# **Tomahawk**

**Bale Processors** 

# <u>Teagle</u>



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### Established engineering excellence

Teagle Machinery Ltd was established over 75 years ago, manufacturing the first Tomahawk bale shredder in 1983.



We remain a family business focussed on meeting the needs of our customers whether just around the corner, or in one of the 50 countries worldwide to which we regularly ship machinery.

From the outset our machinery has been designed to be simple, robust and easy to use. We still stand by these values, with all our products being tested extensively on farms throughout the world to ensure that they perform reliably day-in day-out, under the toughest conditions.

The company now employs around 180 people, most of whom are based at our 14,750m<sup>2</sup> production facility in Cornwall, England.





## Tomahawk Range



### A model to suit your needs

**Quality** - From the latest design methods through to manufacture in our modern production facility, Tomahawks are built for day-in day-out reliability. **Performance** - Whether feeding or bedding, Tomahawks will save you time and money.

**Experience** - Talk to us about your requirements, we can configure a Tomahawk to suit your application.



**400 Series** 404M/4040

**400XL Series** 404XLM/4040XL **500 Series** 505M/5050

**500XL Series** 505XLM/5050XL

## Strength & Reliability

## Tomahawk 404M beds over 15,000 bales

Graeme Cock farms 800 hectares with his brother Patrick on the rolling slopes of South Devon. Over the past 25 years the business has been expanded and developed from around 100 cows to the current herd of 600 plus high performing, mainly Holstein cows, achieving an average approaching 12,000 litres. All cows are milked 3 times/day. Around 120 hectares are set to maize, and a further 120 hectares to cereals.

#### A clean and comfortable cubicle bedding system

Soon after taking on the farm Graeme and Patrick took a close look at the cubicle beds for their dairy herd, their priority being to keep the cows clean and comfortable and achieve optimum lying times.

"Sand is a great product, but management of sand in the slurry does not suit our system."

A Teagle Tomahawk 404 was purchased which chopped the straw short and delivered it to cubicles on both sides as it passed down the aisle. Manoeuvrability of the machine around the tight yards and low power requirement suited the setup.

Around 15 years ago the Tomahawk T404 was upgraded to a Tomahawk T404M, fitted with a Hammer Mill and 21mm screen. This machine tends to smash the straw stems apart and provide a consistent chop length, and most importantly Graeme says 'because there are no blades, when there are stones in the straw the machine does not need so much maintenance.'

Graeme adds, "In combination with mattresses the cattle are clean and comfortable. It is fair to say that Graeme and Patrick are meticulous in maintaining this area; the cubicles for the high performers have fresh straw three times a day, and medium performers and heifers 2 times a day. This works out on average to around 2.5kg of straw per cow per day.

Graeme is now looking at moving from round bales to 6 string rectangular bales. This can be accommodated by simply extending the length of the drum. The ability to process larger bales will also enable Graeme to use the machine to pre-process straw.

#### Correct preparation of straw for feed

"Straw is part of the toolkit in managing dry cows effectively. We add around 5kg of straw to the dry cow ration, but it is all about the preparation. What is the point of adding expensive straw to the ration if the cows don't eat it?"

Graeme's no-nonsense approach to running the farm also serves him well in his capacity as Chairman of Mole Valley Farmers, an 8,000 farmer/shareholder organisation. This link also provides Graeme with a valuable insight into the latest approaches to livestock husbandry and assist him in tailoring feed strategies and housing environment to get the best return from his herd.



## Why own a Teagle bale processor?

For Processing

Pre-process straw for feed.

**Achieve consistency** - provide a consistently short and palatable feed component.

**Process on demand** - no need to stockpile.

**Improve efficiency** - reduce operating time of mixer wagon.

**Prevent over-processing** - of silage in a Total Mixed Ration.

For Bedding

Cleaner and healthier livestock lightly shredded straw improves moisture absorbance for cleaner lying areas.

**Save straw** - users regularly report up to 30% savings by spreading the correct amount of straw evenly across the bedding area.

**Labour saving** - one person can quickly and easily bed livestock.

**Safer** - no need to enter the pen.

**Better Manure** - straw is evenly incorporated into the muck.

For Feeding

**One machine, two jobs** bed down and feed with the same machine.

**Versatility** - If you can bale a crop, we can shred it! Feed clamp or baled silage, hay and root crops.

**Improve palatability** - users report increased feed conversion of shredded bale silage.

**Reduce wastage** - selective feeding/sorting is reduced.



### How it works

Whether feeding or bedding simply load the bale into the drum, start the cutting rotor and set the drum to rotate.



## Built to meet your needs

From round to rectangular bales, to bed straw or feed silage - configure your Tomahawk as follows:





Scan to watch the Tomahawk in action.



