TETRA - TD 1500

HYDROLIC CORE DRILL

TECHNICAL CATALOG

TETRA

www.tetramakine.com

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GENERAL

TD TETRA close to 30 years experience in the sector with the best in Turkey, is one of the world's top three machine tool builder. All of the machines are operator friendly and easy to use. TD TETRA MAKİNE does not use any brand or product of Far East origin in any of its products.Unlike other companies, many optional features are available as standard, and are produced by keeping fuel and spare parts economy at the forefront. When many factors such as operating costs, drilling speeds, spare parts and fuel economy, ease of use come together, TD TETRA machines are the choice of enterprises and the companies whose machine parks are only TD TETRA's become our biggest reference.

TECHNICIAL SPECIFICATIONS

ENGINE

TYPE	DİZEL
MODEL	FORD ECOTORQ EURO 6
KW	283
HP	380
ENGINE SPEED	1800(ADJUSTABLE)
COOLING	WATER AND INTERCOOLER

HYDRAULIC POWER UNIT

MAIN PUMP MAX. (KAWASAKI 112 CC)	112cc@ 2200rpm@320 BAR - 246 LT/MIN
SECOND PUMP MAX.(REXROTH 45 CC)	45cc @ 2700rpm@320 BAR - 121 LT/MIN
SERVICE PUMP MAX.(REXROTH 28 CC)	28cc @ 3000rpm @320 BAR - 84 LT/MIN
OIL COOLING	FAN COOLER

2-1 Specifications KAWASAKI K3VL112/B-NRMM-LO

Pump Model			K3VL28	K3VL45	K3VL60	K3VL80	K3VL112	K3VL140	K3VL200	K3VL200H
Capacity		cc/rev	28	45	60	80	112	140	200	200
Pressure ratings	Rated	bar	320		250	320				
	Peak *1	bar	350		280	350				
Speed ratings	Self prime *2	rpm	3,000	2,700	2,400	2,400	2,200	2,200	1,900	2,200
	Max. boosted*3	rpm	3,600	3,250	3,000	3,000	2,700	2,500	2,200 *5	2,200
Minimum operating speed		rpm	600							
Case drain pressure	Max. continuous	bar	1							
	Peak	bar	4							

Technical data, standard unit

Size		NG		18	28	45	71	88	100	140
Displacement, geometric, per revolution		$V_{g\,max}$	cm^3	18	28	45	71	88	100	140
Rotational speed maximum[1)]	at $V_{g\,max}$	n_{nom}	rpm	3300	3000	2600	2200	2100	2000	1800
	at $V_g < V_{g\,max}$[2)]	$n_{max\,perm}$	rpm	3900	3600	3100	2600	2500	2400	2100
Flow	at n_{nom} and $V_{g\,max}$	$q_{v\,max}$	l/min	59	84	117	156	185	200	252
	at n_E= 1500 rpm and $V_{g\,max}$	$q_{vE\,max}$	l/min	27	42	68	107	132	150	210
Power	at n_{nom}, $V_{g\,max}$	P_{max}	kW	28	39	55	73	86	93	118
at Δp = 280 bar	at n_E= 1500 rpm and $V_{g\,max}$	$P_{E\,max}$	kW	12.6	20	32	50	62	70	98
Torque	Δp = 280 bar	T_{max}	Nm	80	125	200	316	392	445	623
at $V_{g\,max}$ and	Δp = 100 bar	T	Nm	30	45	72	113	140	159	223

MAIN HOIST

SINGLE LINE CAPACITY	9070 KG (REXROTH 80 CC)
LINE SPEED MAX.	44 M/MIN
CABLE SIZE	25-50 M 16-18-20 MM

WIRELINE

CAPACITY	6MM LINE- 2500 M
LINE SPEED MAX.	300 M/MIN
LINE SPEED(LOWER) MAX.	250 M/MIN

H20R-FS-41064-01
6.38 cu in. (104.5 cc) motor
3,000 psi (207 bar) @ 45 gpm (170 lpm)
Wire rope diameter: 0.625 in. (16 mm)
Weight: 515 lb (234 kg)

	LINE PULL		LINE SPEED		ROPE CAPACITY	
	LB	KG	FPM	MPM	FT	M
1	20,000	9,070	97	30	32	10
2	17,890	8,115	109	33	68	21
3	16,190	7,340	120	37	108	33
4	14,780	6,700	132	40	152	46
5	13,600	6,170	143	44	199	61

