



Thompson Meat Machinery

4000 Series Mixer Grinders



*Standard Height
Model 4200 Frozen*

LEADING MANUFACTURERS OF MEAT PROCESSING MACHINERY

The Thompson 4000 Series of Mixer Grinders

Used extensively in high production facilities throughout the World, the 4000 Series is renowned for its outstanding performance and reliability.

The **CONSTRUCTION** of the 4000 Series is Robust and built to last. Manufactured from **high quality Stainless Steel** a strong structured framework supports a thick gauge mixing bowl and panels that are **fully seam Welded both inside and outside the bowl.**

The standard height machines incorporate a **heavy gauge domed lid** with an open gridded section for ingredients adding or viewing of the mix cycle.

An ingredients or liquids pouring channel is also offered as an option.

The **strong built mixing paddle** manufactured from full stainless steel is standard with a choice of either **Tinned or Stainless Steel grinding heads and feedscrews.**

The **4000 Series** has been designed and developed to the high standards of safety and finish demanded by **CE / USDA and GS** regulations.

All models specifically incorporate the *****"smart design" mixing bowl and paddle** and are finished with **smooth hygienic surfaces** to panels and welds to achieve a clean bowl on product discharge and ease the cleaning down process at the end of production.



Standard 4000 Model
15 kw - 2 Speed Grind Motor - 56 Cutting Head with Stainless Steel barrel, Feedscrew and Aluminium Bronze Lock Ring

The **TRANSMISSION** drives are **independent direct drive design.** No more oily greasy chains, no more continual maintenance of pulleys and belt drives.

Smooth, compact and quiet the **robust drives** are very efficient in transmitting maximum power from **large kW motors** - featuring a **standard 2 speeds** on the feedscrew drive with **High Torque** on low speed.

Both feedscrew and mixing drives have been engineered and developed over many years of research optimising RPM's and involving many varied processing applications.

The **PERFORMANCE** of the 4000 Series speaks for itself.

Time and again sausage manufacturers have commented about the processing capabilities of the 4000 machines.

****Specifically designed paddle blade angles and configurations** ("smart design") maximise the product displacement and movement within corresponding mixing bowls that have been specifically contoured to accentuate the mixing action.

Within the **reciprocating mixing paddle cycle**, product is free tumbled from top to bottom to top and from corner to corner within the bowl to deliver a very homogeneous mix within a short time period.

Sausage mix is quickly yet gently mixed and consistently amalgamated and separated.

The 4000 mixing cycle is controlled by a factory "pre-set" or easily adjusted reciprocating mix cycle that achieves a well distributed particle mix for coarse ground high definition products or emulsified evenly seasoned products.

The **56 size cutting head** (standard on the 4000 Series) or the **optional 66** (8 5/8" diameter) cutting head deliver high production rates to a variety of products from hard tempered or flaked frozen meat to light fresh mince.

Fed by feedscrew designs that have been mastered and evolved over a long history the Thompson 4000 delivers a constant feed to a cutting head that itself is at the cutting edge of technology - delivering a **clean cutting action.**

The mixing bowl and cutting head features all combine to offer a very **homogeneously mixed product** with a high definition cut in short mix/grind cycles, therefore limiting heat rise to the product.

Consider the following production rates - **56 head;**
4000 kG / hour 12mm grind plate (66 kG / minute)
3000 kG / hour 5mm plate (50 kG / minute)
2000 kG / hour 3mm plate (33 kG / minute)

or with the **OPTIONAL - 66 head;**
4500 kG / hour 12mm grind plate (75 kG / minute)
3600 kG / hour 5mm plate (60 kG / minute)
2800 kG / hour 3mm plate (46 kG / minute)
(Dependent upon the product and temperature of the product)

SAFETY FEATURES on the 4000 Series are plentiful since the machine was also developed with safety as a premium concern, conforming to the high demands of local and overseas regulations.

The **safety interlocked lid** is a standard feature on all machines incorporated with a maximum stop time on the machine cycle, limiting any possibility of human interference with rotating parts.

A **safety interlocked discharge guard** is also a standard feature.

A **feedscrew ejector** can be built into the machine to reduce the risk in removing knives, plates and feedscrews. **(The feedscrew ejector is a standard feature of the CE designed machines.)**

Standard height machines are designed for ergonomic low load heights.

