

FRONT/REAR FLAIL MOWERS

Bowell BCXpro Flail Mower

Bowell BCXpro professional front/rear flail mower for 90–200 PS tractors with side shift



TOP FEATURES

- For tractors with Cat. 2 / 3 Three-point hitch
- PowerCut® rotor shaft with 40% more Flails for higher travel speeds
- With inner housing made of Hardox® 400
- With double-walled housing, 5+5 mm and 10 mm side wall thickness
- For grass heights over 200 cm
- 260 cm to 310 cm working width
- 50 cm hydraulic side shift
- Rear roller available in 2 different Mountable in 2 positions

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Applications of the Bowell BCXpro Flail Mower

The **Bowell BCXpro** mower series is equipped with a **high-performance, double-sided bevel gearbox** from the well-known Italian manufacturer **Comer**, allowing it to be used optimally as a **front- or rear-mounted mulcher** even on large tractors.

With an available **working width of up to 310 cm** and a **hydraulic side shift** of up to **500 mm**, these professional flail mowers can be used even on very large areas. When paired with a suitable tractor, the Bowell BCXpro mowers outperform virtually any type of vegetation on large areas and deliver very high operational efficiency, even when dealing with stubborn plants.

Key to the performance of the **BCXpro series** is the new PowerCut® **rotor shaft, which features over 40% more hammer blades**. This greatly increases the efficiency of the BCXpro mulchers. You can use this, for example—provided the ground is relatively level—to drive at higher speeds than were previously possible. This increases your hourly output and **significantly reduces costs**.



Technical Details and Additional Features of the BCXpro Mulcher

The practical 500-mm **hydraulic side shift** eliminates the need for tedious maneuvering in tight turns and makes mowing under fences and bushes much easier. For this feature, you'll need a **double-acting hydraulic control circuit** on your tractor.

Up to 44 of these 1,400-gram **hardened flails** deliver ideal mowing results, capable of handling even **tough underbrush and brush** with a diameter of more than 30 mm. A total of 36 to 44 of these high-performance flails are mounted on the newly developed PowerCut rotor shaft. **Additional replaceable counter blades** inside the flail mower ensure even better performance when cutting grass. You can adjust the **cutting height** using the **self-cleaning rear roller**. The freely adjustable rear roller also helps compensate for **uneven ground**, preventing the flails from touching the ground while mowing.

The large **Comer freewheel gearbox** ensures that the heavy flail shaft can continue to rotate after the PTO drive is disengaged, without transferring the motion to the tractor. Solid **metal slats** mounted on the front of the mower prevent stones and other foreign objects from flying around.



Flail mowers for front and rear mounting, designed for 1000 rpm PTO shafts

The double-sided Comer angle gearbox also allows for front-mounted operation on appropriately equipped tractors. The Comer gearbox operates at a **PTO speed of 1000 rpm**. The Howell BCXpro mowers are already equipped with a **dual three-point hitch**, allowing for **quick switching between front and rear mounting at any time**.

Howell BCXpro flail mowers come equipped with **Howell Power Efficiency technology** right from the factory. Your tractor must have a front and rear **PTO speed of over 1000 rpm** to take advantage of this, enabling it to deliver more efficient performance with lower fuel consumption. Howell Power Efficiency technology **saves fuel** from the very first meter, at no extra cost.



Flail mowers with Howell 5-speed belt drive

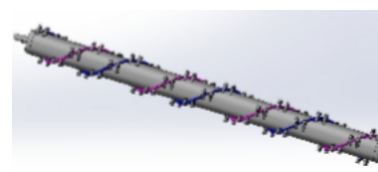
The new Howell 5-stage belt drive, featuring 22 mm wide drive belts and correspondingly **reinforced pulleys**, guarantees nearly 100% power transmission even with these large working widths and despite the high shaft and flail weight, with barely measurable power loss and minimal wear. The new belt cover allows you to check the belt tension in seconds without having to remove the cover.

BCXpro mowers are equipped with **stainless steel grease fittings** at the relevant points and feature a **parking stand** in addition to the **skids**. The maintenance schedule in the German owner's manual is straightforward and makes it easy for you to maintain and care for your Howell mower. Like all Howell mowers, the Howell BCXpro series is equipped with an **electronically precision-balanced flail shaft** driven by five wide V-belts. The heavy-duty freewheel transmission runs in an oil bath, so transmission oil must be added before starting operation.