H20R-SPL-410P037-21
3.6 cu in. (60 cc) motor
4,900 psi (337 bar) @ 60 gpm (227 lpm)
Wire rope diameter: 0.625 in. (16 mm)
Weight: 444 lb (200 kg)

	LINE PULL		LINE SPEED		ROPE CAPACITY	
	LB	KG	FPM	MPM	FT	M
1	18,000	8,165	249	76	36	11
2	16,100	7,300	279	85	77	23

MAST SYSTEM

FEEDING LENGTH	3,5 M
DRILLING ANGLE	45 TO 90
ROD PULL CAPACITY	6,3 M
POSITIONING FOR MAST	HYDRAULIC
FEEDING FORCE	8000 KG - 15700 KG
FEEDING SPEED	SPEED KONTROL PANEL(FAST AND SLOW)

ROTATION UNIT

SPEED	TRANSFORMATION	MAX. (rpm) (Vgmax/Vgmin)	MAX. TORQUE (Nm) (Vgmax/Vgmin)
1 ST	6.27:1	135/199	4997/3398* 6828/4646**
2 ND	3.12:1	272/400	2487/1691* 3397/2311**
3 RD	1.75:1	485/714	1395/949* 1905/1296**
4 TH	1;1	850/1250	797/542* 1089/741**
RATIO	2;1		

*Ηmh(hydro mechanical efficiency):0.9 and working pressure is calculated as 260 bar.

**Ηmh(hydro mechanical efficiency):1 and working pressure is calculated as 350 bar.

The size of the hole corresponds to the diameter of the PQ tie-rod body, equipped with a case spring and rotating proportional control. The self-lubricated mechanical drive 4-speed rotor is operated through the hydraulic motor with alternating load. Data presented above is based on the assumption of operating a diesel engine with a constant speed of 1800 RPM.