# 1) Select drum to suit your bale size

|              | Drum size                        | 1.2m (4')<br>round bale | 1.5m (4')<br>round bale | 0.9 x 1.2 x 2.4m<br>rectangular bale | 1.2 x 1.2 x 2.4m<br>rectangular bale | Extended<br>drum length |
|--------------|----------------------------------|-------------------------|-------------------------|--------------------------------------|--------------------------------------|-------------------------|
| 400 Series   | Diameter: 1.55m<br>Length: 1.55m | <b>(</b>                | X                       | *                                    | X                                    | 1.85m                   |
| 400XL Series | Diameter: 1.55m<br>Length: 3.0m  | **                      | X                       |                                      | X                                    | N/A                     |
| 500 Series   | Diameter: 1.8m<br>Length: 1.55m  | <b>✓</b>                | <b>✓</b>                | <b>X</b> *                           | <b>X</b> *                           | 1.85m                   |
| 500XL Series | Diameter: 1.8m<br>Length: 3.00m  | **                      | **                      |                                      |                                      | N/A                     |

<sup>\*</sup> See XL series to accommodate complete bale. \*\* 2 bale capacity.

# Select rotor type

|                    | MILLING                            | CHOPPING                         |
|--------------------|------------------------------------|----------------------------------|
|                    | TMR/Cubicles/<br>Poultry/Pigs      | Loose Housed<br>Bedding/ Feeding |
|                    | <b>Short Straw</b><br>10mm - 150mm | Long Straw/Silage/Hay<br>-       |
| 400 Series Model   | 404M                               | 4040                             |
| 400XL Series Model | 404XLM                             | 4040XL                           |
| 500 Series Model   | 505M                               | 5050                             |
| 500XL Series Model | 505XLM                             | 5050XL                           |

## The key is consistency

## The benefits of adding processed straw to a TMR



"Our results show how beneficial consistently pre-processed straw is in obtaining good dry cow intakes, even over straw that is mixed well in a wagon."

James Johns (pictured) farms a herd of 260 high performance Holsteins at Sixty Acre Farm, UK.

- In dry cow rations straw can be used to control energy intake and reduce the risk of milk fever.
- In milking cow rations straw can be very useful as physically effective fibre when required.

"For either group the key to feeding straw is incorporation to create a homogenous mix. Poorly processed straw will not blend which can encourage cows to sort the ration, making the problem worse rather than better."

Jeremy Hamilton, Three Counties Feeds

### Trial undertaken by Three Counties Feeds at Sixty Acre Farm

A farm trial was conducted to investigate whether processing straw before it is added to a total mixed ration (TMR) increases the dry matter intake of dry cows fed a ration with high straw inclusions.

The far off dry cow ration contained 6kg of straw and the transition ration 4kg, the effectiveness of these rations depends totally on good feed intakes.

Control rations were prepared using the mixer wagon to chop and incorporate the straw, as best as this equipment would allow prior to the trial. At this point feeding was already at a high standard.



Without changing anything else the straw was pre-processed to 25mm in length. When the cow's intake increased, the portions were increased, with the diet proportions staying constant.

Before straw was pre-processed the far off dry cows ate 21.6kg, after processing they were eating 25.9kg - equating to 20% more. The transition group ate 9% more - a significant improvement in this critical stage.

"With improved and more consistent straw intakes we are better equipped to control metabolic stress in fresh cows, which can cause issues such as retained placenta and metritis. Getting off to a better start these cows have less negative energy balance and sub-clinical ketosis. Straw rations can also help prevent milk fever."



Pictured (left to right) Jeremy Hamilton & Andy Hawken AMTRA, DipRN. Three Counties Feeds

## 404M/404XLM/505M/505XLM

## Milling System

Short straw on demand. Process consistently short material from dry bales of straw for TMR, cubicles, poultry bedding and biomass.

## SUITABLE FOR Straw/Dry Materials

#### **OUTPUT LENGTH**

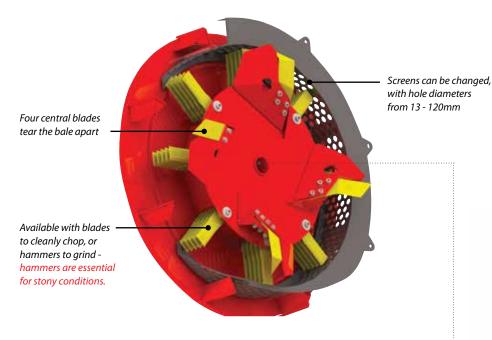
10 -150mm\*

### SPREAD DISTANCE

up to 10m\*\*

#### OUTPUT

up to 2.5t/hr\*\*\*







Screens can be changed, with hole diameters from 13mm - 120mm





### **Options:**

- Hammer or blade system available
- · Various discharge chutes
- Drums available for various bale sizes - see pg.4
- · Quick Hitch A-Frame
- · Hydraulic Top Link
- Turbo fan for remote distribution

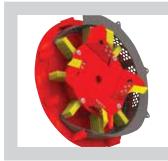
<sup>\*</sup> By changing mill screen diameter \*\* subject to chop length and PTO speed. \*\*\* dependent on screen size and straw type.

