

**TB280FR**  
8.5-TONNE



**SHORT TAIL  
SWING EXCAVATOR**

**STS BOOM**

**TAKEUCHI**<sup>®</sup>  
From World First to World Leader

# TB280FR Side to Side (STS) short tail excavator

The TB280FR features a unique patented side-to-side (STS) offset boom coupled with the near zero tail swing for unrivalled versatility and visibility on site.

The unique FR design provides for parallel trenching right next to walls and buildings. A floor mounted pedal allows you to position the STS offset boom anywhere across the front of the machine without any reduction in dig depth or ground reach. Operators no longer need to reposition the tracks for the optimum excavating angles, they simply let the STS offset boom do all the work.

The STS offset boom combined with near zero tail swing delivers the most versatile compact machine for site. The FR range are the only excavators that can fully retract the boom and loaded digging bucket, then rotate 360° while only exceeding the track by 120mm (digging bucket up to 750mm).

With a low centre of gravity and optimized counterweight the TB280FR has an extremely stable platform, with lifting capabilities similar to that of a conventional machine.



## HEAVY-DUTY OFFSET

The heavy-duty STS offset boom is engineered for robust operating. The oversized slew bearing and ring gear combines with heavy-duty steel boom bracket bushes, for maximum longevity.

Designed for durability, easy lubrication and maintenance.



## NEAR ZERO TAIL SWING

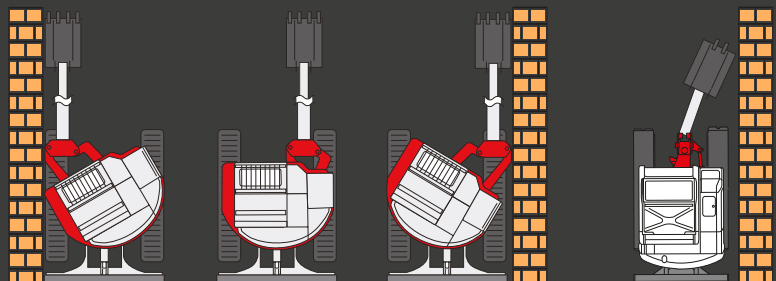
The unique FR design is what sets the TB280FR apart from conventional machines.

The compact near-zero tail only extends 120mm beyond the track. It gets the TB280FR into spaces other conventional excavators cannot operate.



## SIDE-TO-SIDE STS BOOM

- EXCAVATES WALL-SIDE BOTH LEFT & RIGHT
- NO REDUCTION IN DIG DEPTH
- NO REDUCTION IN GROUND REACH
- SIMPLY REPOSITION THE BOOM BRACKET ACROSS THE FRONT RADIUS



No Reduction in Dig Depth or Ground Reach

Conventional

## OPERATOR COMFORT

The operator will appreciate the spacious, well-equipped and well-appointed cab with plenty of foot room. The stylish cab comes complete with air-con, deluxe high back seat and adjustable arm rests.

The large multi-function display highlights real time machine health and vitals. Rocker switches control a wide range of functions.

Short stroke joysticks are low effort and very precise for smooth all day operating. Accumulator assisted pilot controls combined with cushioned boom, arm and offset cylinders, help reduce shock and vibrations for a smoother machine operation.

LED workzone lighting ensures excellent visibility in low light conditions.



## STAGE V READY

### MAXIMUM FUEL EFFICIENCY

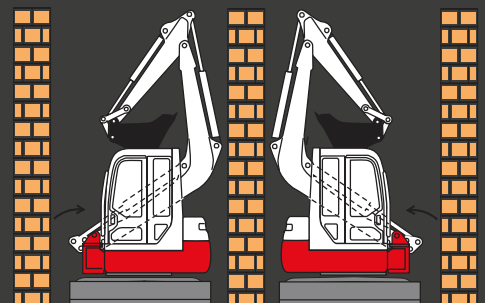
Fuel Saving Features:

- Automatic idle
- Economy work-mode
- Electronic engine monitoring
- Electric dial throttle control
- Two-speed tracking with auto step down
- TFM - Remote utilisation data