On the raised machines (built for 200 L bin feed and discharge) **the inspection step and optional platform** are **safety interlocked** and offered with the lid or no lid option including the **inspection mirror** option.

OPERATOR CONTROL of the 4000 Series machines is very straightforward and **user friendly.**

From the simple 3 push button machine as a standard - to optional degrees of control:
Variable speed dial control / Programmable pre-select speed control / or full Programmable logic control.

GEMINI SYSTEMS The connection of two Machines to incorporate a continuous system or process.



Powerful two speed grind motor with high torque direct drive transmission.

Raised 4200 Model
15 kw - 2 Speed Grind - 56 Head with Stainless Steel barrel, Feedscrew and Aluminium Bronze Lock Ring



Connecting a **Optional Thompson 200L Loading Hoist and Bin**

Primary Machine - Grinder or Mixer Grinder - for the Primary hole plate grind, the ground product is then fed to the Secondary machine continuously for secondary processing.

Product transfer is achieved by a safety interlocked Gemini transfer tube.

Operating as a continuous grind operation - 1st grind to 2nd grind (even double cut on the secondary machine), it can also be used as a continuous sausage mix line - 1st grind to secondary mix and final grind process.

The machines can also be as easily separated in the event that two separate processing applications may be required.

The Thompson gemini system allows a 4000 Series machine to be connected in tandem with multiple machines including non Thompson machines.

The Gemini system is an ideal solution for continuous grinding of one product at high volume production.

Standard 4000 Model
15 kw - 2 Speed Grind - 56 Head
Gemini Connection - available to various machines

The Thompson 4200 FROZEN Mixer Grinder

Incorporating all of the strength and features of the 4000 Series the 4200 FROZEN MIXER GRINDER has been designed and constructed to withstand the higher forces and demands of processing hard frozen product.

The Construction of the **heavy duty reinforced bowl and paddles** have been **structurally engineered** to process **tempered blocks** at - 1°C. (Block dimensions 150 x 150 x 400 mm) or Frozen pre cut pieces.

The **frozen feedscrew** is uniquely designed with an **infeed bellow** in the channel to the barrel. This Bellow incorporated with the specific flight design to the feedscrew **cuts the product** into small pieces and feeds to the **large 66 size cutting head.**

Powerful motors with high torque transmissions achieve **high production rates on coarse grind** with a hard dry product.

With all the benefits of the **4000 Series MIXING** system and incorporating the **2 speed grind motor** the **4200 FROZEN** model is a very versatile machine to many production requirements.

Used for **FROZEN PRE-GRINDING ON 1st SPEED** it can be as easily utilised for **HIGH PRODUCTION PROCESSING ON FRESH MINCE OR SAUSAGE EMULSION ON THE HIGHER 2nd SPEED.**

Optional:
Inspection Mirror

Optional:
Safety Interlocked Step and Platform

Optional: Feedscrew Ejector (standard on CE machines)

Safety Interlocked Discharge Guards

Independent Direct Drives

Heavy Duty Bowl and paddle - frozen 4200



4 kW Paddle Drive

Heavy Duty Levelling Pads on high clearance stainless steel stands (raised machines)

4200 Frozen Model (raised machine)
15 kw - 1st Speed Grind for Frozen
15 kw - 2nd Speed Grind for Fresh

Selecting the Right Machine

The strong rugged design of the 4000 Series has been developed to meet the needs of the most demanding Market Segments.

From the high volume butcher to the large wholesaler through to the largest Industrial Plants.

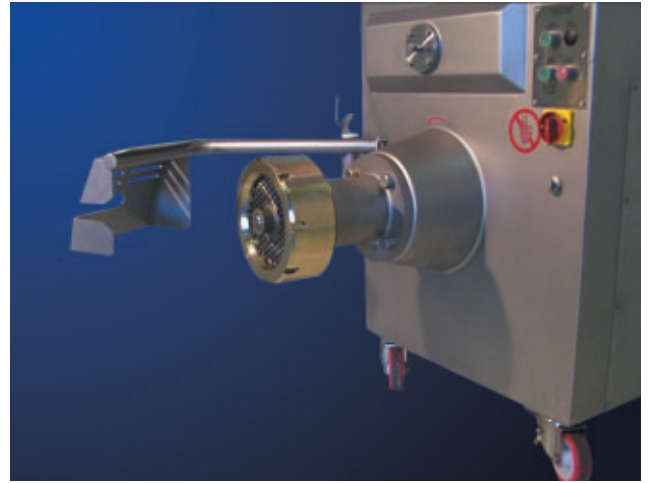
Low load standard height machines or raised machines (see technical specification).

