

# scansteel foodtech

Mixer Programme & Mixer/Grinder  
Programme From 200 L To 6250 L



- Meat And Poultry Industry
- Pet Food Industry
- Cheese Processing Industry



Twin Shaft Mixer series, TSMI



Twin Shaft Mixer/Grinder,  
Intermeshing series, TSMIG



Twin Shaft Mixer series, TSM



scansteel foodtech supplies a full range of Mixers and Mixer/Grinders for the global food processing industry as well as the global pet food industry. Our Mixer and Mixer/Grinder programme comprises the following types and sizes:

**STANDARD MIXERS & MIXER/GRINDERS:**

Twin Shaft Mixers	TSM - From 250 Litres – 6250 Litres
Twin Shaft Mixers Vacuum	TSMV – From 250 Litres – 6250 Litres
Twin Shaft Mixer/Grinders	TSMG.700/200 – TSMG.3250/300
Single Shaft Mixers	SSM – From 250 Litres – 12.000 Litres
Single Shaft Mixers Vacuum	SSMV – From 250 Litres – 12.000 Litres

**INTERMESHING MIXERS & MIXER/GRINDERS:**

Twin Shaft Mixers, Intermeshing	TSMI – From 250 Litres – 6250 Litres
Twin Shaft Mixers, Intermeshing, Vacuum	TSMIV – From 250 Litres – 6250 Litres
Twin Shaft Mixer/Grinders, Intermeshing	TSMIG.700/200 – TSMIG.3250/300

The scansteel foodtech Mixer and Mixer/Grinder programme will meet ALL your requirements to mixing and grinding. Our range goes from Single Shaft and Twin Shaft Mixers to Twin Shaft Mixers either with Vacuum or with Grinder unit with a wide range of optional extras such as, but not limited to: Heating and/or cooling functionality.

scansteel foodtech Mixers - whether Standard TSM type or Intermehsing TSMI type - are extremely versatile and meet almost any product application, you might require, such as:









- Sausage pre-blends/pre-mixes
- Hamburger and patty pre-blends
- Poultry nuggets – lean and extended recipes
- Pizza topping and dry sausage blends
- Meat standardization
- Ham tumbling and vacuumizing
- Heating / cooking / cooling
- All types of pet food pre-blends for wet as well as dry pet food applications



### STANDARD – TSM TYPE MIXERS:

Two mixing wings positioned side by side at the same height from floor level. 250 Litres to 6250 Litres mixing container volumes. The square shaped mixing container contributes to scansteel foodtech's very short mixing times, 2 units of frequency converters control the mixing wing speed (depending on the customer specifications).

Please note that the scansteel foodtech TSM Mixer and Mixer/Grinder programmes, as a standard, are equipped with 4 (four) mixing wing directions:

Left wing	Right wing	Explanation of mixing wing rotation options for the TSM series
		Left wing clock wise – right wing clock wise
		Left wing counter clock wise - right wing counter clock wise
		Left wing clock wise – right wing counter clock wise
		Left wing counter clock wise – right wing clock wise

For gentle mixing to intensive stirring. Two outlet gates for fast discharge or, alternatively, one large centre discharge gate. Vacuum version (V) for control of pre-mix density, curing/tumbling, and protein extraction.

The scansteel foodtech Twin Shaft Mixers with Vacuum are ideal for mixing applications that require air evacuation prior to emulsifying, filling/stuffing, or forming. With cooling, it is also ideal for (heavy) extended products such as meat balls, luncheon meat, and patties. The unique mixing action with high peripheral wing speed gives superior protein extraction, uniform distribution of spices, additives and liquids, and provides efficient salt activation of the salt soluble meat proteins (protein extraction).





**INTERMESHING – TSMI TYPE MIXERS:**

Two mixing wings positioned at two different heights from floor level. 250 Litres to 7500 Litres mixing container volumes. The square shaped mixing container contributes to scansteel foodtech’s very short mixing times. 1 unit frequency converter controls the mixing wing speed (depending on the customer specifications).

Please note that the scansteel foodtech TSMI Intermeshing Mixer and Mixer/Grinder programmes are equipped with 2 (two) mixing wing directions:



Discharge section of a TSMI

Left wing	Right wing	<b>Explanation of mixing wing rotation options for the TSMI series</b>
		Left wing clock wise – right wing counter clock wise
		Left wing counter clock wise - right wing counter clock wise

For gentle mixing to intensive stirring. Two outlet gates for fast discharge or, alternatively, one large centre discharge gate. Vacuum version (V) for control of pre-mix density, curing/tumbling, and protein extraction.

The scansteel foodtech Twin Shaft Mixers Intermeshing with Vacuum are ideal for mixing applications that require air evacuation prior to emulsifying, filling/stuffing, or forming. With cooling, it is also ideal for (heavy) extended products such as meat balls, luncheon meat, and patties. The unique mixing action with high peripheral wing speed gives superior protein extraction, uniform distribution of spices, additives and liquids, and provides efficient salt activation of the salt soluble meat proteins (protein extraction).



