

# TF



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**SIMEX**  
• patented •

## DOUBLE-DRUM CUTTER HEADS

category

2.5 - 75 TON



Mini Exc.



Midi Exc.



Exc.



Backhoe

models

TF 200 | TF 450 | TF 650 | TF 850  
TF 1100 | TF 2100 | TF 2600 | TFN 2600  
TF 3100

The Simex TF double drum cutter heads are ideal for trenching, profiling rock and cement walls, tunnelling, quarrying, demolition, dredging, finishing operations and underwater works. They are **highly effective where conventional excavation systems are too weak and percussion ones have little effect.**



### UTILITIES



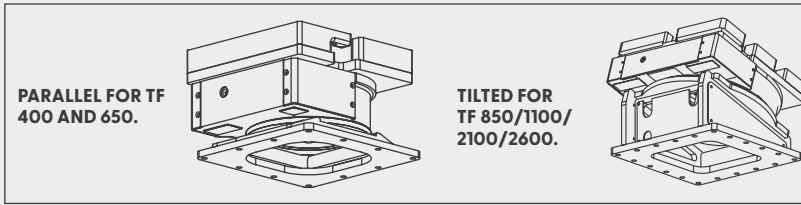
### VERTICAL PROFILING



### QUARRYING



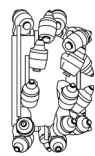
- A 360° HYDRAULIC ROTATION**  
Hydraulic rotation allows the operator to always find the ideal working position.



- B DRUMS AND TEETH FOR ANY APPLICATION,** designed to achieve the highest performance according to the required application. Multiple tooth geometries available for working on different materials.
- C REPLACEABLE ANTI-WEAR PLATES**
- D INCREASED PRODUCTIVITY AND MAXIMUM PRECISION:** cutter head can be rotated 90° with respect to mounting bracket (thanks to square holes of coupling plate).
- E FILTER ON FEED LINE** prevents impurities from entering the motor.
- F** Hose hook-up on both cabin side (standard) and front.
- G MILLED MATERIAL IS DISCHARGED FROM THE TRENCH WITHOUT GETTING STUCK IN THE FRAME** due to special shape.
- H HIGH TORQUE AND HIGH PERFORMANCE** guaranteed by integrated high displacement hydraulic piston motor in direct drive with the drums. Shaft transmits motion only and bears no load thanks to double support bearings for each drum.
- I MECHANICAL GASKETS FITTED ON DRUMS** seal against dust also when the attachment is submerged into the ground, even in muddy conditions.



**AVAILABLE DRUMS:**



**HP (STANDARD)**  
Allows deep penetration even into hard materials



**GP (OPTIONAL)**  
Recommended for wall profiling and various types of jobs



**WP (OPTIONAL)**  
Special drum for finishing and profiling



**HPP (OPTIONAL)**  
Special drums for mixing soils

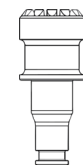
**AVAILABLE TEETH:**



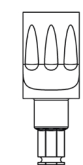
**STANDARD**  
For mixed materials



**OPTIONAL**  
For milling very hard materials



**OPTIONAL**  
For wood



**OPTIONAL**  
For mixing and tilling



CRUSHING TREE TRUNKS



EXTREME CONDITIONS (FROZEN GROUND)



NARROW-SECTION TRENCHING



UNDERWATER WORKS



## PRODUCTIVITY ESTIMATE

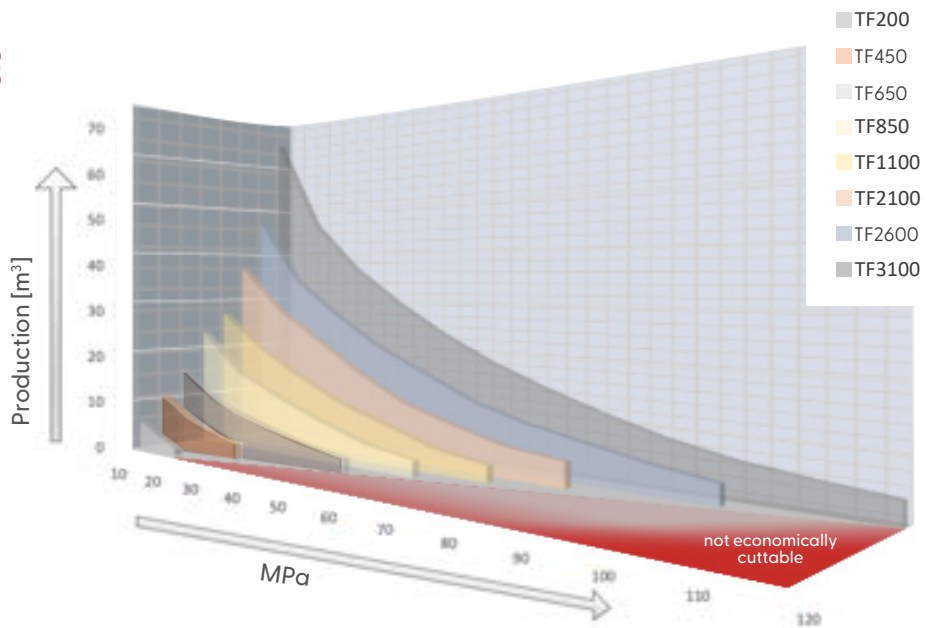
### RATIO BETWEEN CUTTING EFFICIENCY AND COMPRESSIVE STRENGTH

The graph on the side gives an approximate indication of the ratio between the cutting efficiency of each cutter head model in optimal conditions and the unconfined compressive strength of the rock.

