

ITM

1500

IRAN TRACTOR INDUSTRIAL GROUP ITM Co

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ITM 240 ITM 950



BACKHC PRODUC



3.152 AG 1006.6 MN440A MN440A MTI 4400 4.248 GE PHASER 4.248 CC 21.26M E40-47A 55.68M Mobile V



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IRAN TRACTOR INDUSTRIAL GROUP

On the ground of economic co-operation between Iran and Romania, an agreement was reached in 1966 to establish a tractor manufacturing company in the country. Within this framework, Iran Tractor Manufacturing Company (ITMCO) was founded in 1968. The company is located in the outskirt of the industrial city of Tabriz in the north-west of Iran. The initial objective of this enterprise was to manufacture 10000 units of tractors, ranging from 45-65 horse power engines, with single and double differential gearboxes. After eight years of production, based on areevaluation of local market requirements, Massy Ferguson of England began assembling in 1976 with an up-to-date technology and a higher total production capacity rate of 13000 units per annum. In this scenario, it was decided that a significant number of the parts used in assembly must be produced in Iran either by ITMCO itself or its associated organizations. Accordingly, there was a requirement to build workshops to meet the annual demands of 36000 units of diesel engines, 35000 tons of foundry cast iron, and 32000 tons of forging parts.

Due to the success of ITMCO products in the domestic markets, the company began its export activities in the year 1990 and has continued to make rigorous endeavors in expanding its export base in the international arena. Correspondingly, ITMCO closely co-operated with Giad, a company based in Sudan, by establishing a highly sophisticated assembly line in Sudan to meet the specific expectations of the local market. Moreover, ITMCO, as the major shareholder, sow the seeds of further success by initiating joint venture enterprises in Venezuela and Tajikistan.

To date, the company has accomplished export orders to the following countries:

Afghanistan Algeria Armenia Azerbaijan Bangladesh Botswana Chili Djibouti Egypt Ethiopia **Ivory coast** Jordan Kenya Kuwait

Lebanon Libya Macedonia Malaysia Netherlands Nigeria Philippines Qatar Romania Senegal Sierra Leon Seri Lanka Sudan Syria

Tajikistan Kyrgyzestan Tanzania Thailand Tunisia Turkey UAE Uganda Ukraine Venezuela Yemen Zambia Zimbabwe

ITM 1500

maximum hp (Bs.AU.141.a	a)@2200 rpm	150
Maximum torque Nm(Bs.A	U.141.a)@1400 rpm	650
Max. power available hp@	PTO shaft	138
	ENGINE	
Make	Mo	otorsazan
Model	MT660A	- 150AD
Туре	Diesel, Direc	t injection
Number of cylinders		6
Aspiration	Turb	ocharged
Bore		100 mm
Stroke		127 mm
Capacity	3	3.984 litre
Compression Ratio		17.5:1
Starting aid	Th	ermostart
Cooling system		Water
Air cleaner	Dry, dual element with pre	e-cleaner
Fuel filter	Parallel Dual, with se	dimentor
Exhaust		Vertical
FLEC	TRICAI SYSTEM	
Voltage	12 v , Negat	ive earth
Battery	Dual batter	
Alterneter	2 441 04401	75 ^

PERFORMANCE

voltage	12 v, Negative earth
Battery	Dual battery 66 A.H
Alternator	75 A
Starter	3 Kw
Lights Head, Posi	tion, Cabin, Number plate, brake and Rear plough
Other equipment	Horn, Trailer 7-pin plug and Digitaly panel

UL UL	UICH		
Туре	Double split torque		
Plate diameter	330 mm		
TRACK ADJUSTMENT			
I RACK AI	DJUSTWENT		
Front	1900 - 2080 mm		
Rear	1728 - 2066 mm		
TRANS	SMISSION		
Туре	ZF T3500		
POWER TAKE OFF			