Dry and wet pet food

## BENEFITS:

- Complete stainless steel construction.
- Safety equipment for CE conformity.
- Low energy consumption.
- Ideal for frozen meat and fresh/frozen mixtures.  
A flexible and high-performance mixing is given with both a high peripheral wing speed and a gentle handling of mentioned raw materials.
- High volume utilization with short mixing and discharge times. The configuration of the mixing container will provide you with a cost efficient mixing of your product.
- Minimum product residues and cross-mixing of batches, also including fully separated and sealed hygienic zone preventing any possible cross contamination.
- Various lid configurations: rear, or side hinged. Optional as pneumatically operated.
- The TSMIG type Mixer/Grinder provides you with TWO machine options:

### Option 1:

TSMIG to be a Mixer/Grinder with outlet through the grinder unit.

and/or

### Option 2:

TSMIG to be a Mixer/Grinder with outlet through the grinding unit and with outlet through one or two discharge gate(s).

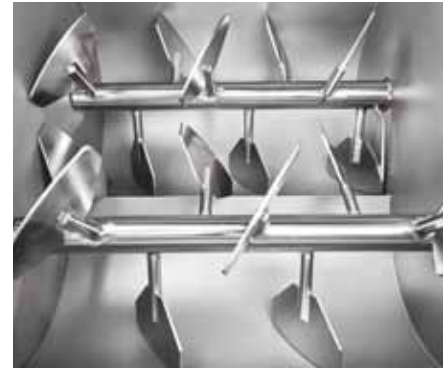
- Computerized design of mixing wings and mixer geometry combined with the programmable mixing action secure optimum processing results for you.
- Low noise level.
- Mixer controls available in range from ordinary push button operated versions to advanced PLC controlled systems. All PLC systems are supplied with reliable and easy accessible finger-touch operator panel with digital read-out of all mixer functions. Make Allen Bradley.
- Safety guard for knife housing.

## OPTIONAL EXTRAS:

- Dust lid without sealing.
- Grill lid.
- Plate lid with sealing.
- Weighing system on frame.
- Weighing system, floor mounted.
- Frame prepared for weighing system.
- Temperature sensor (incl. in CO<sub>2</sub> and steam) - PT100.
- CO<sub>2</sub> top injection system with snow horns incl. control and lid.
- CO<sub>2</sub> bottom injection system.
- N<sub>2</sub> top injection system.
- N<sub>2</sub> bottom injection system.
- Steam bottom injection system incl. nozzles.
- Water dosing system, automatic.
- Double jacket for heating/cooling and insulation. (not pressurized).
- Polished mixing container inside meat product zone.
- Interlock for trolleys - photo cell.
- Inspection platform, various executions.
- For Mixer/Grinders: Continuous Chip Removal System – short CCR System – which at programmable intervals transports impurities via a screw/auger outside the knife housing. The CCR System is operated by an electric motor.
- Mixing wings optional as standard, paddle or spiral wings. Standard and paddle wings to run either side-by-side or intermeshing.

**VOLUMES AND DIMENSION:**

TSM(I)/TSM(I)V/TSM(I)G	Volume Litres (To top of shaft)	Volume Litres (To top of mixing wing)	Volume Litres (To top of mixing container)
200	69	135	200
400	120	228	400
750	226	446	750
1250	381	735	1270
1750	571	1132	1780
2650	881	1683	2600
4250	1454	2901	4500
6250	2556	4730	6500



Optional mirror polished paddle mixing wings



Large hygienic space for easy cleaning & maintenance



**SANITARY CONSTRUCTION:**

All parts in the mixer – such as frame, body, and mixing wings, are made of stainless steel.

All corners of the hopper and the cabinet have been curved and surface ground (glass-bead-peened) for easy and thorough cleaning.

The leak-proof shaft seals are easily removed for daily cleaning.

**WHY CO<sub>2</sub> OR LIQUID N<sub>2</sub>?**

With optional liquid CO<sub>2</sub> or N<sub>2</sub> cooling, your mixer will be suitable for extended formed products. Cooling will provide the correct viscosity and product crystallization for forming, whereby you maintain the product shape during further processing.

**IMPORTANT:** Cooling also reduces bacterial growth in your product and extends thus the shelf life of the mixture.

## **PERFORMANCE:**

- Flexible and programmable mixing for superior consistence for a wide range of products.
- Robust, reliable, easy-to-clean, and cost saving construction.
- Easy operation, handling, sanitation, and maintenance for low cost performance.

## **TECHNICAL SPECIFICATIONS:**

- For exact motor size, see chart on previos page.
- CE standard.
- Robust construction – suitable harsh environments.
- Fixed or swivel arm mounted operator's panel, protection class IP.65.  
Panel mounted on the machine.

## **SUPPLY OPTIONS:**

The scansteel foodtech Mixers can be supplied as stand-alone equipment or as part of an entire food processing line. A perfect match would be the scansteel foodtech Lifting Device, for feeding of the machine and the scansteel foodtech Emulsifier QuadroCut 225.

## **FURTHER INFORMATION:**

For further information and possible quotations / lay-out solutions for your plant please contact us.

**[www.scansteelfoodtech.com](http://www.scansteelfoodtech.com)**

# scansteel foodtech

**scansteel foodtech**

Energivej 3  
4180 Soroe city  
Denmark

Phone: +45 7027 1410

Fax: +45 7027 1411

[www.scansteelfoodtech.com](http://www.scansteelfoodtech.com)