

# KEENAN<sup>®</sup>

an **Alltech** company

Handcrafted in Ireland  
using cutting-edge  
engineering



**Driving global farm  
profits through  
precision nutrition**

# “This is a story about two great Irish, globally-minded companies coming together”

Established in 1978, and a member of the Alltech family of companies since April 2016, KEENAN is a respected leader in ethical and profitable farming solutions, focused on maximising feed efficiency. Over the course of nearly four decades in business, KEENAN has earned a particularly strong reputation for manufacturing quality diet feeders, delivering unparalleled results on farms all over the world.

KEENAN prides itself on continuous investment into new technology for the benefit of its customers globally. The company has evolved throughout the years, combining cutting-edge technological developments with breakthrough nutritional expertise.

A keen advocate for environmental sustainability, KEENAN has developed a range of solutions to enable farmers to overcome agricultural production challenges and improve rumen health and feed efficiency.

## About Alltech

Founded in 1980 by Irish entrepreneur and scientist Dr. Pearse Lyons, Alltech improves the health and performance of people, animals and plants through nutrition and scientific innovation. With nearly 100 manufacturing sites globally, Alltech is a leading producer and processor of yeast and organic trace minerals.

The company’s guiding ACE principle seeks to develop solutions that are safe for the Animal, Consumer and the Environment and is actively supported by close to 5,000 team members worldwide.

Headquartered just outside of Lexington, Kentucky, USA, Alltech has a strong presence in all regions of the world.

For further information, visit [www.alltech.com](http://www.alltech.com)



*KEENAN Factory, Borris, Co. Carlow, Ireland.*



*Alltech Corporate Headquarters, Lexington, Kentucky.*



## The MechFiber Difference

KEENAN machines are unique in the proven nutritional benefits they deliver. Each KEENAN is engineered to use a gentle mixing action to produce evenly, thoroughly mixed, light, fluffy feed which is never over or under mixed. We call this optimal mix 'MechFiber'. The KEENAN controller, which is synced with the InTouch feed management platform ensures all feed ingredients are consistently added in the same order and ratios.

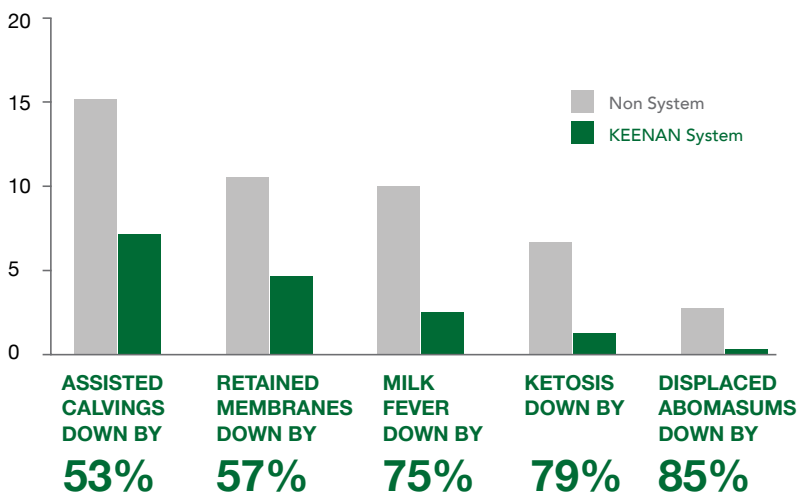
Independent trials have consistently shown that MechFiber retains the fibre structure to stimulate rumination, allows greater absorption of energy and maximised feed conversion efficiency.

## Scientific Results - MechFiber Research

Numerous scientific studies\* have corroborated what KEENAN has known for decades - the MechFiber fed rumen is healthier and as a result animals are more productive.

