MOBILE CONVEYING SERVICES PTY LTD

we do what we say

EQUIPMENT SERIES

TELEBELT

Most Telebelts in Australia are mounted on trucks. The fast mobilisation and demobilisation suits short-term projects, but these have also been used on medium-term projects where their mobility around a site allows them to place multiple materials in multiple locations.

Mobile Conveying Services has a trailer-mounted unit working on a major project with a tracked prime mover built in house. Difficulties in getting larger truck-mounted Telebelts registered for use in Australia could see further trailer-mounted units added to the fleet.

The largest mobileTelebelt has a 61-metre reach, and require a 5-axle all terrain crane carrier to move it around. Mobile Conveying Services has one of these machines. It suits projects requiring placement of high volumes at long reach.

WHAT IS A TELEBELT?

A Telebelt is a TELEscopic BELT conveyor mounted on a truck, carrier, trailer or tower. It is manufactured by Putzmeister, the leading concrete pump manufacturer in the world, using technology acquired from US pioneer Rotec.

It has independent slewing feed and discharge conveyors, providing great flexibility in the relative locations of the feed hopper and conveyor discharge.

Tower-mounted Telebelts have been used on RCC dam projects, but suit any large project where it is possible to place concrete and other bulk materials from a single location. Mobile Conveying Services has one of these units, and it will operate from a barge.

A | Hopper B | Feeder Belt C | Radio Remote D | Main Conveyor Belt E | Reducer F | Trunk

WHAT CAN IT HANDLE?

A Telebelt can handle most bulk materials – sand, soil, bark, landscape mixes, drainage gravel and much more.

Bulk minerals can be handled for applications such as ship loading or stockpiling.

A Telebelt can be used to handle concrete, particularly difficult mixed that cannot be handled with a concrete pump. It can also be used for bulk concrete pours, where large volumes need to be handled quickly and reliability is critical.

Small rocks can be handled, such as those used for filling gabions.


Concrete


Gravel

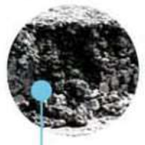

Sand, Crusher Dust


Gypsum


Urea


Pervious Concrete


Woodchip


Roller Compacted Concrete

And then there are some "left field" applications such as sand bags for protecting against flood. If in doubt, ask *(see pages 6-7 for job images)*.


A number of chutes are available to control dust at the discharge point

WHEN SHOULD I USE A TELEBELT?

Backfilling over geotextile in a detention basin

Placing unpumpable concrete

Placing material where there is no other access

Because a Telebelt conveyor is supported above the ground by a carrier vehicle or trailer, it does not rely on ground conditions other than where the machine is set up for work. This means that it can move materials in conditions where:

- it is unsafe to use earthmoving equipment or would require extensive ground preparation to do so e.g. backfilling tailings dams
- access restrictions mean that only extremely compact equipment can be used, prolonging the time and cost of completing the task
- there are environmental reasons for not using earthmoving equipment e.g. potential for damage to environmentally sensitive areas
- other equipment could cause damage e.g. the risk of mobile equipment damaging geotextile fabric and compromising its function when backfilling
- large volumes need to be moved quickly and reliably e.g. ship loading, mass concrete pours
- there is no cost-effective alternative e.g. placing stiff concrete mixes that can't be pumped; backfilling behind a retaining wall.

WHY SHOULD I USE A TELEBELT?

- Because a Telebelt relies on the continuous motion of a conveyor belt, it can move large volumes quickly compared to the cyclical operations of a wheel loader or a dump truck shuttling back and forth.
- A Telebelt requires only a single operator.
- Once a Telebelt is set in position, the material continues to be placed in the same location unless the operator slews or extends the belt. In contrast a loader or dump truck operator needs to make decisions during each cycle of operation, each of which has some potential for error.
- Ground preparation requirements are minimal, basically limited to the site access and the machine set-up area.

IS DUST A PROBLEM?

Dust normally isn't a problem as the load doesn't move relative to the belt. The areas where a problem may arise are:

- Loading the belt
- Transferring between conveyors
- Dropping material into its final position
- Strong winds acting on material on the belt.

Generally equipment is set up to minimise the height that material drops during transfer or placement. If this is not possible or not adequate, then MCS Contracting has a range of drop chutes for transfers and a range of hoppers to suit different materials and applications.

Covers can also be placed over the belt if wind is an issue.