DRILL CHUCK JAW

TYPE	HYDRAULIC
MAX.INSIDE DIAMETER	117,5 MM
HOLDING CAPACITY	19000 KG

ROD HOLDER

TYPE	DOUBLE HYDRAULIC PISTON
MAX.INSIDE DIAMETER	150 MM
HOLDING CAPACITY	20000 KG

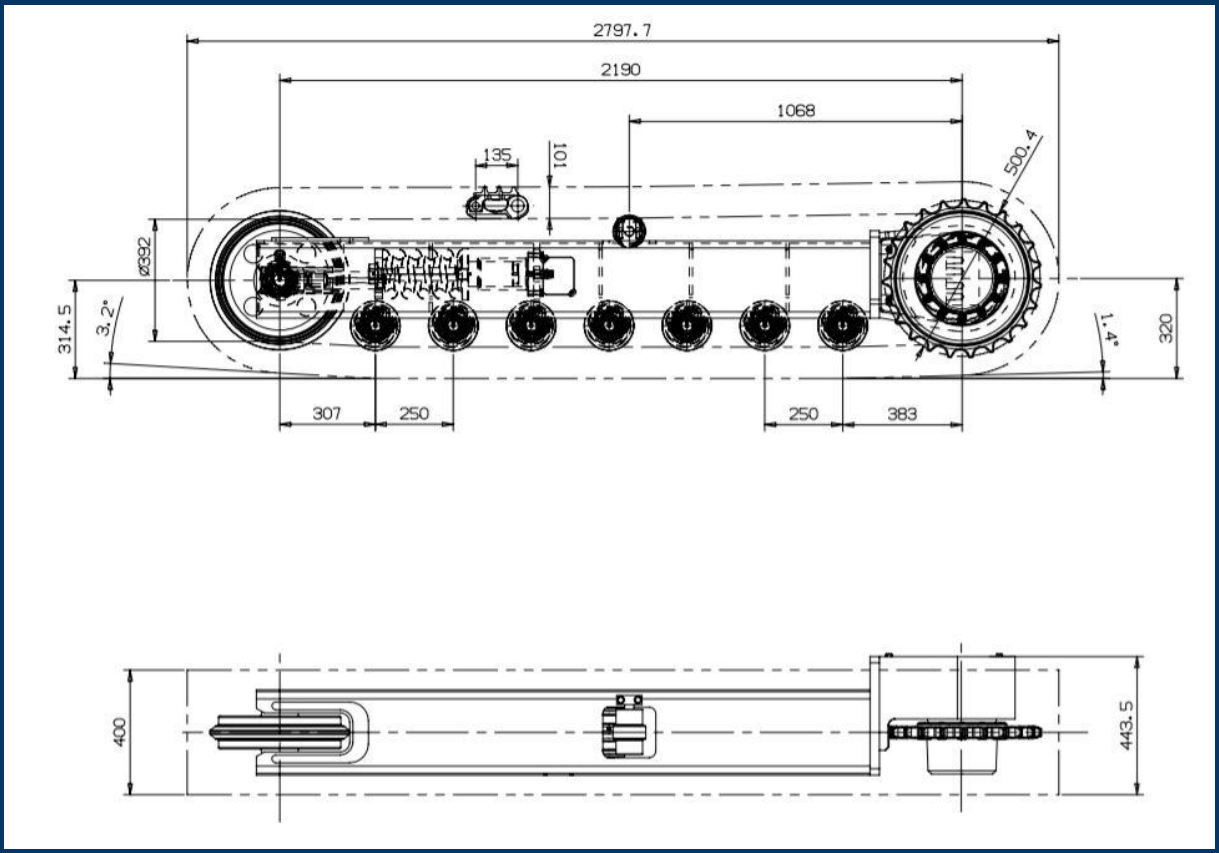
DRILLING CAPACITY

DRILLING ROD DIAMETER	BWL	NWL	HWL	PWL
FINAL HOLE DIAMETER (MM)	60	75,7	96	122,6
DEPTH (M)	2000	1500	1000	600

Drilling depths are given for vertical drilling in homogeneous ground to give an idea.

CRAWLER UNDERCARIAGE

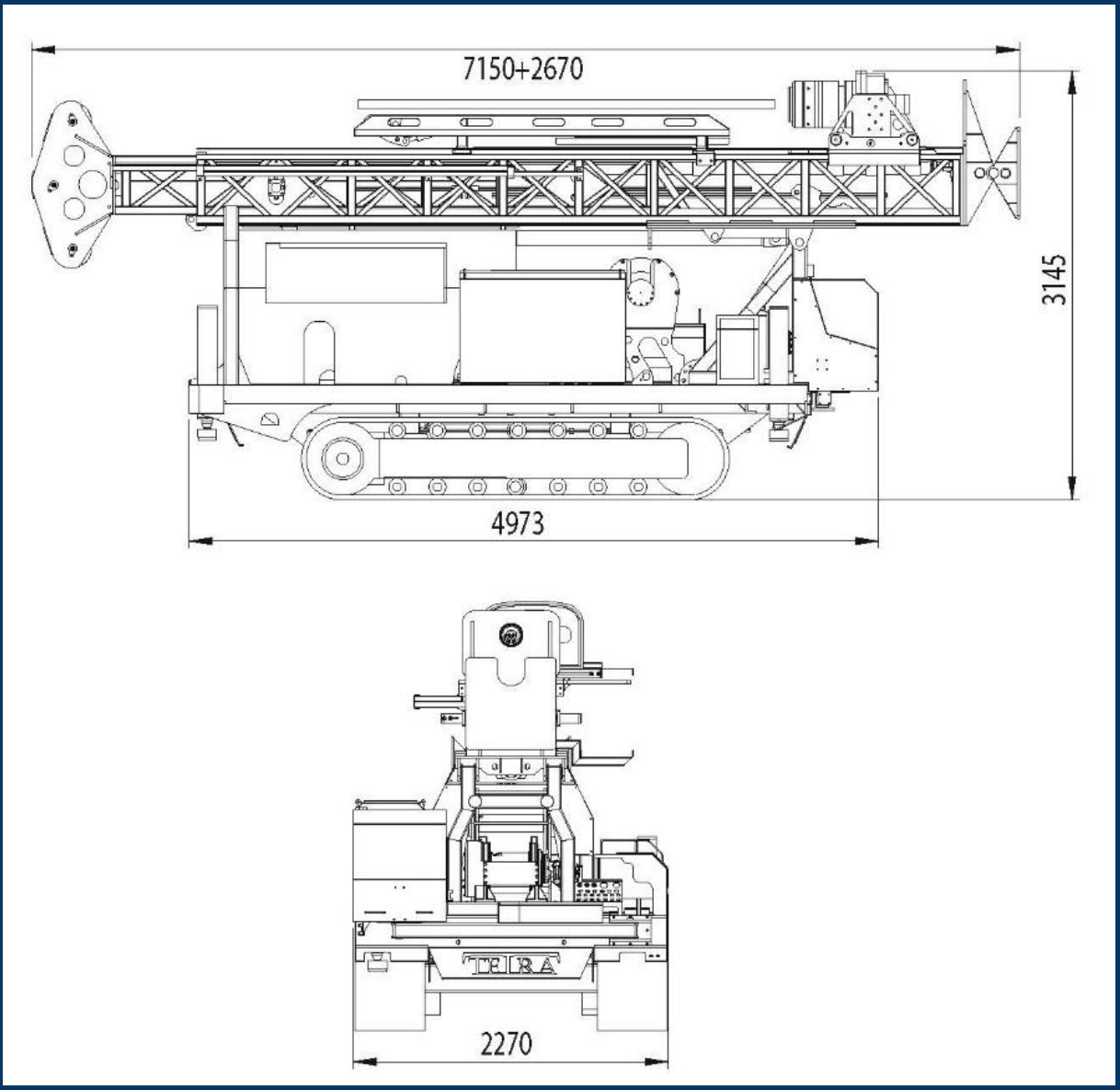
TYPE	GERMAN OR ITALIAN (STEEL)
TRACK WIDTH	400 MM
TRACK LENGTH	2797 MM
TRAVEL SPEED	DOUBLE SPEED 1,07 -2,05 KM/S
LIFTING UP	4 HYDRAULIC PISTON



