







Please click the QR code to the left, or enter "Needham Lipa TLBE" into YouTube to see a video of the Lipa TLBE mower in action!

## TLBE

# Flail Mowers For 4000 - 12,000 lb Mini Excavators



No Case Drain Required





The Lipa TLBE range of flail mowers are the perfect choice for mini excavators. They can mow and mulch grass, brush or small trees up to around 1-2" inch in diameter with the smaller models, and 2" or more with the larger models (assuming adequate oil flow). They are ideal in areas too steep or too unsafe to mow with a tractor or skid-steer, such as around ponds.

The Lipa TLBE flail mower range is designed for mini excavators which ideally weigh between 4000 and 12,000 lb and have sufficient oil flow. They feature heavy duty construction, with front safety chains, plus a front and rear rubber flap to help control flying debris.

All TLBE flail mowers come standard with an adjustable rear roller which sets the mowing height above the ground and extends flail life.

| Model    | Overall<br>Width<br>(inches) | Cutting<br>Width<br>(inches) | Weight (lb) * | Rotor<br>Speed<br>(RPM) | Required<br>Oil Flow<br>(gal/min) | Pressure | Number<br>Of Flails | Number<br>Of Drive<br>Belts | Price<br>\$ |
|----------|------------------------------|------------------------------|---------------|-------------------------|-----------------------------------|----------|---------------------|-----------------------------|-------------|
| TLBE-50  | 26                           | 21                           | 440           | 2300                    | 7 - 10                            | 3000     | 6                   | 2                           | 4990        |
| TLBE-70  | 34                           | 29                           | 490           | 2300                    | 10 - 14                           | 3000     | 7                   | 2                           | 5590        |
| TLBE-90  | 41                           | 37                           | 560           | 2300                    | 12 - 17                           | 3000     | 9                   | 2                           | 5990        |
| TLBE-100 | 42                           | 41                           | 590           | 2300                    | 15 - 20                           | 3000     | 10                  | 3                           | 6590        |
| TLBE-120 | 53                           | 49                           | 700           | 2300                    | 18 - 22                           | 3000     | 12                  | 3                           | 6990        |

<sup>\*</sup> Approximate weight, with typical mounting bracket and hydraulic hoses.

#### **Standard Equipment**

- Excavator hookup linkage (for most mini excavators, please contact us to confirm availability). Pins not included.
- Electronically balanced, heavy duty rotor with staggered heavy steel flails.
- Heavy duty adjustable steel roller, with adjustable mud scraper.
- Heavy duty lateral skids.
- Chains across the front and rubber flaps front and back to help control flying debris.





## **Options**TLBE Oscillating Saddle

The oscillating saddle is a heavy duty parallel linkage that allows the mower to follow the ground better, on the rear roller. It's purchased by around 75% of customers and it's recommended if you plan to mow a lot of undulating ground. It adds around 88 lb to the mower, so its only recommended for larger mini excavators with sufficient counterweight.

#### **TLBE Flow Regulator**

The flow regulator is required for mini excavators which have higher auxiliary flow than what the mower is designed for (and they don't have the ability to reduce the auxiliary flow on the excavator). The flow regulator allows precise auxiliary flow adjustment, to set the rotor speed to around 2300 rpm, to optimize its operation.

890

660









Please click the QR code to the left, or enter "Needham Lipa TLBE-D 60" into YouTube to see a video of the Lipa TLBE-D 60 mower in action!

## TLBE-D

### Flail Mowers For 3500 - 4000 lb Mini Excavators







Required



The Lipa TLBE-D 60 flail mower is designed for 3500-4000 lb mini excavators, ideally with hydraulically adjustable undercarriage (extended for safety and stability) especially when mowing perpendicular to the tracks.

The TLBE-D 60 is designed for mini excavators with 7-10 gallons per minute of auxiliary flow. Compatible mini excavators include the Deere 17G/17P, Kubota U17, Cat 301.7, Takeuchi TB216, JCB 18Z-1/19C-1 and Bobcat E20. We have most pin style and quick couplers in stock, but please contact us with your machine type and coupler style to check availability and price.

The TLBE-D 60 features a heavy duty Casappa hydraulic motor and a direct drive to reduce weight. The motor is covered with a heavy duty stainless steel end shield for protection, as shown in the image below left.

The TLBE-D 60 can mow and mulch grass, brush or small trees from 1-2" in diameter with at least 8 gallons per minute of auxiliary flow. These mowers are suitable for mowing areas too steep or too unsafe to mow with a tractor or skid-steer, such as around ponds or steep banks. The adjustable rear roller sets the mowing height above the ground and helps keep the flails out of soil and rocks to extend their life.

|           | Width | Width |     | Speed |        | Pressure | Number<br>Tri-Flails<br>Sets |      |
|-----------|-------|-------|-----|-------|--------|----------|------------------------------|------|
| TLBE-D 60 | 34    | 25    | 370 | 2300  | 8 - 10 | 2500     | 7                            | 4990 |

<sup>\*</sup> Approximate weight, with typical mounting bracket and optional hydraulic hoses.

#### **Standard Equipment**

- Excavator coupler is included to fit most mini excavator couplers. However, some will require a specialist mount (which will incur an additional charge), so please contact us directly. Mounting pins are not included, but are available as an option.
- Electronically balanced, heavy duty 4 1/4" diameter rotor, with 7 sets of scrolled tri-flails as shown above.
- Heavy duty adjustable steel roller, with 3 vertical settings, and adjustable mud scraper as shown above.

For more information or to order, call (270) 785 0999, or visit our online store at needhamag.com

#### CONFIGURING A FLAIL MOWER FOR YOUR MINI EXCAVATOR

To make sure your mini excavator is safe, stable and effective, it's critical that you select the correct size and weight of flail mower, especially if you plan to do a lot of mowing on uneven ground with the boom fully extended.

You will also need to know the maximum auxiliary oil flow and pressure available, to maximize the mowers performance. These numbers are often reported within the manufacturer literature, but not always. Many newer mini excavators (including Bobcat, Cat and Kubota) come standard with auxiliary flow adjustment from the cab display, so if your flail mower requires 15 gallons per minute of flow (for example), these machines allow you to program the maximum flow. Older mini excavator models with more auxiliary flow than what the flail mower is designed for will either require manual adjustment to limit the oil flow, or by purchasing an optional Lipa flow regulating block. This flow regulator block allows the oil flow to be adjusted on the mower itself. We have these flow regulator blocks available for most flail mowers and they allow easy adjustment by means of a rotary knob.

We can help you configure the best flail mower for your excavator size/weight, its application and its hydraulic flow/pressure, so please contact us for more information.



The image to the left shows a Lipa TLBE-100 on a CAT 304CR mini excavator. This 9800 lb machine had a maximum auxiliary flow of 18.5 gallon per minute. The TLBE-100 only requires 15-16 gallons per minute, so we added an optional flow regulating block to regulate the flow down. By adjusting the flow, the rotor speed can be set to around 2300 RPM, to optimize the mower performance and maximize flail life.



The Lipa TLBE-100 shown in the image left is fitted with the optional oscillating saddle. This is an excellent option if mowing a lot of uneven ground. This saddle allows the mower to follow the ground much better with a lot less operator adjustment. The TLBE mowers do not come with hydraulic hoses, these can be supplied by Needham Ag, or sourced locally.