### Features



### Round and rectangular bales

1.2m or 1.5m round bales, with drum extensions available for 2.4m rectangular bales.



### 2 Suitable for feeding and bedding

Mill, Chop or Shred. Rotors available for straw, hay, silage and root crops.



### Straightforward loading

Horizontal drum can easily be loaded. A hydraulic top link enables easy adjustment of drum angle.



### 4 Manoeuvrable

Machine weight is close to tractor, ensuring manoeuvrability even with smaller tractors.



### Discharge to one or both sides

Chutes can be open or shut independently. Various chutes are available for special applications, see options on page 9.



### 6 Ease of operation

Simply start the cutting rotor, and then adjust the drum speed of rotation to control the discharge rate.



### Straightforward maintenance

With accessible greasing points and belt tension adjustment, routine maintenance is easily undertaken.



### 8 Accessories for ease of use

For easy hitching-up and adjustment of the drum angle select the optional A-Frame attachment and hydraulic top link.



## 4040/4040XL/5050/5050XL

## Chopping System

Feed and bed with one machine - this rotor can handle wet silage bales, hay or root crops, then lightly chop and spread a bale of straw into loose housing.

### **SUITABLE FOR**

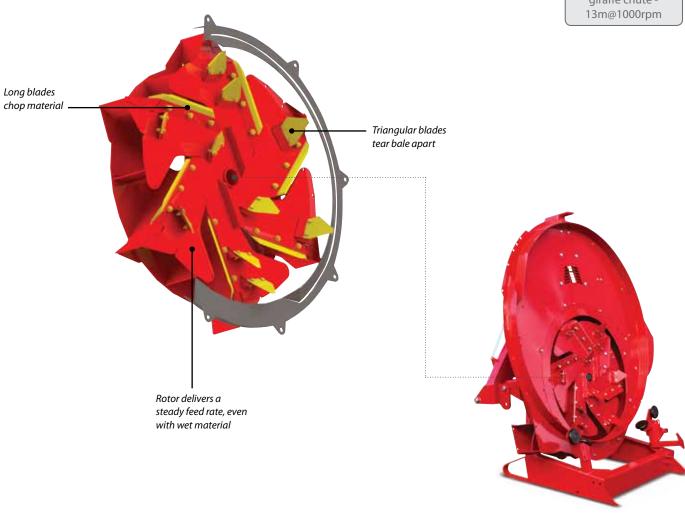
Straw/Hay/Silage

#### **OUTPUT LENGTH**

150 - 200mm

### SPREAD DISTANCE

up to 10m @540rpm giraffe chute -







### **Options:**

- Various discharge chutes
- Drums available for various bale sizes - see pg.4
- Quick Hitch A-Frame
- Hydraulic Top Link

## Options



Increase delivery height and blow distance.
Dry materials only.



2 Silage Giraffe Chute Increase delivery height and blow distance.



3 Swivel Giraffe Chute
Increase delivery height,
available with hydraulic
rotation and deflector.
Dry materials only.



4 Hydraulic Deflectors

Available for all chutes except low level kit.



Longer drums are available for improved containment of material or for loading large rectangular bales.

See options on page 4.



**6 Hydraulic Top Link**For straightforward, in-cab adjustment of drum angle and feed rate.



**Quick Hitch A-Frame**For straightforward hitching and un-hitching of the mounted models.



8 Strawberry Chute Kit
Quickly and conveniently lay
straw mulch between rows
on both sides of the tractor,
the chute kit can be fitted to
the discharge chutes on both
sides of the machine.



### Process & distribute

Load the bale into the Tomahawk Turbo Mill and set the tractor PTO running. Direct drive to the mill rotor is engaged and the onboard pump provides hydraulic power to the booster fan. Designed to process and distribute baled material with a moisture content up to 20%.

### **SUITABLE FOR**

Straw/Dry Materials

### **OUTPUT LENGTH**

8 - 60mm\*

### CAPACITY (MAX)

2500kg/hour







### Suitable for:

Poultry and cubicle bedding, pre-processing for TMR and crop mulching.

<sup>\*</sup>Designed to process and distribute baled material with a moisture content up to 20%.

## The Teagle Range

### Other machines in the Teagle Range





#### Tomahawk Feeder Bedders

No. 1 for silage and straw processing equipment, the Tomahawk range offers outstanding performance from a comprehensive range of models. If you are processing straw for cubicle housing, poultry, briquetting and pelleting, or addition of fibre to TMR we have a model to suit your application.



