



*A convenient tool  
to secure your  
skinning yield*

Check the state of your skinner tooth roll

# Tooth roll gauge

**Changing tooth rolls on schedule is one of the smartest things you can do to ensure reliable, efficient skinner performance. The challenge is to determine WHEN to replace tooth rolls. The Tooth Roll Gauge eliminates guesswork and assures optimal pulling power is applied during the skinning process. The rugged stainless steel device measures tooth roll diameter to determine the precise moment when tooth roll replacement is needed.**

All moving machine parts are subject to wear. The same is true for tooth rolls. As tooth rolls diameter diminishes due to normal wear, it affects the critical factory-set tooth roll-to-blade clearance.

Regular once-a-month testing with the Tooth Roll Gauge can result in a 1% yield gain, with payback in less than a month.

Just place the gauge over the tooth roll at center, left and right. A snug fit with little or no resistance indicates needed replacement. No fit or significant resistance shows the tooth roll is still within specifications.

You can adjust the blade and blade clamp to compensate for wear. However sooner or later, you will reach their maximum adjustability. Any additional wear will destroy the tooth roll-to-blade clearance, and efficiency will decrease dramatically.

If you can stop this cycle before it exceeds tooth roll-to-blade clearance, you can maintain skinning efficiency and reap a 1% yield gain advantage.

A smaller diameter also indicates a dull/blunt tooth, which partially determines pulling power. All tooth rolls leave the factory with a precision manufactured tooth geometry (sharpness). Loss of this geometry will result in a loss of skinning efficiency.

The Tooth Roll Gauge is designed to help you consistently achieve these results. It measures the outside diameter of the tooth roll at the point that wear exceeds the tooth roll-to-blade specification of .004". Performed on a monthly basis, this simple test will help you maintain skinning efficiency and add to your profitability.

**+10%** yield on **1000 kg** =  **meat**



*Example:  
membrane skinner  
capacity = 600 kg  
per hour 6 kg x 8  
hours = 48 kg more  
meat per day*

# How to use the tooth roll gauge

To maintain optimum skinning performance, tooth roll maintenance parameters suggest checking tooth roll wear every month. Follow the below simple steps to measure your tooth roll.

**Note: Before using the Tooth Roll Gauge, lockout the electrical supply to the machine!**

**Never force the gauge onto the tooth roll!**



[marel.com/tooth-roll-gauge](http://marel.com/tooth-roll-gauge)

- 1. Uncover the skinning mechanism** – For an open-top skinner remove the tray. For a conveyORIZED skinner open the hood and pull up on the top feed.
- 2. Remove the blade** – Follow proper safety procedures when removing the blade.
- 3. Expose the tooth roll by moving the shoe** – For an open-top skinner raise the shoe with the shoe control lever. For a conveyORIZED skinner remove hold downs and pull the shoe forward.
- 4. Measure the tooth roll** – Apply the gauge to the center, left and right areas of the tooth roll. If the gauge fits completely over the diameter of the tooth roll, replacement is needed. If resistance is felt on the sides of the gauge and a space is visible between the gauge and the tooth roll, no replacement is necessary.

## Membrane



## Derinding



TYPE OF TOWNSEND SKINNER	TYPE OF GAUGE
AT21-620 RH / LH	9755131
MS1355 / 1710	9755131
OTM50 / OTD50 / OTB50	9755131
SK14-410 - 20"	9755131
SK14-430 - 20"	9755131
SK15-330 / SK15-335 - 20"	9755131
SK15-340 / 15-345 - 14" / 20" / 26"	9755131
SK15-350 / 15-355 - 14" / 20"	9755131
SK15-360 / 15-365 - 20"	9755131
6000DHT - RH / LH	9755131
6000DHT LOIN - RH / LH	9755131

TYPE OF TOWNSEND SKINNER	TYPE OF GAUGE
500, 7500, 7600	9755085
SK11-220 / 11-250	9755085
SK11-312 / 11-317	9755085
SK11-320 / 11-325 / 11-350 / 11-355	9755085