Conveyors remain in a fixed position so vehicle movement is not an issue, other than trucks bringing material to site or if loaders are used to charge hoppers. Because these occur in fixed areas, regular watering or use of a dust suppressant is a viable control measure.

WHY SHOULD I USE MCS CONTRACTING?

- MCS Contracting has the largest fleet of Telebelt conveyors in Australia, with a range of sizes and models available. There is a greater chance of a machine being available when you what it, and of it being the right size for your job. If the job demands multiple machines, they are generally available.
- MCS Contracting has the greatest experience in using Telebelt conveyors in Australia, and this is across a range of applications and materials. This experience will be applied to finding the best solution for your job.
- MCS Contracting concentrates its business on mobile conveying: it is not a specialist in another area with mobile conveyors as a sideline.
- MCS Contracting has a range of covers, chutes and feed hoppers to complement the Telebelt conveyors themselves.

WHAT IF A TELEBELT CAN'T DO THE JOB?

If a Telebelt can't do a job, or can't do a job on its own, MCS Contracting has other types of mobile conveyor in its fleet that may be able to the job either individually or in combination with other machines. MCS also has a history of developing its own equipment or modifications to extend the capabilities of the fleet.

However if this is not a solution, MCS will tell you rather than attempt to do a job for which its equipment is not the right answer.

CAN I DRY HIRE A TELEBELT?

Because this is a specialised piece of equipment MCS only uses the machines with its own operators. It can operate on a tonnage rate, hourly rate or fixed price, depending on the circumstances of the job.

MCS continues to develop specialised training for its operators.

Mobile Conveying Services has other equipment available


Radial stacking conveyors


Truck unloaders and track-mounted conveyors

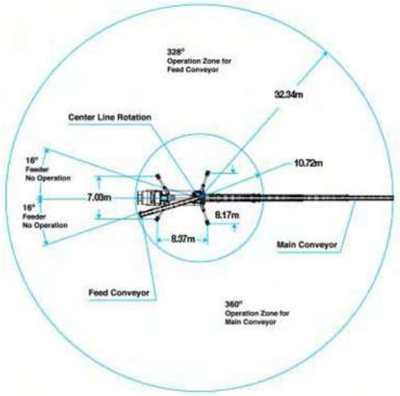
Only Mobile Conveying Services has the fleet & expertise to supply a multi-machine package

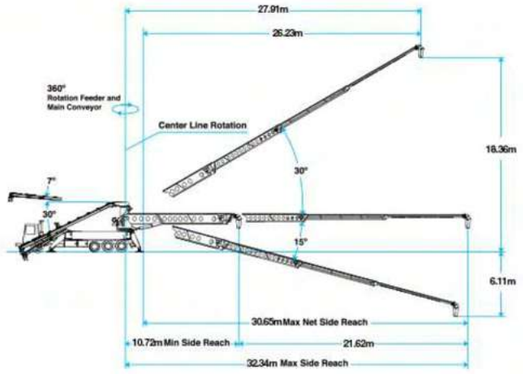

passing concrete from shore via a barge for an underwater pour


passing concrete from the surface for paving a tunnel floor

TB 110

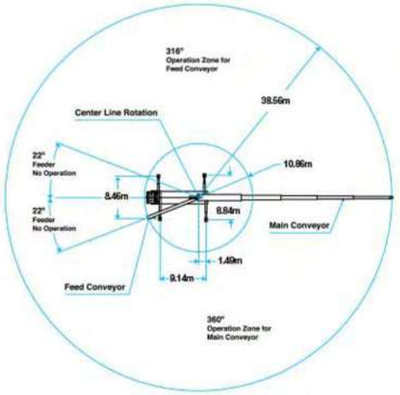
- 32.34m horizontal reach
- 4-section remote-controlled telescopic boom
- 4.60m³/min maximum output
- Handles 0-305mm concrete slump
- Places material from sand to 100mm rock
- Sets up under 4.80m height