Offering **bowl capacities from 200 L to 400 L** the 4000 model best suited for your application can be selected from the following:

Models in the Series include;

4000-56	standard or raised machine - 200 L bowl	56 Size cutting head
4200-56	standard or raised machine - 300 L bowl	56 Size cutting head
4300-56	standard or raised machine - 400 L bowl	56 Size cutting head
4200 Frozen-66	standard or raised machine - 350 L bowl	66 Size cutting head (FLAKED or GUILLOTINED FROZEN PIECE APPLICATIONS)

All machines are available with 56 or 66 cutting head options.



Optional: 66 Size Head and Safety Interlocked Discharge Guard fitted to a Stainless Steel Barrel, Feedscrew and Aluminium Bronze Lock Ring.

Production Performance kG / Hr (based on -1C to +4C meat temp)

Machine / Model	Muscle & Trim:			Sausage Emulsion:	
	1/2" hole plate	1/4" hole plate	1/8" hole plate	1/4" hole plate	1/8" hole plate
4000 / 4200 / 4300 - 56 Cutting Head	4000	3000	2000	2700	2000
4000 / 4200 / 4300 - 66 Cutting Head	4500	3600	2800	3200	2500

Production rates are dependent upon the product and temperature of the product.
Thompson Meat Machinery recommends SPECO knives and plates as their preferred cutting system.

Production Performance kG / Hr:

(based on -15C Flaked to "Tempered" meat temp):

Machine / Model	1/2" hole plate	5/16" hole plate
4200 Frozen-56 or 66	3000	2500

Shipping Specifications:

Machine / Model	Ship Size (mm)	Ship Weight (kG)
4000-56 (Std)	1600 x 990 x 1700 H	600
4200-56 (Std)	1800 x 990 x 1800 H	860
4300-56 (Std)	2170 x 990 x 1910 H	980
4200 Frozen-56 or 66	2170 x 990 x 1910 H	1040

Options

- Variable speed drives
- Controllable mix / grind cycles
- PLC pre-set programmable control
- Product temperature readout
- Tinned or stainless steel cutting heads
- GEMINI connection / systems
- Pneumatic Lid Operation
- Vacuum
- CO2 Cooling
- Debone / Degristle System
- Feedscrew / knife & plate trolley
- Ingredients / Liquid Chute in lid
- Load Cells to Mixing Bowl
- Feedscrew Ejector

The OPTIONAL 66 SIZE HEAD

With the 66 Size head the **outstanding processing performance** and capabilities of the 4000 series machines are **further improved**.

The flared head design and the **8 5/8" diameter knives and plates** of the 66 Size **increases production** rates on fresh mince and sausage emulsions by as much as **20 %** over the 56 Size head.

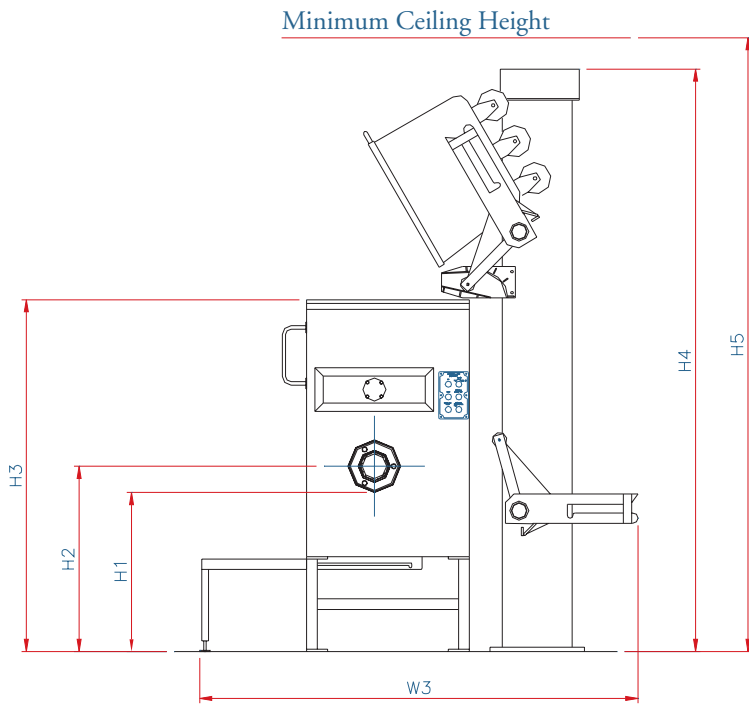
The larger surface area of the 66 cutting set also makes **lighter work of the processing of harder products** - such as tempered or frozen flaked meat.