RESEARCH MONITORING  
24,450 DRY COWS ACROSS  
277 FARMS SHOWED THE  
FOLLOWING:

**33% reduction  
in time the  
MechFiber-fed  
rumen is below  
pH 6.0**



THE MECHFIBER  
MIX - FORAGE WITH  
STRUCTURE AS  
NATURE INTENDED

Professor Drackley of University of Illinois also found "Substantial gains in animal health" in the form of:

- More consistent intakes
- Less fluctuation in body condition
- Increased lactation persistency
- Less liver fat accumulation

**16% More Milk/kg Feed**

"Subtle changes in rumen conditions had major effects on feed efficiency"

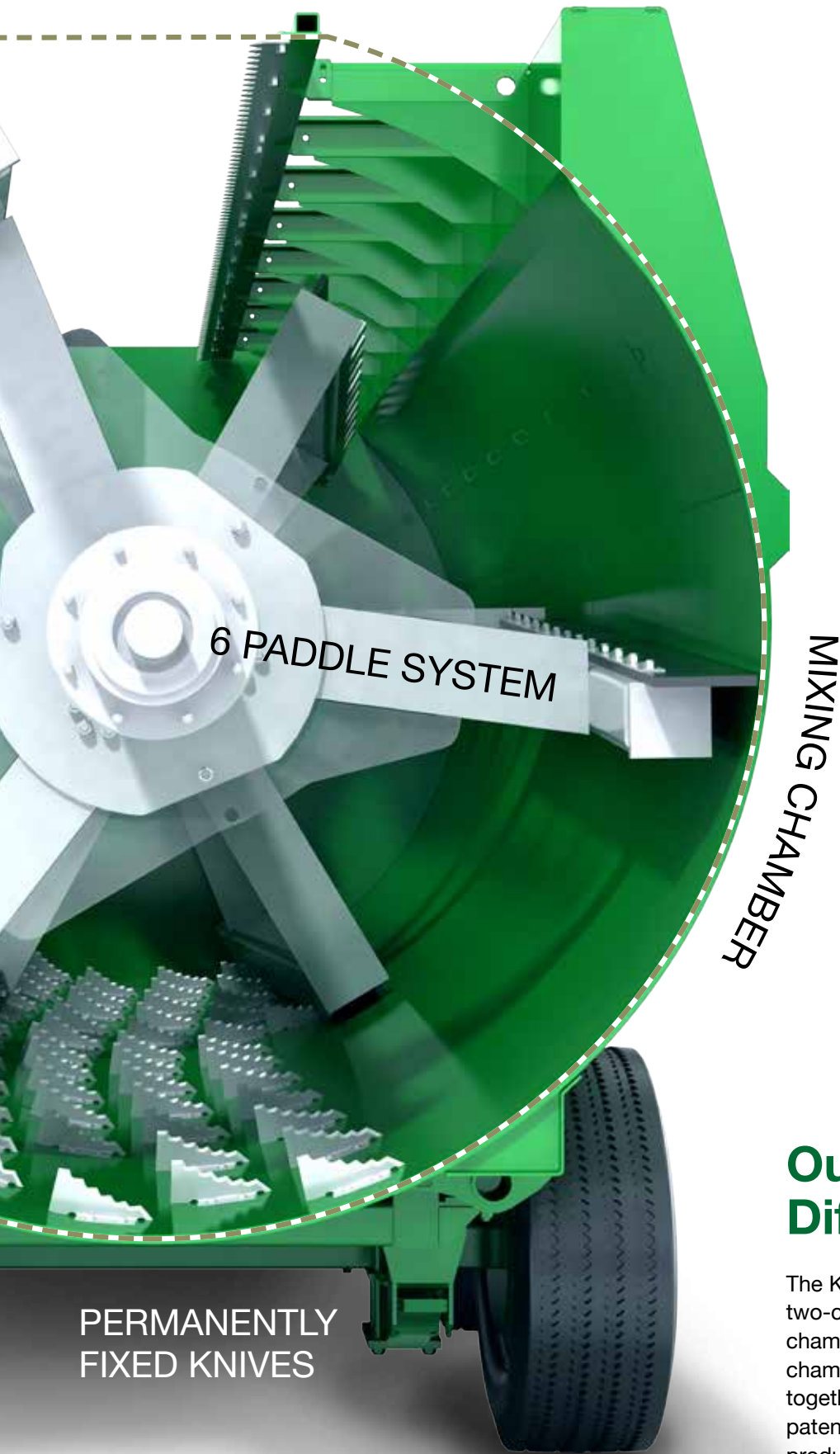
Professor Jim Drackley

\* University of Illinois 2008, University of Reading 2008 & Colman et al, 2011. Professional Animal Scientist, 27, 505-17

