



Highway & Airport  
Paving Equipment

Concrete Batching  
& Mixing Plants

Canal Construction  
Equipment

Trenching  
Equipment

# TC1500

Texture Cure Machine



# TABLE OF CONTENTS

**INTRODUCTION**.....2

**HEAVY DUTY TRACTOR FRAME**.....3

    Operator Visibilty.....3

    Crowning Capability.....3

    Roller Mounted Jacking Columns.....4

**CONTROL SYSTEM**.....4

    90 Degree Steering.....4

    Grade & Steering Control.....5

    Ultrasonic Sensors.....6

**CURING AND TINING**.....5-6

    Cure System.....5

    Longitudinal Tining.....6

    Transverse Tining.....6

**CATERPILLAR C3.4 ENGINE**.....7

**TRANSPORT CONFIGURATION**.....7-8

**OPTIONAL EQUIPMENT**.....7

**BURLAP / ASTROTURF DRAG**.....8

**POLY-ROLL ATTACHMENT**.....8

**TC1500 APPLICATIONS**.....9-10





# INTRODUCTION



The Guntert & Zimmerman (G&Z) TC1500 is the most technologically advanced texture cure machine on the concrete paving market today. The features contributing to this best-in-class distinction include: 90 degree steering, highly accurate steering and elevation control systems, and unique, rigid frame design for quick width changes.

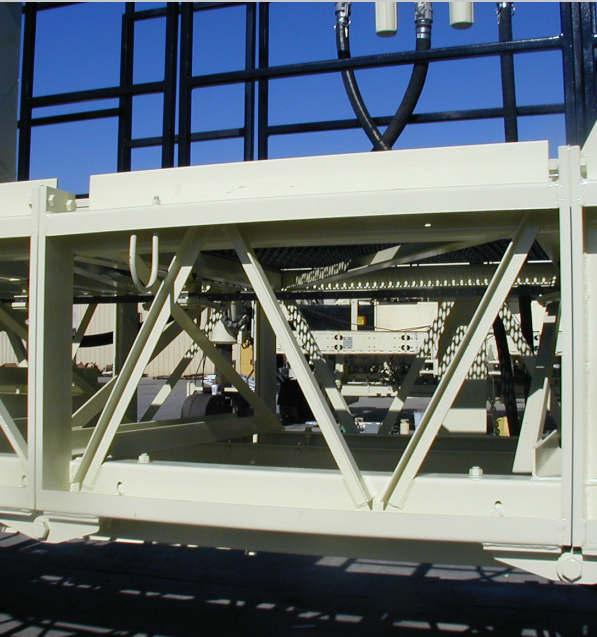
The four-track TC1500 can be equipped with 90 degree steering which allows the machine to travel and steer across bridges and self-load for transport. 90 degree steering also offers exceptional on-site maneuverability where space is sometimes at a premium. This feature gives contractors a distinct advantage when dealing with an aggressive production schedule.

The TC1500 has modern proportional steering and elevation controls with electronic sensors fulfilling the contractor's need for accurate grade and steering control. The TC1500 is designed with a rigid latticework frame capable of handling widths from 12 to 56 ft. (3.6 to 17 m). The rigid frame contributes to the steering accuracy ultimately giving contractors a more uniform result. Accuracy is essential when precision timing is required.





## HEAVY DUTY TRACTOR FRAME



The TC1500's latticework construction is capable of working widths from 12 to 56 ft. (3.65 to 17.06 m). The bottom of the frame sections are pin connected for quick width changes. Each frame section is provided with a hose / cable trough. An optional access walkway with hand railing installed across the entire machine is available .

The latticework frame is torsionally rigid and capable of transmitting steering forces from one end of the machine to the other, a requirement for precision tining.



## OPERATOR VISIBILITY



The TC1500 is optionally equipped with an access walkway across the top of the truss frame to optimize operator visibility, speed access, and allow safe movement across the width of the machine. Included in this option, access ladders are provided on each side.

The Operator Console is equipped with a lockable cover and can be relocated anywhere along the access walkway hand railing for optimizing the operator's view of all the tining and curing functions.

## CROWNING CAPABILITY



The TC1500 can be equipped with one or more crowning points that are hydraulically controlled from the Operator Console. Using optional sonic crowning sensors, the machine frame can be programmed to transition automatically in and out of crown in reference to the profile of the road surface.



# CONTROL SYSTEM



Networked Microprocessor Control System monitors and operates all machine functions including: proportional manual and automatic elevation and steering controls, self-diagnostic capability, counter rotation capability, 90 degree steering mode on four track version, remote engine low idle switch, and constant system monitoring of all sensors.