Production rates and the **definition of cut is improved** and the 66 head is **recommended** as a very favourable **option** to a STANDARD 4000 Series machine when higher demands of processing are required.

The 66 Size head compliments the powerful motors and tough direct drives of the 4000 Series offering the option of further gains in grinding capabilities.

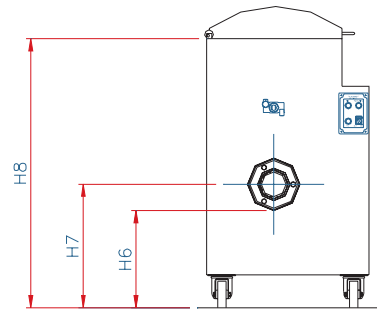
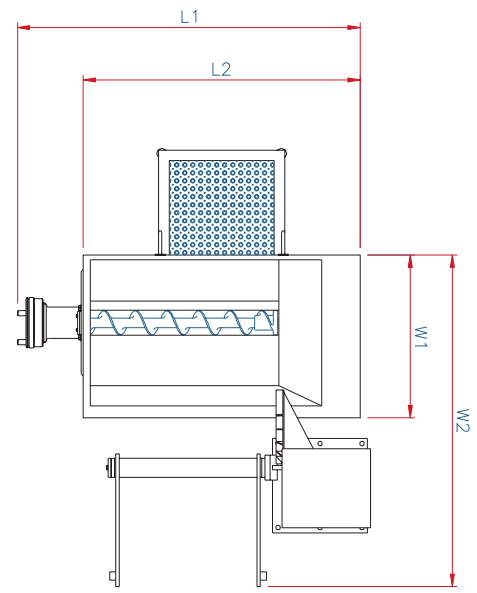
Manufactured in accordance with CE / USDA and GS regulations.

4000 Series Technical Specifications



Minimum Ceiling Height

Raised Machine(s)
200L Bin Discharge



Standard Machine

Dimensions (mm):

Machine / Model	H1	H2	H3	H4	H5	H6	H7	H8	L1	L2	W1	W2	W3
4000-56 (Std)						465	585	1275	1302	1000	770		
4000-56 (raised)	760	880	1570	N/A					1302	1000	770	N/A	
4200-56 (Std)						465	585	1375	1585	1280	770		
4200-56 (raised)	760	880	1670	2965	3150				1585	1280	770	1710	2210
4300-56 (Std)						465	585	1475	1902	1600	770		
4300-56 (raised)	760	880	1770	2965	3150				1902	1600	770	1710	2210
4200-Frozen (Std)						465	585	1470	1900	1610	770		
4200-Frozen (raised)	760	880	1765	2965	3150				1900	1610	770	1710	2210

Dimensions may vary as in the course of development:

Technical Specifications (based on 415V / 50hz):

Machine Model	Bowl Capacity	Mix Capacity	Mixer Motor	Grind Motor	**Power Supply	Full Load Current
4000-56	200 Litre	150 kG (fresh trim)	1.5 kW	15 kW - 2 speed	50 A	32 A
4200-56	300 Litre	1 x 200L bin	2.2 kW	15 kW - 2 speed	50 A	33 A
4300-56	400 Litre	1.5 x 200L bin	4 kW	15 kW - 2 speed	50 A	37 A
4200 Frozen - 56	350 Litre	1 x 200L bin (90kG Frozen flake - beef)	4 kW	15 kW - 2 speed or single speed	50 A	37 A
4200 Frozen - 66	350 Litre	1 x 200L bin (90kG Frozen flake - beef)	4 kW	15 kW - 2 speed or single speed	50 A	37 A

**Machine Power supply to be fitted with a "D" curve motor start circuit breaker:
Overload protection to motors



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