# THT High - Performance Planetary Mixers



The mixing system for premium concrete products.

At TEKA everything revolves around mixing.

TEKA THT Planetary Mixers with unique mixing turbines are the ultimate mixing system for the production of premium concrete products, and the most difficult mixing tasks.

### The advantages of the THT mixer:

- The swing and throw effect of the mixing turbine ensures optimal batch material flow and intensive mixing action
- Ideal for very small, partial batch sizes
- High-quality concrete output, thus reducing waste
- Optimal sheer and material blending of the batch at various filling capacities
- Minimal contamination inside the mixer (easy clean-up, less wear)
- Mounting bolts are outside of batch materials (no build-up on mounting hardware)
- Tungsten-carbide surfacing for longer wear life
- Exclusively available from TEKA



1 The THT mixer is ideally suited for face-mix, fiber-, foam-, self-compacting-, color-, ultra-high-strength concrete, etc. This mixer type is also optimally suited for the absolute smallest batch sizes (partial loadings), and therefore extremely variable in its use.

THT mixers are custom-built to individual customer requirements and specific mixing/batching tasks. This means that drive power, the diameter of the mixer pan, and the number of mixing turbines are variable and specifically chosen to match the customers' needs.

The robust and compact drive system includes a Frequency Converter as standard equipment. This ensures the optimal rotation speed of the mixing turbine, which is adjustable for specific mix designs. Mixer speed can be varied during different stages of a single mixing cycle, to ensure the best possible mix effect.



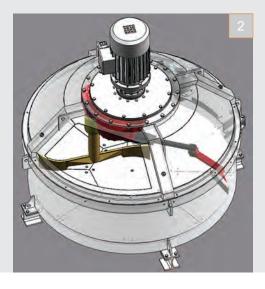
2 | Mixer models THT 250 - 1125 have one mixing turbine. THT 1500 - 2250 models can be fitted with either one or two mixing turbines, and the THT 3000 can have either one, two or three mixing turbines.



mixers have a low overall height due to externally mounted discharge gates, which are operated hydraulically by a powerful rotary cylinder.

A manual hand pump is included to open discharge gates in case of a plant power outage.

Large discharge gate openings and the design of the mixing turbine ensure very short discharge times. Mixers can have up to four (4) discharge gates.











4 The mixer hood design has several large areas for material inlets. Cleaning/access doors can be installed in various locations, and are built with quick-release latches and gas-pressure pistons to keep them open. Electronic safety switches stop mixer operation when access doors are opened.



5 THT mixers have low maintenance factors. and require gearbox oil changes only every 2,500 hours. Central grease lubrication (except for rotating mixing stars) is standard. An optional motor-driven automatic grease lubrication pump is available.



6 | Electrical components are completely pre-wired to an electrical junction box.



7 | Production water is sprayed into the mixer through multiple nozzles.



8 | All TEKA mixers can be outfitted with a Skip Hoist to charge the mixer with batch materials. TEKA offers tilting skip hoists for very steep angles (90°) of inclination, or the standard 60° nontilting bottom-discharge type.



9 As an option, mixers can have a Sample Gate.

#### **Available options:**

- Moisture probes (wall or floor mounted)
- Automatic Wash-out Systems
- Steam-injection through pneumatically operated steam nozzles in the outer wall
- Mixer Air Bags for dust control
- Replaceable wear liners made of AR Steel, Chromium Carbide, Chill-cast Tiles, or Ceramic Tiles
- Mixing Paddles made of Ni-hard Steel, Polyurethane, or with tungsten/carbide surfacing



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# **THT High-Performance Planetary Mixers**

	THT	250	375	500	750	1125	1500	1875	2250	3000
	Versions	A-1-I	B/C-1-II	C/D/E-1-II/III	D/E-1-III/IV	E/F-1-IV	F/G-2-V/VI	G/H-2-VI	H/J-2-VI/VII	J/K-3-VII
Maximum Filling Capacity	cu.ft.	9	13	18	27	40	50	66	80	100
	cu.yds.	1/3	1/2	2/3	1	1½	2	21/2	3	4
	lbs.	900	1,300	1,800	2,700	4,000	5,300	6,600	8,000	10,600
Output Capacity	cu.yds.	1/4	1/3	1/2	2/3	1	11//3	12/3	2	22/3
Electric Motor of Mixer	hp	12	17/24	24/35/47	35/47	47/60	60/70	70/85	85/115	115/140
Electric Motor of Hydr. Unit	hp	1	1.75	1.75	5	5	6.5	6.5	6.5	6.5
Mixing Turbine	Qty.	1	1	1	1	1	1-2	1-2	1-2	1-3
Mixing Paddles (with 1 Mixing Turbine)	Qty.	-	-	-	-	-	2	2	2	4
Wall Scraper & Discharge Paddles	Qty. ea.	1 + 1	1+1	1+1	1 + 1	1 + 1	1+1	1 + 1	1+1	1 + 2
Speed of Main Rotation	RPM	23	20	20	18	14	19	19	13	13
Speed of Mixing Stars	RPM	57	53	53	43	43	52	44	42	36
Inside Diameter of Mixer Pan	in.	44	63	63/71	71/83	83	95/109	109	109/113	113
Height of Mixer	in.	64	81	83	85	89	103	105	113	122
Weight of Mixer (Standard Layout)	lbs.	2,900	5,500	6,200	7,500	8,200	11,000	11,700	16,300	21,600
Skip Hoist Filling Capacity	lbs.	880	1,200	1,600	2,400	3,600	4,800	6,000	7,100	9,500
Electric Motor of Skip Hoist	hp	4.7	4.7	15	15	17	29	29	35	47
Speed of Skip Hoist Bucket	inches/sec.	13	13	13	16	16	16	14	16	14
Weight of Skip Hoist Bucket	lbs.	800	1,200	1,800	2,200	3,750	4,600	4,850	6,600	8,800
Required Water Pressure	psi	60 - 90	60 - 90	60 - 90	60 - 90	60 - 90	60 - 90	60 - 90	60 - 90	60 - 90

#### At TEKA everything revolves around mixing.

We offer, for the most diverse applications and the highest demands in quality concrete products and ready-mix concrete, customized solutions with the highest technical standards suited to the individual conditions with the right type of mixer from one source:

- THT HIGH-PERFORMANCE PLANETARY MIXERS with mixing turbine
- TPZ HIGH-PERFORMANCE PLANETARY MIXERS
- THZ HIGH-PERFORMANCE PAN MIXERS also equipped with Agitator
- TDZ HIGH-PERFORMANCE TWIN-SHAFT MIXERS

Consultation, Planning, Manufacturing, Installation, Service. TEKA, mixing technology, proven worldwide for over 50 years.



#### Parent Company and Headquarters:

#### Germany

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