# 90 DEGREE STEERING



The TC1500 is available with four tracks which offers the best possible weight distribution and lowest ground pressure even in soft trackline conditions. The optional "flip of the switch" 90 degree steering feature is great for maneuvering/steering around job site, self-loading/steering onto a trailer, crossing bridges, and reducing hand pour sizes.

# ROLLER-MOUNTED JACKING COLUMNS



As an option, the TC1500's jacking columns can be equipped with supporting rollers that engage a track system on the main frame. The rollers can be utilized to speed width changes or relocation of the crawler tracks on the track line.





# GRADE & STEERING CONTROL



Electronic, no contact type, moisture proof, and proportional Sauer Danfoss (SD) steering and elevation sensors, as well as G&Z's own proprietary software provides precise steering and elevation accuracy and self-diagnostic capability.

Hydraulic jacks are provided on each corner of the machine for elevation control. Jacks and supports are relocatable along the terminal frames to optimize track location.

Two steering sensors mounted on sensor support brackets with graduated scale adjustment are provided to steer the machine in relationship to one of the grade wires. One sensor is provided for forward travel and the other for reverse

# OPTIMIZED CURE SYSTEM



The Cure System is available with a cure tank capacity up to 350 gallons (1,323 L) featuring an oversized access hatch. Cure tank agitation is provided by mechanical agitator and recirculating cure system. As an option, cure hoses can be provided to both sides of the machine to pump cure into the cure tank from barrels or totes. Optional ground level accessible, cure pump on-off switches (located on both sides of the machine) are also available.

The Cure System is provided with dual filtration of curing compound to reduce risk of nozzle plugging. Heavy duty spray hood / windshield with spray bar is located out and away from the machine to keep cure over spray off of the operator. Telescopic aluminum access walkway is provided off of the spray hood supports for servicing spray tips. Spray nozzles with stainless steel tips are provided with diaphragm check valves and screens to reduce plugging and chance dripping.







# TRANSVERSE TINING



The transverse tining kit uses a hydraulic motor powered chain to drive the tine cart back and forth across the slab in an adjustable track. Movable ramps with limit switches on each end of cart track automatically lift tine rake and stop cart at the end of its travel.

# LONGITUDINAL TINING



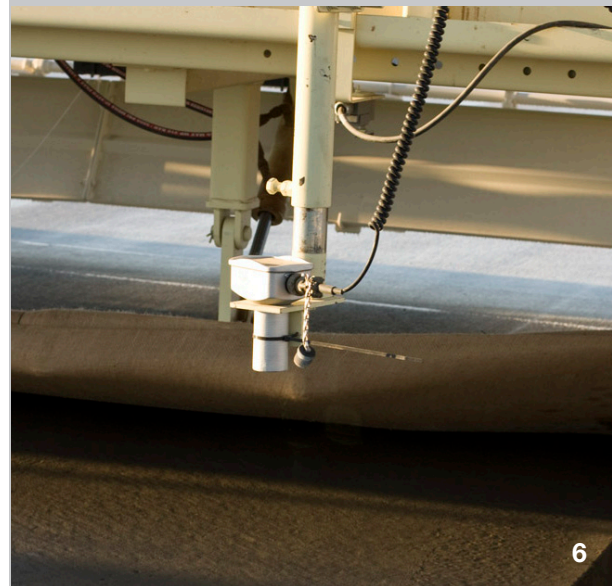
The longitudinal tining kit uses the same hydraulic controls as the transverse tine cart and mounts to the adjustable transverse cart track. Tine rakes can be hydraulically raised or lowered. Longitudinal tining can be done concurrently with the curing operation.

# ULTRASONIC SENSORS



G&Z offers optional ultrasonic sensors and supports for reference off top of slab for elevation control so only one wire is required for steering reference.

Ultrasonic sensors can also be used at the crown location to maintain a fixed, preset distance from the bottom of the frame to the top of the crown. This allows the TC1500 main frame to transition automatically in and out of crown.





# CATERPILLAR C3.4B



The fuel efficient Caterpillar C3.4B EPA Tier 4f IOPU "C" Rating four - cylinder Diesel Engine is ready to take on your toughest paving project. The C3.4B provides all of the performance, reliability, durability and long maintenance intervals that you would expect from a Caterpillar engine. Caterpillar Electronic Control Module manages all engine components for a completely integrated system.