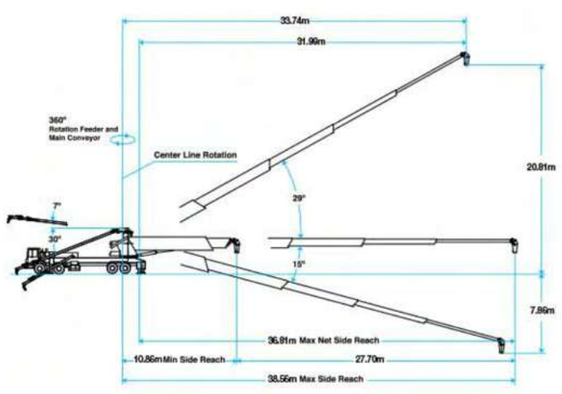




TB 130

- 38.56m horizontal reach
- 5-section remote-controlled telescopic boom
- 4.60m³/min maximum output
- Handles 0-305mm concrete slump
- Places material from sand to 100mm rock
- Sets up under 4.70m height





TBS 600

- 31.08m horizontal reach
- 4-section remote-controlled telescopic boom
- 7.65m³/min maximum output
- Handles 0-305mm concrete slump
- Places any flowable material up to 152mm
- Sets up under 4.70m height

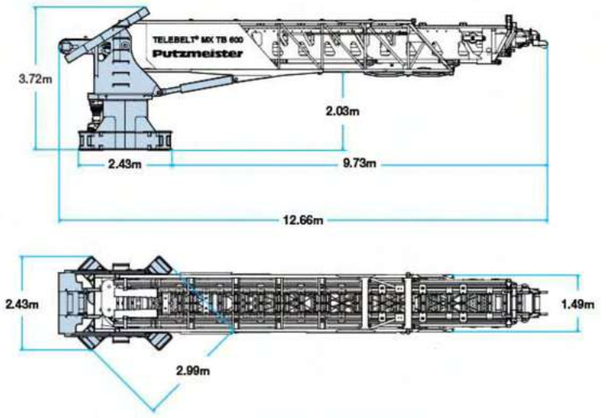
TRACK BASE

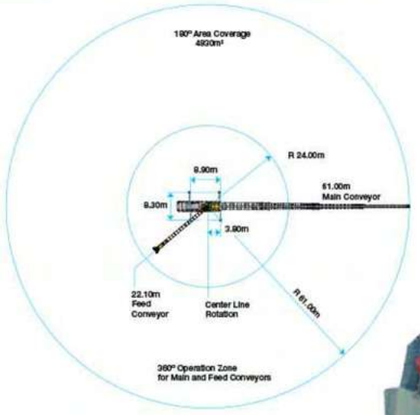
- 4-cylinder Perkins diesel
- Hydrostatic drive
- 4m long x 2.2m wide
- Allows trailer equipment to be mobile on site without a highway prime mover
- Facilitates manoeuvring in tight spaces

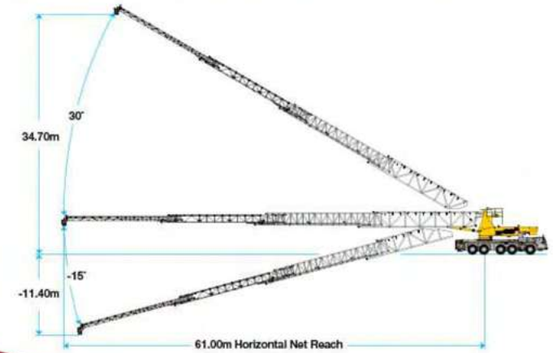
TBS 600 being lifted on board a barge: track base is on the wharf

MXTB 600

- 31.08m horizontal reach
- 4-section remote-controlled telescopic boom
- 7.65m³/min maximum output
- Handles 0-305mm concrete slump
- Places any flowable material up to 152mm
- Powered by a diesel power pack
- Mounts to 1.37m square lattice tower