SKF ball bearings and Performance rotor shaft

The BCXpro flail mowers are equipped with large **SKF rotor shaft ball bearings**, which are anchored in solid, CNC-machined bearing seats. This is necessary because the heavy, laser-balanced rotor shaft rotates at **2,350 rpm**, thereby shredding the cut material to a minimum so that it can decompose quickly. The PowerCut® rotor shaft is specially optimized. The **flails are arranged in a spiral pattern**, so that, despite the large working width and number of flails, no more than three flails cut the grass at the same time. This significantly reduces the effort required.



Variable Rear Roller Position

Depending on the material to be chopped, the technical requirements for the mulcher can vary widely. The Bowell BCXpro mulcher therefore features a trailing roller that can be mounted in **two different positions**. If the material is placed in front of the roller and then run over by it, it is compressed—which is irrelevant if it is subsequently worked into the soil with a rotary tiller or rotary cultivator. However, if the material is placed behind the trailing roller—that is, if it is not compressed—it decomposes more quickly, allowing more light and air to reach the grass beneath. On uneven surfaces, a smaller distance between the trailing roller and the rotor shaft can be advantageous for adapting to the ground. The chopped material is then deposited behind the support roller. However, with dry chopped material such as corn stalks, this can lead to significant dust clouds, which can impair the cooling performance of the tractor engine when mounted on the front.

The Bowell BCXpro mulcher offers the option of moving the trailing roller or support roller 20 cm further back toward . This deposits the chopped material in front of the roller. By adjusting the support roller's position, the BCXpro flail mower can adapt perfectly to varying conditions. There are three positions for the support roller **to adjust the cutting height**.



Double-walled mower housing

For wide and heavy flail mowers that operate at high rotor shaft speeds, a torsionally rigid and low-vibration housing is essential for the machine's reliability. In addition to solid side walls—which are 10 mm thick on the BCXpro mulcher—the best results are achieved by designing the rest of the mulcher housing with double walls.

The Bowell BCXpro mulcher features a 5-mm-thick outer housing and a reinforced inner housing with a wall thickness of 4 mm, which covers more than 90% of the surface area. Both housing surfaces are welded and bolted together. This ensures very smooth operation of this professional attachment.



How is the BCXpro mulcher positioned behind your tractor?

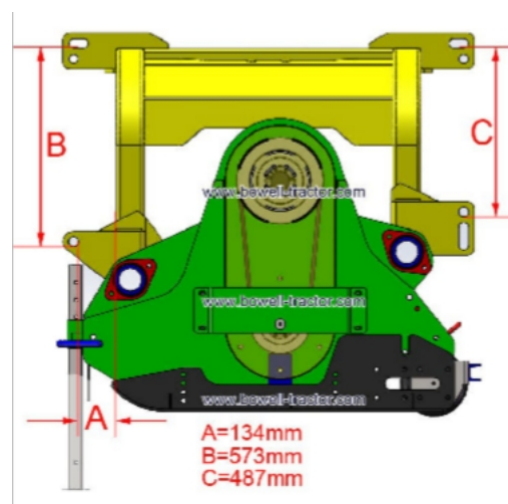
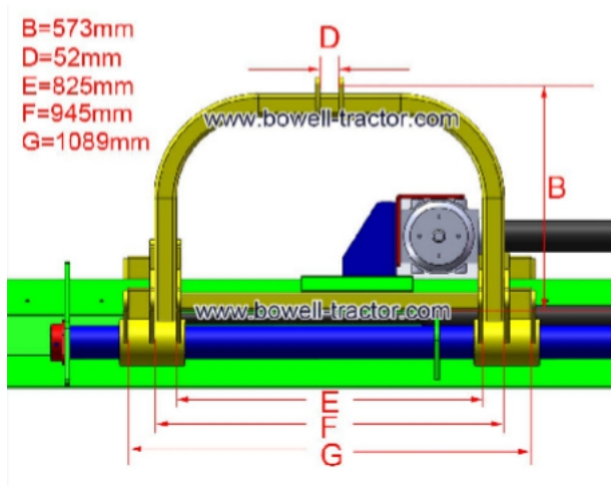
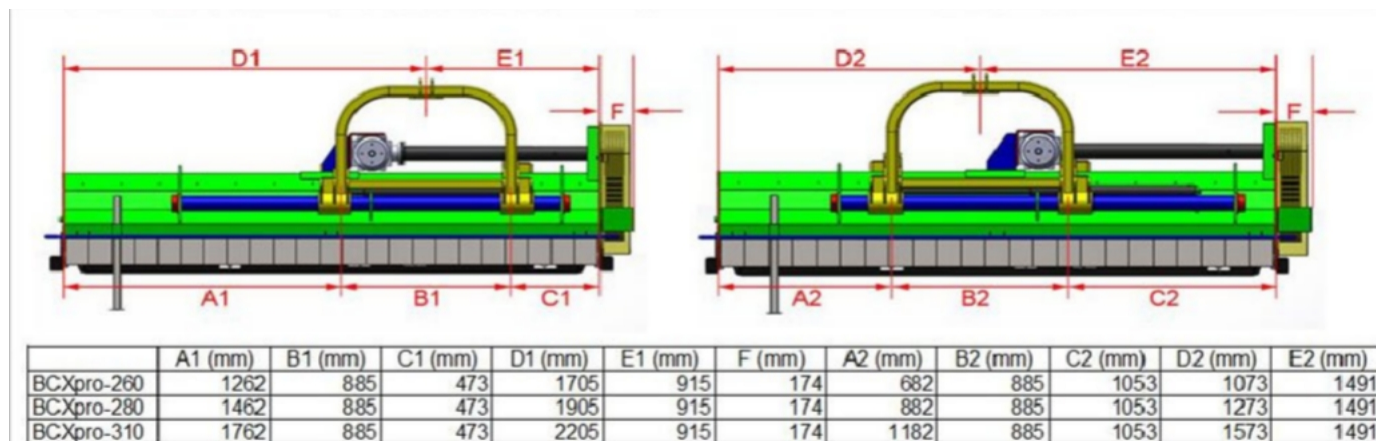
The reference point is always the center of your tractor, i.e., where the PTO shaft is located.