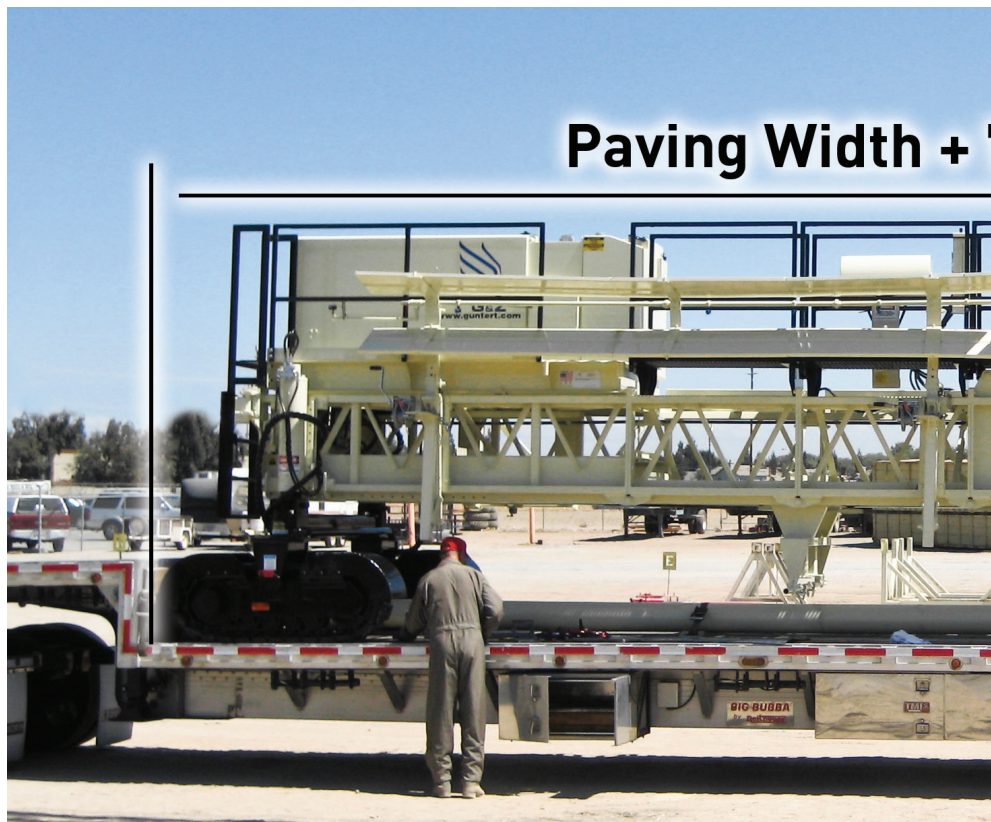
The TC1500 power unit is designed with the safety and comfort of the operator by suppressing noise, heat, and vibration. The engine muffler is a cowl type silencer to reduce noise. It is wrapped in a heat blanket to keep heat away from operator. The engine radiator with integral hydraulic system heat exchanger is equipped with a push type fan which evacuates heat and noise from the enclosure. To further reduce noise and vibration, the engine with pump drive box are vibration isolated from the power unit module and the power unit module vibration isolated from the machine frame.

## OPTIONAL EQUIPMENT

- DC Night Lighting System
- Skewed Tining Kit
- Telescopic Loading Support Stands
- Remote Tine Block Out Device for Tine Rake
- Bitumen Application System Complete with Tank, Pump, Spray Bar and Windshield
- Sensor Arm Extensions

## TRANSPORTING THE TC1500

The TC1500 is designed to be transport in a single load. The machine self-loads by walking over the top of the deck of a trailer or with optional loading stands. With optional 90 degree steering, the machine can walk and steer on a trailer with a removable gooseneck or a low bed trailer with the aid of a ramp(s). The rear walkway and spray hood hinge up for quick transport at a transport width of less than 10 ft. (3 m).







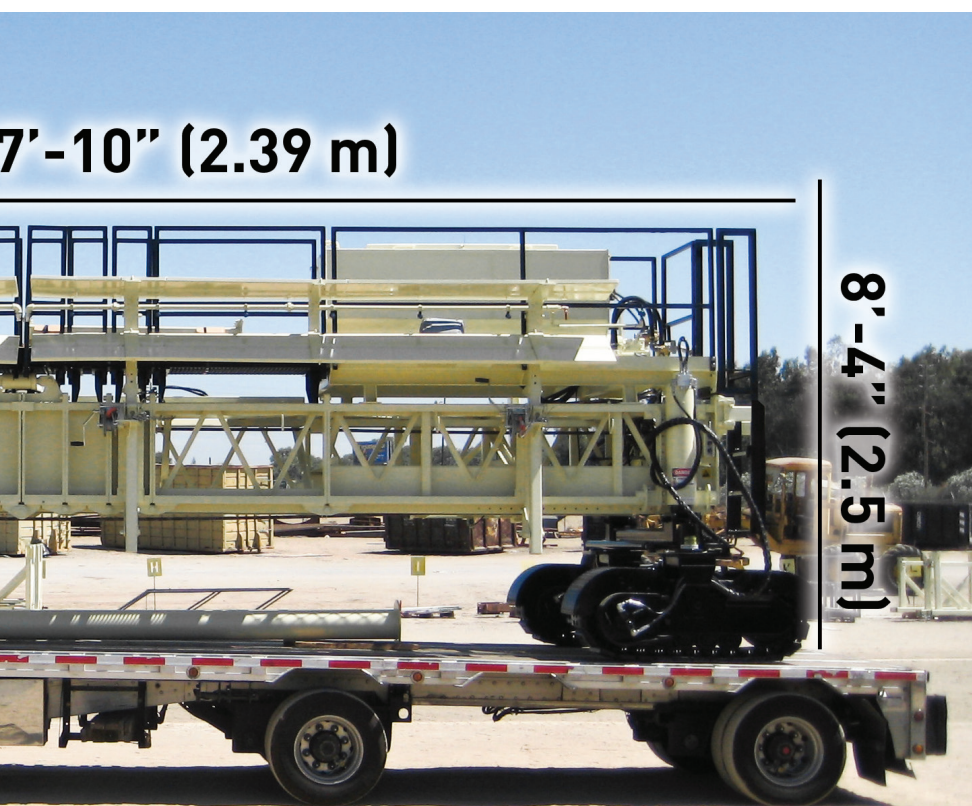
9'-10" (3.0 m)