- Mixing chamber containing 6-paddle reel with fixed mounted knives at the bottom
- The paddles gently lift and tumble the added materials across the blades ensuring feedstuff is cut to an optimal length without destroying the quality of the fibre. This is to create a mix with the correct chop length and structure for optimum rumen health
- The two chambers are separated by an exit door which opens when the feed is mixed and ready to be fed out through the discharge chamber
- The auger is housed in the discharge chamber to evenly dispense feed to the animals. Traditional diet feeders house the auger inside the mixing chamber, which can lead to physical damage to the feed, compromising the mix quality
- InTouch Controller is connected via the internet to our InTouch monitoring software. This records and communicates ingredient weights, diets, rotations, mixing speed and mixing accuracy. Our advisors monitor this information daily to safeguard against problems on-farm

## DISCHARGE CHAMBER





6 PADDLE SYSTEM

MIXING CHAMBER

PERMANENTLY  
FIXED KNIVES

## Our Engineering Difference

The KEENAN diet feeder has a unique two-chamber system - both a mixing chamber and a separate discharge chamber. The two-chamber system, together with the 6-paddle reel and our patented fixed knives system is how we produce MechFiber - the open fluffy mix that is unique to KEENAN.

A QUALITY OF MIX THAT  
BENEFITS BOTH YOU  
AND YOUR ANIMALS.



# KEENAN Controller

The KEENAN controller is synced with the InTouch feed management platform; allowing farmers to easily measure, monitor and manage feed accuracy and efficiency, herd performance, feed costs, dry matter intake and refusals.

#### KEENAN Controller:

- Gives clear instructions on order and weight of ingredients
- Leading to maximised ration quality and consistency

#### Instant Revolutions & AutoStop:

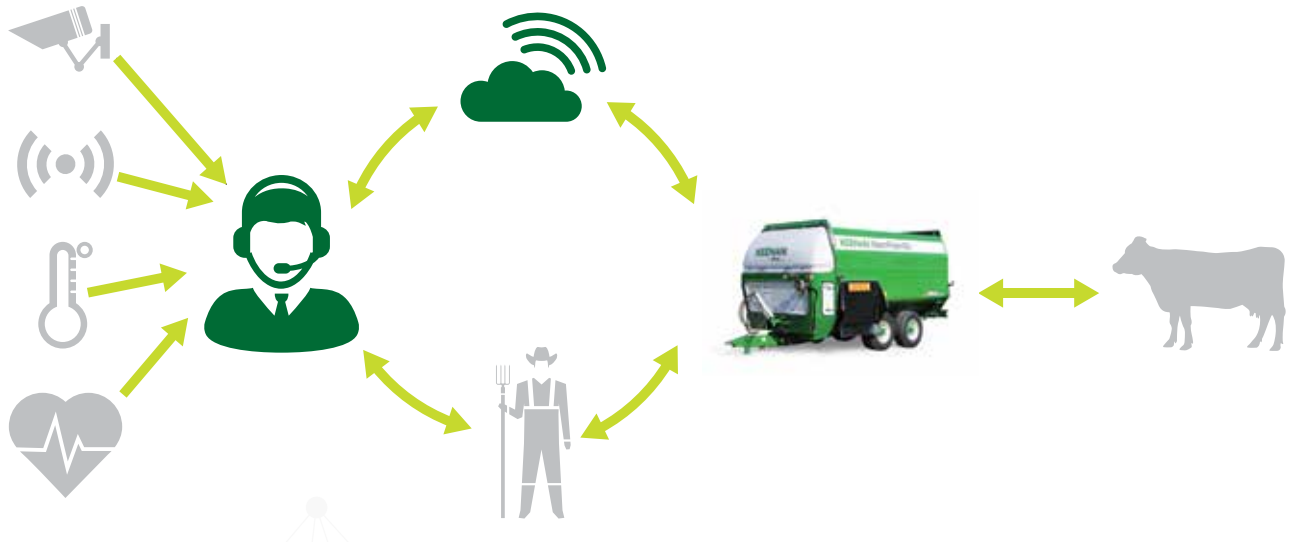
- Prevents over or under mixing of feed ingredients
- Ensures a consistent TMR in every load
- Delivers a balanced ration with every bite of feed

#### Automated Data Sharing:

- Ability to send ration changes straight from the InTouch feed management platform directly to the farmer
- Simplifies communication between the farmer, employees and trusted advisors
- Reduces time delays/labour in implementing ration changes

#### InTouch Platform – A Real Time Performance Measuring & Support Service That:

- Monitors exact inclusion rates of ration ingredients
- Audits KEENAN feeder performance
- Measures daily feed efficiency and over 20+ key performance indicators



Helping almost 2,000 farmers and animal nutritionists globally.