## WORKS IN TIGHT SPACES

- FULLY RETRACTS THE BOOM WITH A FULL LOAD USING A DIGGING BUCKET UP TO 750mm
- EXCEEDS TRACKS BY ONLY 120mm
- NO NEED TO MOVE THE MACHINE





## STANDARD FEATURES

(see website for the complete features list)

### OPERATOR STATION

- Steel tilt-up cab (ROPS / OPG)
- Adjustable armrest, deluxe highback seat, retracting seat belt and drinks holder
- Radio with stereo speakers MW/FM/ USB/ Bluetooth
- AC/ multi vent heater/ de-mister
- Gas lift-assist window slides into recess
- Skylight with retractable sunshade
- Front screen rain guard
- Large fully supported foot travel pedals

### ELECTRICAL

- Internal/ external power sockets - 12V
- Switched roof beacon power socket - 12V
- LED workzone lights
- Travel alarm
- Emergency engine shut-down switch
- Electrical refuelling pump

### ENGINE

- DOC+DPF exhaust after treatment
- Dual fuel filtration - water trap
- Dual element air filter
- Automatic idle
- Service interval - 250 hours
- Working modes: Standard/ Eco/ Altitude



### HYDRAULICS

- Cushioned boom, arm and offset cylinders
- Boom and arm holding check valves
- Lift overload alarm
- Aux flows/ pressure - touchscreen adjustable
- Multi-attachment presets - password secure
- 1-way/2-way flow selector
- Aux with independent isolation valves
- Proportional auxiliary controls with detent
- Aux ports: 1st + 2nd standard, 3rd (pre-piped for hydraulic hitch)

### UNDERCARRIAGE AND FRAME

- Dozer with switch activated blade float
- Triple flanged track rollers & sealed bearings
- Tie down anchor points
- Auto track tensioning system

### COMPATIBLE BREAKER

The TB280FR is compatible with a Takeuchi TB302-S or TKB402-S sound suppressed hydraulic breaker.

Designed to meet the requirement for quieter operating environments.



### ATTACHMENT READY

The TB280FR comes with factory fitted steel hydraulic hitch pipe work with safe hand/foot activation switches.

Convenient 1st, 2nd auxiliary circuits and the quick hitch are plumbed to the mid-arm.

The dual flow hydraulic lines are operated by sliders on both levers, for smooth control of variable flow and detent to accommodate a range of attachments

With matching TB290-2 pin and link dimensions, all attachments are interchangeable.

Auxiliary flows adjustable from the VDU with optional password secure presets.

### SWITCH ACTIVATED BLADE FLOAT

To maximise ground finishing on-site the switch activated blade float is fitted as standard.

A heavy-duty dozer blade with a blade cylinder protection guard.

Exposed ground level hydraulic hoses are spiral steel wrapped for added protection.



### RELIABLE TRACK DESIGN

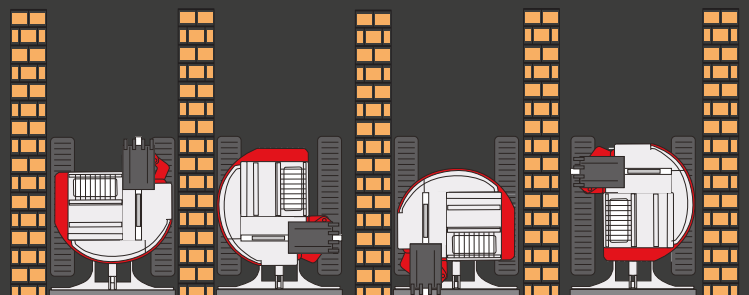
The TB280FR comes with auto track tensioning. The triple flanged rollers support the track in multiple positions improving machine stability. The upper roller maintains track alignment and helps shed debris.

High torque auto step-down travel motors deliver on-demand tracking power when dozing, turning and climbing.



## 360° FUNCTIONALITY

- MORE VERSATILE THAN A FIXED BOOM
- THE ONLY 8-TONNE EXCAVATOR THAT CAN DIG IN-FRONT AND LOAD BEHIND IN A CONFINED SPACE
- ROTATES 360°, ONLY EXCEEDS TRACKS BY 120mm



# TB280FR SHORT TAIL SWING EXCAVATOR



## SERVICEABILITY

The rear full-width service engine hood is robust for site - all-steel, lockable and hinged overhead. It provides quick and easy ground level access for daily maintenance checks to minimise downtime. The engine oil fill, oil level dipstick and coolant filler points are all easily accessible.