Since many variables exist regarding the material (**fracturing, weathering, ductility,** etc.), the prime mover, and the operability, the ratio should be understood as only an approximation of cutting efficiency. The actual production may be estimated after all noted variables are taken into account.

### CALCULATION OF HOURLY PRODUCTION

Our team of experts has created a tool to help you calculate the theoretical hourly production, guiding you in choosing the most appropriate cutter head for the type of material to be worked. SCAN THE QR CODE ON THE SIDE WITH YOUR SMARTPHONE TO ACCESS THE CALCULATOR FOR HOURLY PRODUCTION.



## PRODUCTIVITY: A FEW APPLICATION EXAMPLES

### PROFILING NATURAL WALL IN CONSTRUCTION FIELD

**Job:** Profiling natural wall in a construction site with TF 2100 and TF 3100

**Material:** Hard and compact sedimentary conglomerate, 80-90 MPa

**Production:** 10-15 m<sup>3</sup>/h



### TRENCH EXCAVATION FOR LAYING UNDERGROUND UTILITIES

**Job:** Trench excavation with TF 850 for later connection to sewers

**Material:** Metamorphic rock with schist texture

**Forward speed:** 10 linear metres per hour, depth: 80 cm.



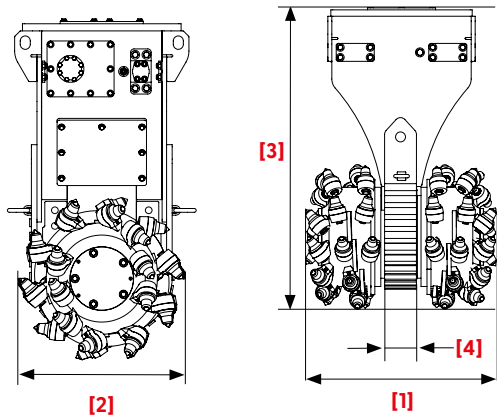
### DEMOLITION OF INDUSTRIAL FLOORS

**Job:** Dismantling of industrial concrete flooring, 25 MPa with TF 2100

**Material:** Reinforced concrete

**Production:** 40-45 m<sup>2</sup>/h





TECHNICAL DATA		TF 200	TF 450	TF 650	TF 850	TF 1100	TF 2100	TF 2600	TFN 2600	TF 3100
Recommended excavator weight	ton	2.5 - 7	6 - 12	9 - 16	14 - 22	20 - 34	28 - 45	30 - 55	30 - 55	50 - 75
	lbs	5500 - 15500	13000 - 26500	19800 - 35200	30800 - 48500	44000 - 75000	61700 - 99000	66000 - 121000	66000 - 121000	110000 - 165400
Weight without bracket (*)	kg	300	470	650	1100	1340	2380	2380	2180	2940
	lbs	660	1050	1430	2420	2950	5240	5240	4800	6470
Nominal power	hp (kW)	40 (30)	55 (40)	68 (50)	95 (70)	122 (90)	163 (120)	205 (150)	205 (150)	250 (185)
	kNm	2.8	5.1	7.4	12.1	20	26.7	36.1	36.1	48
Rotation torque	lb.ft	2080	3760	5450	8920	14750	19700	27600	27600	35400
	kN	15.1	22.5	30.5	40.2	61	71	96.4	96.4	128
Cutting force	lb.f	3400	5100	6850	9000	13700	16000	21600	21600	28700
	bar	350	350	350	400	400	400	400	400	400
Maximum pressure (**)	psi	5100	5100	5100	5800	5800	5800	5800	5800	5800
	l/min	45 - 80	65 - 120	90 - 150	140 - 190	170 - 250	240 - 340	280 - 400	280 - 400	350 - 500
Required oil flow	gpm	12 - 21	17 - 32	24 - 40	37 - 50	45 - 66	63 - 90	74 - 105	74 - 105	92 - 132
	Optional 360° hydraulic rotation	-	yes	yes	yes	yes	yes	yes	yes	-
Standard drum (HP) width [1]	mm	565	625	700	800	865	965	965	850	1270
	inch	22	25	28	32	34	38	38	33.5	50
Optional drum (GP) width [1]	mm	-	-	-	890	1000	1100	1150	980	1350
	inch	-	-	-	36	40	43	45	38.6	53
Optional drum (WP) width [1]	mm	650	750	850	920	1200	-	-	-	-
	inch	26	30	34	36	47	-	-	-	-
Drum (HP) diameter [2]	mm	380	450	500	595	660	750	750	750	750
	inch	15	18	20	24	26	30	30	30	30
Height without mounting bracket [3]	mm	840	970	1005	1270	1335	1570	1570	1420	1825
	inch	33	38	40	50	53	62	62	56	72
Drum distance [4]	mm	110	130	135	180	190	250	250	120	330
	inch	4	5	5.3	7	7.5	10	10	4.7	13
Tooth holder diameter	mm	20	22	22	38/30	38/30	38/30	38/30	38/30	38/30
	inch	0.8	0.8	0.9	1.5 / 1.2	1.5 / 1.2	1.5 / 1.2	1.5 / 1.2	1.5 / 1.2	1.5 / 1.2

\* The installer is responsible for ensuring that the equipment meets the excavator's specifications and weight requirement. \*\* Torque and cutting force decrease with lowered operating pressure. Simex does not accept responsibility or liability for the information provided. Technical modifications may vary without prior notice.