Feeding almost 300,000 animals.



Detailed graphs and reports on ingredients used, feed costs, herd productivity and feeding accuracy.




Real time wireless transfer of animal diets and mixing revolutions.



Global presence - Call centres in Ireland, France and New Zealand.



Providing the farmer with control, accuracy and real-time feed advice.



Easily measure, monitor  
and manage your  
feed efficiency

## Benefits of using the KEENAN controller and InTouch feed management:

- Provides accurate feed advice and ration formulation
- Delivers consistency in both feed and mixing
- Improves milk yields and milk solids
- Assists in finishing cattle quicker
- Improves herd health
- Monitors and controls feed costs





## Global Spread of KEENAN Machines

IRELAND

FRANCE

UK

DENMARK

NORWAY

SWEDEN

GERMANY

NETHERLANDS

BELGIUM

SPAIN

PORTUGAL

ROMANIA

BULGARIA

HUNGARY

CZECH REPUBLIC

SWITZERLAND

SLOVENIA

POLAND

ESTONIA

LATVIA

MOROCCO

CANADA

USA

MEXICO

VENEZUELA

PERU

CHILE

ARGENTINA

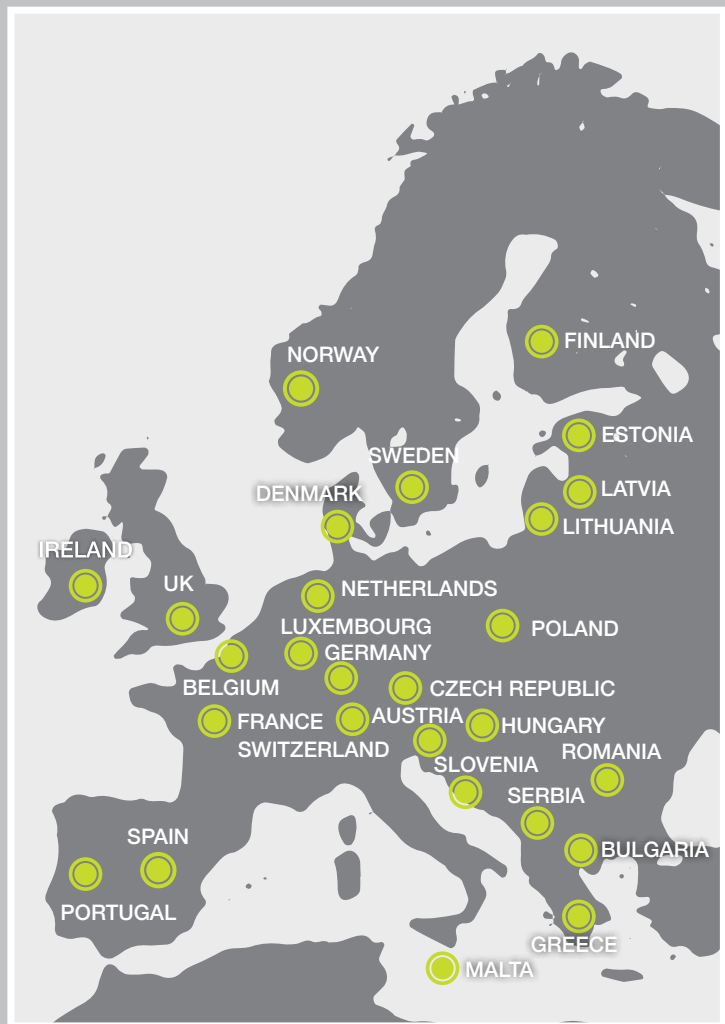
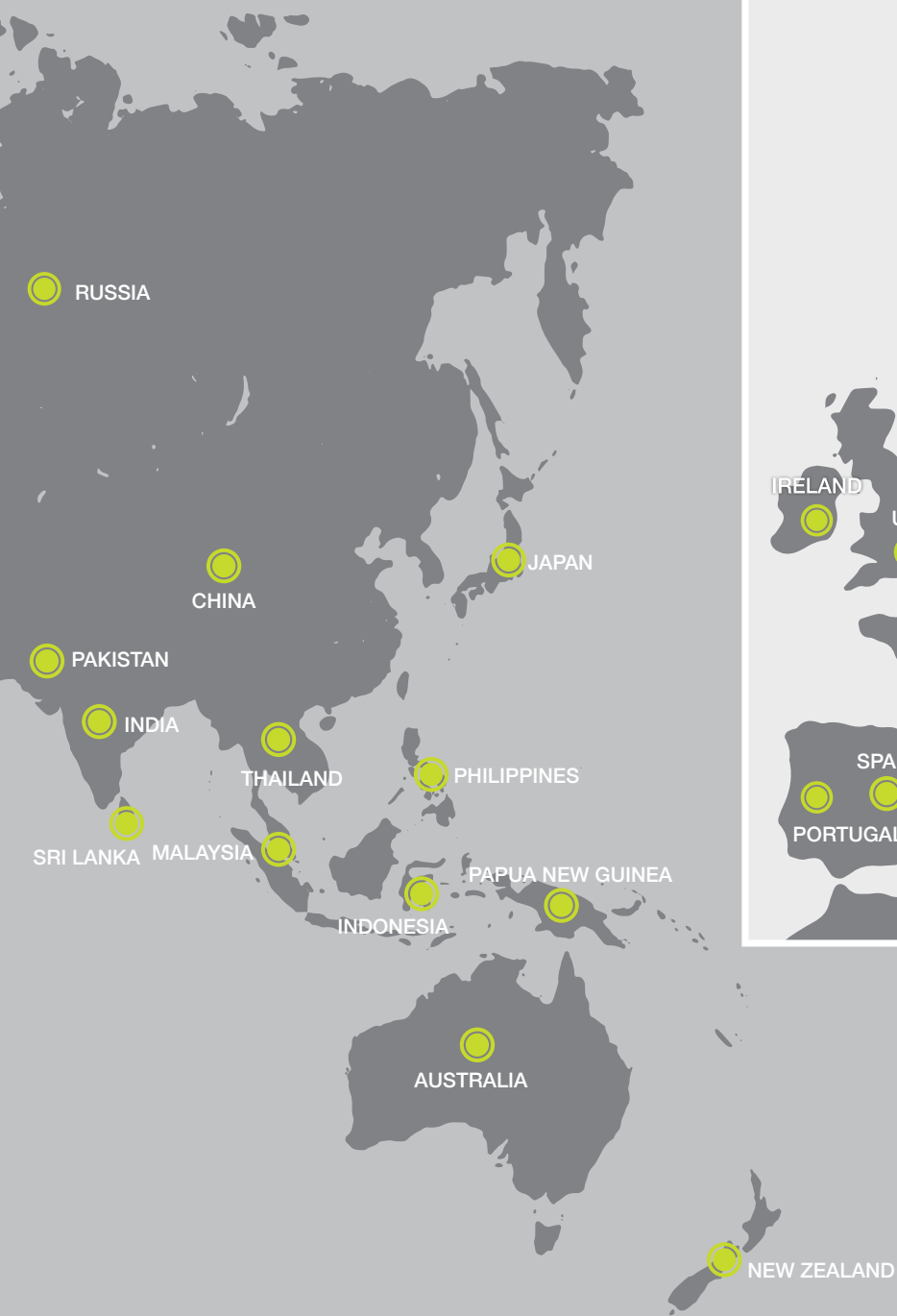
BRAZIL

CHINA

INDIA

JAPAN





MALAYSIA  
 INDONESIA  
 AUSTRALIA  
 NEW ZEALAND  
 SOUTH AFRICA  
 ZIMBABWE  
 BOTSWANA  
 KENYA

TURKEY  
 RUSSIA  
 ICELAND  
 ZAMBIA  
 LITHUANIA  
 MALTA  
 CYPRUS  
 GREECE

FINLAND  
 SRI LANKA  
 PHILIPPINES  
 SAUDI ARABIA  
 UAE  
 OMAN  
 YEMEN  
 COLOMBIA

MAURITIUS  
 SENEGAL  
 SURINAME  
 SUDAN  
 PAKISTAN  
 NAMIBIA  
 THAILAND  
 AUSTRIA

HONDURAS  
 LUXEMBOURG  
 PAPUA NEW GUINEA  
 SERBIA  
 UGANDA

## Optional Extras - Customise Your KEENAN

MACHINES ARE BUILT TO ORDER,  
ALLOWING FOR CUSTOMISATION  
OF EACH MACHINE TO SUIT THE  
INDIVIDUAL NEEDS AND A VARIETY  
OF FARM SET-UPS.