Electric refuelling pump with fast fill-up and auto shut off as standard, with filtered suction hose and integrated non return valve.

The off-side all-steel service access door is hinged, lockable and swings out. Giving maximum access to the side-by-side cooling units, battery, dual air filters and windscreen washer bottle.

The hydraulic tank is conveniently situated on the off-side with visible sight gauge, accessible fill point and internal filters. An additional lockable toolbox with tool bag is mounted above.

## EASY MAINTENANCE

Maintenance and serviceability have been greatly improved with an enhanced forward tilting cab.

Designed to allow for superior access to the rear engine components, hydraulic valves, pilot line filter and greater access to hydraulic pipework.



## TSS - TAKEUCHI SECURITY SYSTEM

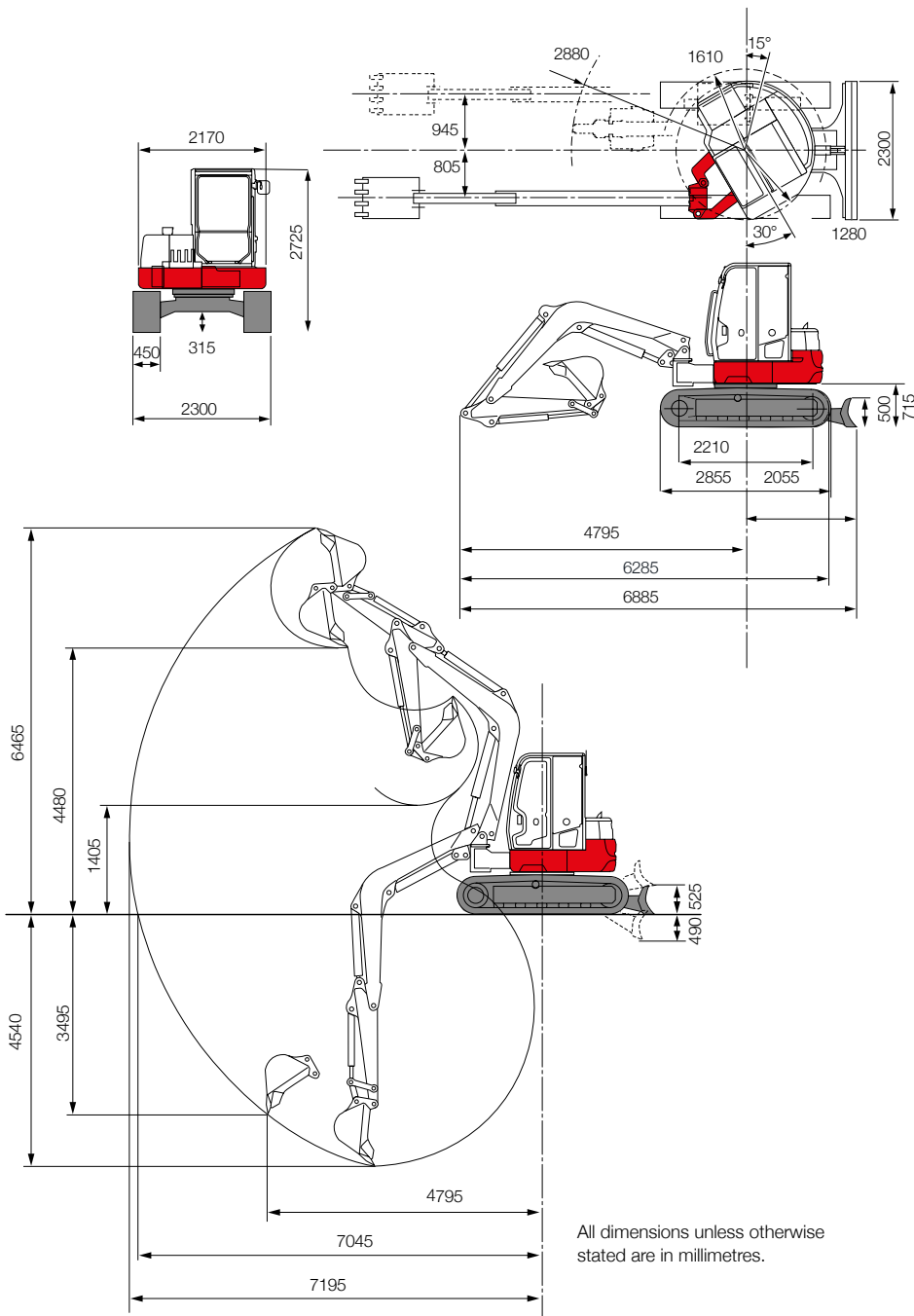
The TB280FR comes with **TSS** as standard. Includes 1 red master key and 3 black user keys. Can programme up to 13 user keys.