#### Titan rear discharge muck spreaders

From 6 - 15m³ capacity with a fine and even spread pattern. Outstanding strength and quality as standard.



#### Super-ted

High speed swath conditioners to promote faster drying. Ideal for recovery of rain damaged crops – your wet weather insurance.



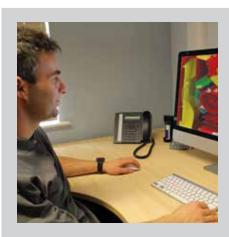
#### **Spiromix**

Deep spirals inside the drum ensure a quick and thorough mix. Easy to load through the wide mouth and is reversed to self-unload.



#### **XT Fertiliser Spreaders**

From the 234 litres single disc Compact 8 to the 1350 litres twin disc XT48 with quadruple overlap, Teagle spreaders offer simplicity, accuracy and reliability.



### Intelligent design

Teagle use state of the art software throughout the design process to ensure that strength is in-built where it is needed most.



### Customer service

For outstanding back-up we have an extensive dealer network, supported by our experienced sales team.



### Quality built & backed

To keep your Tomahawk running, Teagle distributors carry a comprehensive stock of genuine spare parts.

## **Specifications**



|                                     | Δ,.        |              |            |              |
|-------------------------------------|------------|--------------|------------|--------------|
| Specifications                      | 400 Series | 400XL Series | 500 Series | 500XL Series |
| Maximum Round Bale Diameter         | 1.2m       | 1.2m         | 1.5m       | 1.5m         |
| Maximum Rectangular Bale Size       | N/A        | 1.2m x 0.9m  | N/A        | 1.2m x 1.2m  |
| Drum Diameter                       | 1.57m      | 1.57m 1.57m  |            | 1.83m        |
| Drum Length (standard)              | 1.55m      | 3.00m        | 1.55m      | 3.00m        |
| Long Drum (optional)                | 1.85m      | N/A          | 1.85m      | N/A          |
| Overall height (from the ground)*   | 2.18m      | 2.53m        | 2.44m      | 2.80m        |
| Overall width (chute closed)        | 1.98m      | 1.98m        | 1.98m      | 1.98m        |
| Lower Chute discharge height*       | 0.4m       | 0.4m         | 0.4m       | 0.4m         |
| Upper Chute discharge height*       | 1.14m      | 1.14m        | 1.14m      | 1.14m        |
| Overall Length                      | 2.36m      | 3.77m        | 2.36m      | 3.77m        |
| Mill (see page 6)                   | 404M       | 404XLM       | 505M       | 505XLM       |
| Operating width                     | 2.06m      | 2.06m        | 2.13m      | 2.13m        |
| Operating width with Straw Giraffe  | 2.28m      | 2.28m        | 2.28m      | 2.28m        |
| Straw Giraffe discharge height*     | 1.84m      | 1.84m        | 1.84m      | 1.84m        |
| Weight                              | 904kg      | 1,167kg      | 970kg      | 1,259kg      |
| PTO power required**                | 80hp       | 100hp        | 80hp       | 100hp        |
| Chop (see page 8)                   | 4040       | 4040XL       | 5050       | 5050XL       |
| Operating width                     | 2.48m      | 2.48m        | 2.48m      | 2.48m        |
| Operating width with Silage Giraffe | 2.64m      | 2.64m        | 2.76m      | 2.76m        |
| Silage Giraffe discharge height*    | 1.53m      | 1.53m        | 1.53m      | 1.53m        |
| Weight                              | 811kg      | 1,074kg      | 877kg      | 1,166kg      |
| PTO power required - Straw**        | 60hp       | 100hp        | 60hp       | 100hp        |
| PTO power required - Silage**       | 80hp       | 100hp        | 80hp       | 100hp        |

### Key:

<sup>\*</sup> Working heights will increase by up to 1m depending on tractor \*\*Typical tractor size to provide adequate lifting capacity and stability

The company's policy is one of continuous improvement and development, therefore specifications are subject to change without prior notice.

# <u>Teagle</u>

With over 30 years experience in designing and manufacturing Bale Processors you can be confident when you choose Teagle.

Contact us today to discuss your individual requirements.

Call our Sales Desk: 01872 560592



– European Sales Manager Werner Brach +44 (0)7800 731250 werner.brach@teagle.co.uk

#### **Scotland Manager**

David Haggart 07970 136616 david.haggart@teagle.co.uk

#### North Manager

Gary Eastham 07866 532666 gary.eastham@teagle.co.uk

#### **East Manager**

David Threadgold 07970 136615 david.threadgold@teagle.co.uk

#### **West Manager**

Steve Offland 07970 462240 steve.offland@teagle.co.uk

### **South East Manager**

Chris White 07970 136614 chris.white@teagle.co.uk

#### South West Manager

Mike Sanders 07970 836705 mike.sanders@teagle.co.uk