### BALEBLEND

An optional extra for those who use a large proportion of baled forage in their farming operation. BaleBlend ensures a fast, even and consistent intake of round and square bales of all forage types.



### EMPTYING

The emptying of the KEENAN machine can be adapted to suit various feeding systems. This means that it can be placed either to the front or to the rear of the machine. Double output to the rear of the machine is also possible if desired.

KEENAN machines are handcrafted using cutting edge technology in our world class manufacturing plant in Borris, Co. Carlow, Ireland. Each machine can be provided either as a trailed unit or as a stationary unit driven by an electric motor. Feeders come in a range of sizes from 8 cubic metres to 28 cubic metres.



## CONVEYORS

Choose between different conveyors, either fixed or mobile, and with various lengths. The conveyors are also suitable for use with belt feeder systems.



## LINERS

Some customers opt to add either a hardened steel or plastic liner in the mixing chamber of the KEENAN. This liner gives the body of the machine a longer life.



## MAGNETS

Different options for the feed out tray are available - in particular, the tray can be provided with or without industrial-strength magnets.



## AXLES/WHEELS

KEENAN machines can be supplied with either single or twin axles. Axles can be spring mounted to absorb load impact. Wheel options can be varied subject to driving terrain and axle type.



# KEENAN®

MechFiber Self-Propelled

## Introducing the KEENAN MechFiber Self-Propelled range of diet feeders:



- Consistently delivering the patented KEENAN MechFiber mix, with the capacity of 16m<sup>3</sup> to meet the requirements of farms of all sizes
- Heavy duty sealed oil bath drive system
- Featuring exclusive STORTI mechanical transmission reducing fuel consumption up to 25%



- Cutter head designed & tested to ensure protection of forage structure for optimum mix quality
- Ultimate in operator comfort and control with twin video cameras and in-cab monitor for visibility, climate control and pneumatic seat
- Reduced noise and running costs

The operating system of the KEENAN MechFiberSP range has been cleverly designed for ease of maintenance and features a mechanical drive to the six-paddle reel.

This exclusive engineering system, by means of a specially designed gearbox and PTO shaft, transfers all the power from the engine to the mixing system, thus reducing fuel consumption by up to 25% as well as reducing maintenance costs.



#### **Class-leading cutter head technology**

The cutter head used in the KEENAN MechFiber SP range has been engineered to deliver rapid loading of a vast number of products (grass silage, hay, waxy maize, pulp, pellets, flour, square or round bales of straw or hay, etc.) leaving a clean, uniform face for optimum pit face management.

The tungsten-coated blades feature a unique crossed arrangement, performing clean cuts without damaging the structure of the fibre, even with very compact silages.

#### **Speed. Precision. Versatility.**

The unique placement of the blades and configuration of the loading channel allows the cutter to load in both directions. High speed loading belt drastically reduces the preparation time.



# Proven Performance Benefits













Brand	Silage fiber destruction			Loading hay (large bale format)				Engine Rpm
	Average length from the silo (mm)	Average length from the inlet belt (mm)	Destruction (mm)	Destruction (%)	Load (400kg)	Time in "min"	Flow t/min	
Mutti	9	8.01	0.71	8.14%	415	7'33	55	2500
Faresin	9.3	8.2	1.1	11.83%	410	3'39	112	2000
Kuhn	9.74	8.67	1.07	10.99%	400	2'01	198	2500
Taarup Kverneland	8.89	8.08	0.81	9.11%	400	4'08	97	2000
Sgariboldi	9.4	8.7	0.7	7.45%	410	7'28	55	1800
Rmh	9.23	7.92	1.31	14.19%	410	1'50	224	1750
<b>Storti</b>	<b>9.14</b>	<b>8.76</b>	<b>0.38</b>	<b>4.16%</b>	<b>420</b>	<b>1'15</b>	<b>336</b>	<b>1800</b>

Extensive testing at INRA in France in 2012 has shown the Storti design of cutter head and loading arm outperformed the competition.