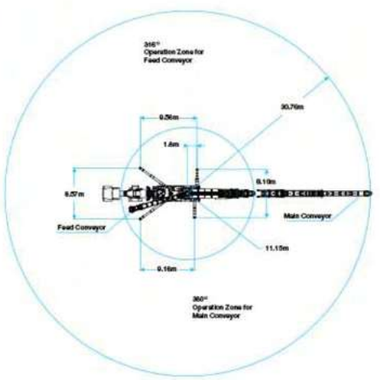


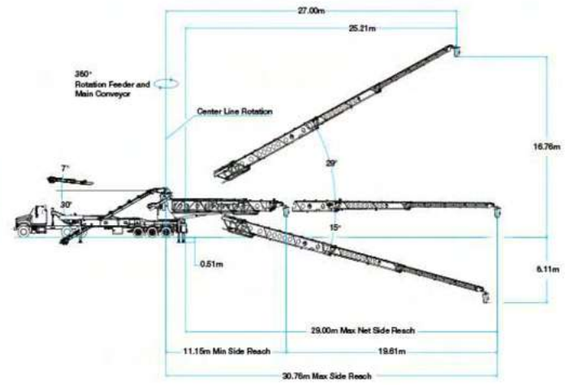




TB 200

- 61.00m horizontal reach
- 4-section telescopic boom
- Infinitely variable speed of main and feed conveyors
- 360° rotation of main and feed conveyors
- 7.65m³/min maximum output
- Place materials sized up to 200mm
- Counterweight moves out and in proportionally as the boom extends and retracts





APPLICATIONS

Placing concrete for bridge slabs, concrete hard stands and other large slabs. Material can be placed evenly across the slab ahead of the paver.

Crusher dust being loaded into a hopper for placement under a slab. A variety of hoppers is available to suit the material and loading method.

Removing soil from a basement excavation and direct loading a tipper on the street. This avoids the tipper entering the site, and often the need for a wheel wash at the site exit.

Loading urea into the hold of a ship at a general purpose wharf. The telescopic slewing discharge belt facilitates even placement of the bulk cargo in the hold.

Capping a tailings dam by placing coal rejects over geotextile for a swamp dozer to push out.

Placing concrete for a slab under an existing house, where placement would otherwise be difficult, slow and labour-intensive. Agitator site time is greatly reduced.

Placing soil on a noise wall: a productive alternative to other methods in areas that cannot be accessed directly or safely. Mulch and bark can also be placed, and belt speed and discharge height can be adjusted to suit cellular confinement systems.

Placing stone in gabions with minimal labour requirements. Stone can be stockpiled close to road access and fed into the Telebelt hopper by excavator or loader.

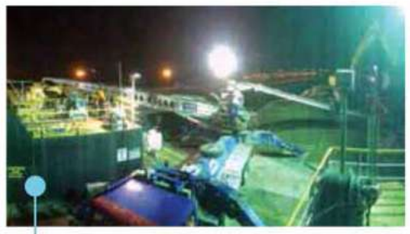
Telebelt working with restricted access to backfill behind a retaining wall. The ability to telescope and slew allows it to work around posts and other obstructions.

Pouring cast in situ barriers for a railway overpass. The reach of the Telebelt can generally avoid having trucks on the bridge, and minimises disruption to other works.

Placing concrete at a dam upgrade project. The ability to handle multiple materials and stiff concrete mixes is an asset on a remote site, compared to a pump.

Placing backfill material around underground water tanks, where conventional earthmoving equipment cannot gain access.

Placing no fines concrete behind precast wall panels for a rail project. Feed from two agitators speeds the placement.



Discharging roadbase from a barge direct into articulated dump trucks for an island project. Congestion and double handling is avoided.

Panorama image of tipper on the street discharging directly into the feed belt hopper via a grain chute, with the telescopic placement belt used to place 20mm drainage gravel around a unit block slab at an elevated level.

As well as bulk materials, sandbags can be handled for speedy construction of flood protection walls or creating formwork for concreting around underground infrastructure.

Tower –mounted Telebelt systems are an option for long-term projects or where set-up space is limited.

Placing stabilised sand around pipes, where safe direct access by wheel loader or excavator is impossible. All material can be placed from the side most accessible to vehicles.

Placing soil over rock armour at a new watercourse from an overhead bridge. A small tracked machine can then level the soil, minimising environmental disturbance.

CAPABILITIES

Telebelts can place concrete for the tower bases and roadbase material for site access roads at wind farm projects.

With 61 metres of reach, the TB 200 covers a huge area for mass concrete pours, without the need to relocate.

Independent control of feed and placement conveyors allows agitators to discharge close to site access roads for fast turnaround, while the placement boom accesses confined spaces.

Placing concrete indoors for high productivity laser screeding equipment. A Telebelt is faster than a pump, handles stiff mixes and can work with lower head height.

Flexible options for positioning outriggers allow this Telebelt to set up in an area with restricted access.

This Telebelt remained on site to place both materials over geotextile for this detention basin.

Going up ...
placing drainage gravel for a mezzanine level garden.

Going down ...
placing crusher dust in a basement.

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