## BURLAP / ASTROTURF DRAG



An optional Burlap / Astroturf Drag attachment can be supplied complete with water spray bar. The tow arms can be hydraulically raised/lowered by the operator. Tow arms pivot out of the way for transport. A water system is included with a 60 gallon (227 L) polyurethane tank complete with hydraulic motor driven water pump. As an option, a larger 200 gallon (757 L) polyurethane tank can be supplied.

## POLY-ROLL ATTACHMENT



7'-10" (2.39 m)

8'-4" (2.5 m)



As an option, a Poly-Roll Attachment with manually adjustable support arms can be supplied for quick slab protection from rain. The support arms hinge up for transport. The roll is hydraulic motor powered for fast lay down and pick up of the polyethylene paper.



# TC1500 APPLICATIONS...



## INTERSTATE 80

**CONCRETE PLACING CO.**  
SALT LAKE CITY, UTAH, U.S.A.

**Project:**  
2 mile stretch of highway paving consisting of interchanges and bridge crossings.

**Equipment:**  
S850, PS1200, & TC1500



## MCCARRAN AIRPORT

**ACME**  
LAS VEGAS, NEVADA, U.S.A.

**Project:**  
Concrete Runway 10,525 ft. (3,208m) long x 150 ft. (45.7m) wide, with lanes paved at 37.5 ft. (11.4m) wide, and 18 in. (457mm) thick. Parallel Concrete Taxiway 11,000 ft. (3,352m) long x 100 (30.5m) wide, with lanes paved at 33.4 ft. (10.2m) wide, and 18 in. (457mm) thick.

**Equipment:**  
S1500, S850, PS1200, & TC1500



INTERSTATE 80  
MCCARRAN AIRPORT  
SPACEPORT AMERICA





...AROUND THE WORLD



## SPACEPORT AMERICA

**DAVID MONTOYA CONSTRUCTION**  
TRUTH OR CONSEQUENCE, NEW MEXICO, U.S.A.

**Project:**

Concrete Runway 10,000 ft. (3048m) long x 200 ft. (60.96m) wide, with lanes paved at 33.3 ft. (10.1m) wide, 6 in. (152mm) base, 4 in (101mm) asphalt layer, and 14 in. (355mm) concrete slab.

**Equipment:**

G&Z MCP12 Mobile Concrete Plant, S850 with Leica 3D Stringless Paving, PS1200, & TC1500



## PACIFIC HIGHWAY

**THIESS PTY LTD.**  
NEW SOUTH WALES, AUSTRALIA

**Project:**

Base concrete is unreinforced plain concrete with sawn skewed transverse joints at 4.2m spacing. Single sawn blade longitudinal joint. Subbase paved at 10.1m wide. Base baved at 8.0m wide. Pavement design low noise 220mm thick lean mix subbase (5Mpa), 175 dense grade asphalt, 30mm thick open grade asphalt. Total length of project is 32.7km of dual carriageway.

**Equipment:**

S1500, PS1200, & 2 EA TC1500



**Guntert & Zimmerman Const. Div., Inc.**

222 E. Fourth St. Ripon, CA 95366 U.S.A.

Phone +1 209-599-0066 Fax +1 209-599-2021

Toll Free 800-733-2912 (USA / Canada)

Email: [gz@guntert.com](mailto:gz@guntert.com) Web: [www.guntert.com](http://www.guntert.com)



Manufactured under one or more of the following U.S. or Foreign Patents: [www.guntert.com/patents.html](http://www.guntert.com/patents.html). Some items shown may be optional. G&Z reserves the right to make improvements in design, material and/or changes in specifications at any time without notice and without incurring any obligation related to such changes. Brochure No. 400P112