- 50 - 200% less silage fibre destruction
- Up to 6 times faster loading
- Highly efficient engine RPM



# MechFiber Machine Specification

		MACHINE	HEIGHT MM (INCHES)**	WIDTH MM (INCHES)	LENGTH (INCHES)
Page 12		MechFiber345SP	3,040 (120)	2,550 *** (100.5)	9,640 (380)
Page 18		MechFiber400	3,421 (134.5)	3,009 (118.5)	7,600 (299)
Page 19		MechFiber380	3,201 (126)	2,819 (111)	7,600 (299)
Page 20		MechFiber370	3,200 (126)	2,856 (112.5)	7,250 (285.5)
Page 21		MechFiber365	3,020 (119)	2,665 (105)	7,250 (285.5)
Page 22		MechFiber350	3,112 (122.5)	2,856 (112.5)	6,250 (246)
Page 23		MechFiber345	2,932 (115.5)	2,619 (103)	6,250 (246)
Page 24		MechFiber320	2,805 (110.5)	2,541 (100)	6,250 (246)
Page 25		MechFiber300	2,660 (104.5)	2,482 (97.5)	6,250 (246)
Page 26		MechFiber280	2,563 (101)	2,380 (93.5)	6,250 (246)
Page 27		MechFiber270	2,694 (106)	2,541 (100)	4,850 (191)
Page 28		MechFiber250	2,523 (99.5)	2,380 (93.5)	4,850 (191)

\*Payload = Maximum design payload. Number of animals/load is dependent on ration composition & dry matter of materials being loaded.  
 \*\*Height and width will vary depending on axle/tyre combinations and optional extra selection, please contact your local KEENAN representative to ensure correct machine is chosen to suit your farm layout.

MM	PAYLOAD KG (LB)*	MIX CAPACITY M <sup>3</sup> (FT <sup>3</sup> )	HORSEPOWER	MILKING COWS/LOAD	BEEF FINISHERS/LOAD
	6,000 (13,225)	16 (565)	170	65-100	130-200
	10,000 (22,045)	28 (990)	120	140 - 200	300 - 400
	9,000 (19,840)	24 (848)	115	120 - 170	240 - 320
	8,000 (17,635)	20 (706)	105	100 - 140	200 - 280
	8,000 (17,635)	20 (706)	105	100 - 140	200 - 280
	5,500 (12,125)	17 (600)	90	85 - 120	170 - 220
	6,000 (13,225)	16 (565)	90	65 - 100	130 - 200
	3,800 (8,378)	14 (494)	80	55 - 85	110 - 170
	3,800 (8,375)	12 (424)	80	48 - 72	96 - 144
	2,750 (6,750)	11.5 (406)	70	50 - 60	100 - 120
	3,000 (6,615)	10 (353)	70	40 - 60	80 - 120
	2,500 (5,510)	8 (283)	55	30 - 50	60 - 100

\*\*\*MechFiber345SP Machine Width increases to 2590mm if optional side mounted ladder is fitted.



# KEENAN<sup>®</sup> MechFiber400



The largest paddle diet feeder in the KEENAN range, the KEENAN MechFiber400 sets new standards for mixing. Its heavy duty four chain drive system allows for high work rates, durability and trouble free operation. The heavy duty chassis with spring mounted drawbar is designed to improve weight transference and stability when driving.

# KEENAN<sup>®</sup> MechFiber380



The KEENAN MechFiber380 is designed for the farmer who wants to feed large numbers of animals in a short period of time. Aesthetically closer to the KEENAN MechFiber400, it retains the manoeuvrability of the smaller KEENAN MechFiber365. The two front doors ensure easy access to the sealed oil-bath unit for maintenance.



# KEENAN<sup>®</sup> MechFiber370



The KEENAN MechFiber370 is the ideal machine for the farmer who requires a highly manoeuvrable machine with high capacity. The wide mixing chamber encourages greater tumbling of feed during mixing which helps keep power requirement low. Like all KEENAN diet feeders, it will produce the same high quality MechFiber ration with 500kgs as at full capacity.



# KEENAN<sup>®</sup> MechFiber365



The KEENAN MechFiber365 is the first machine of the medium sized range to be designed with a heavy duty sealed oil-bath drive system. The two chain driveline is self-lubricating, reducing the loading on the chains and sprockets and increasing their working life. A central greasing manifold allows all front bearings to be greased from one location.