MUD/WATER PUMP

TYPE	HYDRAULIC WITH THE MACHINE (FCM)
CAPACITY	130-240 L/MIN (ADJUSTABLE)
MAX. PRESSURE	60-120 BAR

MACHINE DIMENSIONS



MACHINE WEIGHT

MAST STROKE LENGTH	MAİN HOİST HİGHT	MAST LENGTH	MAST SLİDİNG STROKE
3500 MM	5510 MM	9300 MM	2650 MM
WEIGHT		10500 KG	

STANDARD FEATURES

TWO SECTION FOLDING	S
MAST REELS	S
SAFETY SHEETS	S
HİGH TORQUE GEAR	S
4 PİECES HYDRAULİC PLUNGER-TYPE LEG MEMBERS	S
TRPLEX MUD PUMP	S
FUEL TANK 250 LT	S
OIL TANK 400 LT	S
OIL COOLER WITH FAN	S
EQUIPMENT CABINET	S
HYDRAULİC MUD MİXER	S
POSITIONING FOR MAST	S
ROD HOLDER	S
DRILL CHUCK JAW (UPPER JAW)	S
BATTERY CABINET	S
SLIDING MUD PUMP HOUSING	S
HYDRAULIC WIRELINE	S
CRAWLER UNDERCARIAGE	S
TIJ REMOVAL TOOL HYDRAULIC	O
EXTRA FUEL FILTER	S
TACHOMETER	S

N-H-P JAW SET FOR UPPER JAW	O
N-H-P JAW SET FOR ROD HOLDER	S
REMOTE CONTROL	S
MUD PUMP	S
2. MUD PUMP	O
LIGHTING	S
DIGITAL DISPLAY	S
MULTIPLE MANOMETER	S
BRAKE WIRELINE MOTOR	S
DOUBLE CHAMBER REFRIGERANT RADIATOR	S

- All data are approximate and change depending on the model of equipment and accessories used.

 All mechanical parts are manufactured by our company and available in stock.

 Depending on the type of foundation is recommended Usage of additional mud-pump for drilling of deeper holes.

 Spare parts of Far Eastern manufacture are not used in the production of our equipment.

 Main pump systems are JAPON KAWASAKI brand.

 Rotary engine is REXROTH brand.

 Cooling system is AKG brand which has a flow of 200 lt/min.and a capacity of 40000 Kcal/h.

 Filters are Italian UFI brand.

 Controllers are Italian AMKA or Denmark DANFOSS brand.

 Movement system is German or Italy brand which has a carrying capacity of 12.000 kg. on 60% slope.

 Warranty for 1 year or 2000 Hours.

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