TYPE OF MAJA SKINNER	TYPE OF TOOTH ROLL	TYPE OF GAUGE
EVM 3006 / 4004 / 4006	Z 104 helical toothed, dm 75,45	9844091
EASY	Z 108 helical toothed, dm 75,45	9844091
EVM 3002 / 4004 / 4006 / 5004 / 5006	Z 108 helical toothed, dm 75,45	9844091
EVMsplit 4006 / 5006	Z 108 helical toothed, dm 75,45	9844091
EVM 5006	Z 120 helical toothed, dm 75,45	9844091
SRA 500 A	Z 120 helical toothed, dm 75,45	9844091
BXA 554	Z 36 helical toothed, dm 75	9844090
BXAplus 434 / 554	Z 36 helical toothed, dm 75	9844090
BXM 434 / 554	Z 36 helical toothed, dm 75	9844090
ESB 4434 / 4600	Z 36 helical toothed, dm 75	9844090
ESM 3800 / 4550	Z 36 helical toothed, dm 75	9844090
VBA 3500 / 5550 / 5700	Z 36 helical toothed, dm 75	9844090
ESB 4434 GV	Z 36 straight toothed, dm 75	9844090
VBA 5550 / 5700	Z 40 helical toothed, dm 75	9844090
BEM 3750 G / BEM 501	Z 48 helical toothed, dm 75	9844090
BXAplus 434 / 554 / 754	Z 48 helical toothed, dm 75	9844090
BXM 434 / 554 / 754	Z 48 helical toothed, dm 75	9844090
ESB 441 / 3441 / 3450 / 3450/2 / 3750 G / 4434 / 4600	Z 48 helical toothed, dm 75	9844090
ESM 3435 / 3550 / 3800 / 435	Z 48 helical toothed, dm 75	9844090
EVMsplit 4004 / 4006 / 5006 only Z 48	Z 48 helical toothed, dm 75	9844090
SBA 420 / 3420 / 8200	Z 48 helical toothed, dm 75	9844090
TEM 100	Z 48 helical toothed, dm 75	9844090
VBA 3500 / 3600 / 3700 / 5550	Z 48 helical toothed, dm 75	9844090
ESB 4434 V	Z 72 helical toothed, dm 75,45	9844091
EVM 4004 / 5004 / 5006	Z 72 helical toothed, dm 75,45	9844091
EVMsplit 5006	Z 72 helical toothed, dm 75,45	9844091
BXA 554	Z 72 straight toothed, dm 75	9844090
BXAplus 554	Z 72 straight toothed, dm 75	9844090
BXM 554 / 554 K2 / 754 / 754 K	Z 72 straight toothed, dm 75	9844090
BXM 554 K	Z 72 straight toothed, dm 75,45	9844091
ESB 3450/2 / 4434	Z 72 straight toothed, dm 75,45	9844091
EVM 435 / 437	Z 72 straight toothed, dm 75,45	9844091
EVMsplit 4006 only Z 72	Z 72 straight toothed, dm 75,45	9844091
FIM 437	Z 72 straight toothed, dm 75,45	9844091
GEA 420	Z 72 straight toothed, dm 75,45	9844091
SBA 3420 Tilapia	Z 72 straight toothed, dm 75,45	9844091
AEM 438	Z 90 straight toothed, dm 75,45	9844091
EASY	Z 90 straight toothed, dm 75,45	9844091
ESM 5550	Z 90 straight toothed, dm 75,45	9844091
EVM 1000 / 1001 / 2000 / 2005 / 3000 / 302 / 3005 / 3006 / 437 / 5006	Z 90 straight toothed, dm 75,45	9844091
FIM 437	Z 90 straight toothed, dm 75,45	9844091
SFA 6000	Z 90 straight toothed, dm 75,45	9844091
SRA 500 A / 8000	Z 90 straight toothed, dm 75,45	9844091
TEM 200	Z 90 straight toothed, dm 75,45	9844091
ESB 4434 V	Z 96 helical toothed, dm 75,45	9844091
EVM 3002 / 3006 / 4006 / 5004 / 5006	Z 96 helical toothed, dm 75,45	9844091
EVMsplit 4004 / 4006 / 5006 only Z 96	Z 96 helical toothed, dm 75,45	9844091
FEM 436	Z 96 helical toothed, dm 75,45	9844091
BXM 754 / 554 KR	Z 96 straight toothed, dm 75,45	9844091
ESB 4600/2	Z 96 straight toothed, dm 75,45	9844091
EVM 437 / 500	Z 96 straight toothed, dm 75,45	9844091
FEM 435	Z 96 straight toothed, dm 75,45	9844091
GEA 421	Z 96 straight toothed, dm 75,45	9844091