the compaction. All three configurations share the same 2,700 by 1,400 mm footprint and stand only 1,100 mm tall.

APPLICATIONS

Dust Baler - ToronBale™ DB Applications

The ToronBale™ DB fits any operation whose dust collection system discharges fines that then have to be handled a second time.

- **Cement and Mineral Processing:** compacts baghouse fines from crushing, grinding, and screening circuits
- **Foundry and Casting Operations:** handles collected sand fines and furnace filter dust
- **Ceramics and Refractory Manufacturing:** briquettes body preparation and finishing dust for reuse or disposal
- **Quarrying and Aggregate Production:** compacts filter fines that would otherwise need sealed bagging

- **Glass Processing:** handles cullet and batch house dust collected at transfer points
- **Printing and Paper Converting:** compacts paper dust from trim extraction and cyclone systems
- **Powder Coating and Surface Finishing:** consolidates collected overspray powder for controlled disposal
- **Chemical and Pigment Handling:** briquettes filter fines where airborne loss carries a cost or a hazard
- **Metal Finishing and Grinding:** applicable only with the explosion-protected variant, since collected metal fines carry ignition risk



Standards

The supplier declares CE marking for this series. Torontech recommends requesting the signed Declaration of Conformity and the harmonized standards used before relying on that declaration for a specific installation. Note also that this model is not stated to include explosion protection. Wood, metal, plastic, grain, and many chemical dusts are combustible, and installations handling them are subject to specific requirements in most jurisdictions. Discuss the dust type with Torontech before ordering, since an explosion-protected configuration exists as a separate machine.

FEATURES

Dust Baler - ToronBale™ DB Key Features

The ToronBale™ DB is designed around one position in a plant, directly beneath a bag-type dust collector.

- **Briquette Output, 90 or 140 mm Diameter:** solid cylindrical form that handles and transports without shedding fines
- **Direct Collector Mounting Position:** takes dust as it discharges, removing the manual bagging step entirely
- **Separate 1.5 kW Feed Motor:** powered feeding moves material into the press independently of the compaction cycle
- **15 Ton Press Force:** applies the pressure needed to bring fine particles into contact and drive out interstitial air
- **Low 1,100 mm Overall Height:** fits beneath collector hoppers where headroom under the discharge is limited
- **Wide Voltage Range, 200 to 440 V:** accommodates supply variation across sites and regions without reconfiguration
- **Throughput Options from 10 to 60 kg/h:** three configurations match the discharge rate of different collector sizes
- **Taiwanese Hydraulic Cylinder:** sourced cylinder rather than an unspecified component of mixed origin
- **Schneider Motor:** recognized electrical equipment with spares available through established distribution
- **Japanese Valve Package:** sourced hydraulic valves supporting consistent cycle behavior at low throughput
- **Japanese Oil Pipe Joints:** fittings selected to hold hydraulic connections leak-free in a dust-laden environment

- **Compact 2,700 by 1,400 mm Footprint:** a single defined floor area for a machine that removes a recurring manual task

THEORY & METHOD

Theory and Method

Fine particles behave unlike anything else a press handles. Bulk dust is mostly interstitial air, and the material flows almost like a liquid, so it escapes containment through gaps that would hold coarse waste. Compaction works because reducing the spacing between particles brings enormous surface area into contact. At these particle sizes, short-range attractive forces between surfaces and simple mechanical interlocking are strong enough to hold a shape once the air has been driven out.

Moisture and any residual binder in the collected material change the result considerably. Slightly damp mineral fines bind readily, while bone-dry material of the same composition may crumble under handling. Buyers evaluating this machine on a specific dust should expect trials rather than assume briquette quality from the specification sheet. The source material governs the outcome more than the press does.

The output form matters as much as the compaction. A 90 or 140 mm cylinder has a small external surface relative to its mass and no loose faces to shed material, so it survives handling and secondary transport without re-suspending. That is the actual problem this machine solves. Throughput stays modest at 10 to 60 kg per hour, which suits a collector discharge rate rather than a bulk processing line.

TECHNICAL SPECIFICATIONS

Dust Baler - ToronBale™ DB Technical Specifications

Parameter	ToronBale™ DB-10	ToronBale™ DB-15	ToronBale™ DB-60
Press Force	15 tons (approx. 147 kN)	15 tons (approx. 147 kN)	15 tons (approx. 147 kN)
Briquette Diameter	90 mm	90 mm	140 mm
Feed Opening Size	1,200 mm	1,200 mm	1,200 mm
Baling Chamber	1,200 mm diameter	1,200 mm diameter	1,200 mm diameter
Output per Hour	10 kg/h	15 kg/h	60 kg/h
Voltage	200 to 440 V (110V is also available)	200 to 440 V (110V is also available)	200 to 440 V (110V is also available)
Main Motor Power	4 kW	4 kW	5.5 kW
Feeding Motor Power	1.5 kW	1.5 kW	1.5 kW
Machine Weight	1,200 kg	1,200 kg	1,300 kg
Overall Dimensions (L × W × H)	2,700 × 1,400 × 1,100 mm	2,700 × 1,400 × 1,100 mm	2,700 × 1,400 × 1,100 mm
Materials Handled	Collected dust and fines from bag-type dust collectors	Collected dust and fines from bag-type dust collectors	Collected dust and fines from bag-type dust collectors



Torontech Inc.

251 Consumers Road, Suite 1200
Toronto, Ontario, M2J 4R3, Canada 

Phone: +1 416 368 2721 | Fax: +1 416 981 7652
Email: info@torontech.com

Torontech, LLC

601 Brickell Key Drive, Suite 700
Miami, FL 33131, USA 

Toll-Free: 1-866-383-7919
Email: sales@torontech.com

Torontech ME FZE

Meydan Grandstand, 6th Floor,
Meydan Road, Nad Al Sheba,
Dubai-261440, UAE 

Phone: +971 488 19252
Email: me@torontech.com