Let's assume your tractor is 120 cm wide from its center to the outer edge of the right rear tire (for a total width of 240 cm); in that case, the mulcher should extend more than 120 cm to the right from the center of the tractor. This allows the mulcher to mow even to the right of the right rear wheel. This would allow you, for example, to keep some distance between the tractor and a fence, bush, tree, or shed while still mowing flush with the edge.

The three-point hitch on this model can be moved hydraulically. The above values—D1, E1, etc., and

D2, E2, etc., for the BCXpro models.

If, in the example chosen here, the flail mower is to extend more than 120 cm to the right of the tractor's centerline, all BCXpro models would be capable of doing so (50 cm, 70 cm, 100 cm); however, you would need to use the hydraulic side shift for this. The BCXpro flail mower is a front/rear mower, so it can also be mounted on the front of the tractor, provided there is a PTO outlet and a three-point hitch available there. Tractors are generally narrower at the front axle than at the rear axle, which can result in significantly different measurements.



TECHNICAL SPECIFICATIONS	BCXpro-260	BCXpro-280	BCXpro-310
Dimensions (LxWxH) mm	2854x1190x1100	3054 x 1190 x 1100	3354x1190x1100
Total weight, including drive shaft, kg	1220	1265	1310
Working width (cm)	260	280	310
Adjustable cutting height (mm)	20–75		
Recommended grass height, cm	< 200		
Max. hydraulic side shift (mm)	500		
3-point hitch for tractor	Cat. 2 + 3		
PTO (clockwise rotation), rpm	1000		
Distance from top link pin to ground, min/max mm	1007 / 1110		
Distance from lower link pin to ground, min/max mm	470 / 573		
Distance from PTO connection to ground, min/max mm	672 / 730		
Length of the drive shaft mm	1200 with slip clutch		
Length of hydraulic lines cm	185/245		
Work rate (approx. values) m ² /h	14,000–28,000	15,000–30,000	16,000–31,000
Number of drive belts / width (mm)	5 x 22		
Recommended tractor engine power (PS/kW)	90–200/65–150	100–200/75–150	120–200/90–150
Outer housing material thickness () mm	5		
Inner housing material thickness, mm	4		
Material thickness of side wall mm	10		
Coating	Powder coating		
Mallet shape	Hammer, hardened		
Number of Beaters (Helical Arrangement)	36	40	44
Weight per hammer, g	1400		
RPM of the flail shaft	2353		
Diameter / wall thickness of the beater shaft mm	194 / 10		
Diameter / Wall Thickness of Idler Roller, mm	168 / 6		
Rotor shaft diameter (rotating) mm	470		
Beater speed m/s	58		
Transport frame (LxWxH) cm	290x110x130	310x110x130	340x110x130

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