# KEENAN<sup>®</sup> MechFiber350



The design of the KEENAN MechFiber350 make it the perfect mid-range machine for incorporating high levels of dense fibrous material into diets. The wide mixing chamber creates more space for the gentle tumbling action that produces the KEENAN MechFiber ration consistently. This high volume machine is capable of discharging feed over barriers 1,346mm (53") high.

# KEENAN<sup>®</sup> MechFiber345



The KEENAN MechFiber345 has a similar footprint to the KEENAN MechFiber320, offering a bigger mixing capacity (up to 35% greater) and featuring an enlarged mixing chamber. It features an oil bath driveline with automatic chain lubrication system for easy maintenance and central greasing of all front bearings from one location.

- Self-lubricating two-chain driveline
  - Reducing loading on chains & sprockets
  - Increases their working life



# KEENAN<sup>®</sup> MechFiber320



The KEENAN MechFiber320 is one of the most popular models in the KEENAN range. It is a highly versatile machine and adaptable to most feeding operations. Like all KEENAN diet feeders, it will produce as high a quality MechFiber ration with 500kgs as at full capacity. The machine can discharge over 1,181mm (46.5") without additional modifications.

# KEENAN<sup>®</sup> MechFiber300



The KEENAN MechFiber300 is the perfect machine for the medium sized operator with limited space. Its narrow footprint comes from a smaller diameter discharge auger located lower on the side of the machine. The front driveline includes an auxiliary drive shaft more evenly distributing the input power requirement of the machine.



# KEENAN<sup>®</sup> MechFiber280



The KEENAN MechFiber280 is designed as a higher capacity machine with a low overall height and narrow footprint. It is ideally suited to farms where space is limited. The gentle paddle mixing action produces a consistent ration while maintaining the important quality KEENAN MechFiber ration structure.



# KEENAN<sup>®</sup> MechFiber270



Also from the smaller range of KEENAN feeders, the KEENAN MechFiber270 affords greater flexibility around the farm. With a build similar to some medium size range diet feeders allows for the addition of BaleBlend technology if required. It can offer a discharge height to feed over barriers of up to 1,070mm (42") without any extra modifications.

# KEENAN<sup>®</sup> MechFiber250



The KEENAN MechFiber250 is the smallest six paddle machine in the range. With an overall height from as little as 2,328mm (91.5"), this is an ideal machine for smaller farms. As with all KEENAN machines, the simple two-chain drive system and externally mounted bearings ensure a low maintenance machine.

# KEENAN<sup>®</sup> ProMix

The KEENAN ProMix is an industrial machine developed for high throughput industrial applications. It incorporates patented mixing, management and control technologies. Preserving the original KEENAN philosophy of simplicity in design and ease of use and maintenance, the KEENAN ProMix has the flexibility to be built for multiple applications.





# KEENAN® OrbitalSpreader

The KEENAN OrbitalSpreader is a heavy duty versatile muck spreader. It is capable of high work rates, with trouble free spreading of a wide range of farm and commercial wastes. It delivers a uniform spread pattern up to 20 meters wide. Material is pushed to the front for discharge ensuring better weight transfer minimising soil compaction.



# KEENAN Accredited Service and Genuine Spare Parts



## Why KEENAN Accredited Service?

No one knows more about your machines than our skilled KEENAN service engineers. We are committed to ensuring that you are 100% satisfied with your KEENAN machine at the point of purchase and any day after – our established KEENAN network is there to help.

## Why KEENAN Genuine Spare Parts?

Only KEENAN genuine spare parts are used by our KEENAN engineers. These are specifically designed for KEENAN – tried and tested, having stood the test of time in all of our KEENAN machines worldwide. Ensuring maximum reliability and delivery of the proven nutritional benefits that are associated with a KEENAN.

## We are here to help

Our sales, aftersales and parts centre provide you with the very best products, service, advice and customer care. Get in touch to ensure your machine will give you a long, trouble-free life and retains its re-sale value. We provide a 24-hour emergency machine back-up service 365 days per year.

**To find your local service agent, visit:**

**[Alltech.com/keenan/parts-services](http://Alltech.com/keenan/parts-services)**



KEENAN-trained  
Service Engineers



KEENAN Genuine  
Spare Parts



Service support  
when you need it most

## NEVER MISS A FEED!

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