## TFM - TAKEUCHI FLEET MANAGEMENT

**TFM** is a remote **TELEMATICS** system, using real time data to better manage your fleet and lower overall operating costs. Free of charge in warranty period.

# TB280FR SHORT TAIL SWING EXCAVATOR



All dimensions unless otherwise stated are in millimetres.

## TB280FR

Standard UK Specification Long Arm Optional: (Steel Tracks)

Engine	
Make	YANMAR
Model	4TNV98CT-WTBZ
Rated Output kW/rpm	51.6/2000
Maximum Torque (Nm)	308
Cylinders	4
Displacement (cc)	3318
Electrical System	12Volt 90 amp

Dimensions & Weight	
Op. Weight (bucket, hitch, fuel) kg	8530
Length (Transporting) (mm)	6285
Width (mm)	2300
Height (mm)	2725
Ground Clearance (mm)	315
Front Swing Radius (mm)	1610
Slew Radius (mm)	1280
Dozer Blade (W x H) (mm)	2300x500

Operating Information	
Max Digging Depth (mm)	4540
Max Dump Height (mm)	4480
Max Reach at Ground Level (mm)	7045
Max Vertical Dig Depth (mm)	3495
Max Bucket Digging Force (kN)	46.7
Max Arm Digging Force (kN)	31.3

Hydraulic System	
Set Pressure (bar)	280
Pump Type - Rexroth	Variable x 2+ Gear x 2
1st Auxiliary Maximum Flow (l/min) / Pressure (bar)	148/206
2nd Auxiliary Maximum Flow (l/min) / Pressure (bar)	59/206

Swing System	
Boom Swing Angle (L/R)	30°/15°
Slew Speed (rpm)	10
Slew Motor	Axial Piston
Slew Brake	Wet Friction Plate

Undercarriage	
Traction Motor	Axial Piston
Traction Drive	Planetary
Traction Brake	Disc
Track Width (mm)	450
Ground Contact Length (mm)	2210
Ground Pressure (kpa)	38.1
Travel Speed (k/ph)	2.7/5.2
Maximum Gradeability	30°

Capacities	
Hydraulic System (l)	147
Fuel Tank (l)	100
Engine Lubrication (l)	9.4
Cooling System (l)	14

Health & Safety	
Noise / Sound Power Level (LwA)	99 dB
Vibration Hand Arm / Body m/sec <sup>2</sup>	≤2.5 / ≤0.5

**2 YEAR  
2,000 HOUR**

**WARRANTY\***

Takeuchi machines come with a 2 year/2000 hours warranty as standard. Before fitment of a hydraulic attachment, machine auxiliary pressure and flow should be accurately measured.

\*Lifting; the mass weight of slings / hitches / bucket to be deducted from the rated load to determine the net load that may be lifted.

For all lifting specifications please refer to lifts charts on the Takeuchi website or operator manual. In accordance with our established policy of constant improvement, we reserve the right to amend these specifications at any time without notice. Photographs shown may feature non-standard equipment.

11/2023

For more information locally contact:



SCAN ME

To find your local dealer

Takeuchi Mfg (UK) Ltd, Unit E2B Kingsway Business Park,  
John Boyd Dunlop Drive, Rochdale, Lancashire OL16 4NG  
info@takeuchi-mfg.co.uk www.takeuchi-mfg.co.uk

@TakeuchiUK

**TAKEUCHI**  
From World First to World Leader