Туре	Independent, hydraulic shiftable with lever	
P.T.O speed	540/1000 rpm at 2160/2140 rpm engine speed	
Number of spli	nes 6/21 for 540 rpm / 1000 rpm	
Shaft diameter	35 mm	

HYDRAULICS

Accessories Electrohydraulical draft, position and response cor Max. lift capacity 5500 Kg@ lower links are horizon	trol
Max. lift capacity 5500 Kg@ lower links are horizon	uoi
	ntal
Hydraulic pump Gear pu	mp
Max. delivery 45	pm
Max. pressure 220	

ITM 1500

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INDUSTRIAL

ITM 1500



AUXI	LIARY HYDRAULIC
Pump type	Engine mounted tandem gear pump
Max. delivery	45 lpm @ 220 bar
Combined flow	60 lpm
Spool valve	1 valve (2 spools, 3 positions)
	STEERING
Туре	Hydrostatic
	FRONT AXLE
Туре	Carraro
Diff. lock	Autolock
Turning angle	55°
	BRAKES
Туре	Oil immersed, Wet brakes
Function Hydraulio	c, Independent or both wheels together
Plates diameter	222.4 mm
Parking brake	Mechanical, Hand lever
Differential lock	Mechanical
	TIRES
Front	16.9 - 26
Rear (Disk type)	20.8 - 38
WEIGH	ITS AND DIMENSIONS
With full fuel, oil, water a	and front weights
Weight on front axle	2600 kg
Weight on rear axle	3830 kg
Total Weight	6430 kg
Length (Lower links are	horizontal) 5100 mm
Width	2080 mm
Height(Over of Cabin)	3100 mm
Height (Over of steering	wheel) 2310 mm
wheel base	2920 mm
Turning radius (with bra	king) 5700 mm
Height over ground (Dra	awbar beneath) 490 mm
	CAPACITIES
Fuel tank	380 litre

Fuel tank	380 litre
Hydraulic system	56-60 litre
Engine sump	15.3 litre
Cooling system	30 litre

OTHER EQUIPMENT

Drawbar

- Hydraulic quick couplers
- Toolkit

- Rear wheels weights Front weights Cabin with heating, air conditioning systems and radio Remote position control bottons



Rated engine power@2200 rev/min		110 hp	
Max engine torque@1200 rev/min		444 N.m	
Max P.T.O power		95 hp	
ELECTRICS			
Voltage		12v, negative earth	
Alternator / Starter		45 Amp / 2.8 KW	
Lights	0 ,	e lights - Brake lights	

PERFORMANCE

Headlights, Side lights - Brake lights Direction indicators - Rear work lights Horn - 7 pin trailer socket Other

U.	LUTUI
Туре	Split torque
Diameter	330 mm(13 in) dia.
Material	Cerametalic

	ENGINE
Make/Type	Motorsazan / MN660A - 110AD
Number of cylinders	6
Injection	Diesel, Direct injection
Bore	100 mm (3.937 in)
Stroke	127.0 mm (5.0 in)
Capacity	6 litre (365 in ³)
Compression Ratio	16.5:1
Starting Aid	Thermostart
Throttle control	Hand and foot
Cooling System	Water
Air cleaner	Dual, dry element
Air Pre-cleaner	Element Over-bonnet Centrifugal
Fuel filter	Dual, high capacity
Exhaust	Vertical

ITM 399 4 WD

	TRACK ADJUSTMENT
Front	1769 mm-2093 mm
Rear - pressed	1525 mm-2235 mm

		TRANSMISSI	ON	
synchrom	iesh	12 forward,	4 reverse m	anual change
	eds-at rated e , mile/h.(Km/ł	engine speed, h)	16.9/15 - 38	
Forward	1 2 3 4 5 6	1.3(2.1) 1.7(2.7) 2.0(3.2) 2.5(4.0) 3.6(5.8) 4.6(7.4)	7 8 9 10 11 12	5.4(8.7) 6.8(11.0) 8.0(13.0) 10.2(16.5) 14.8(23.8) 18.8(30.2)
Reverse			1 2 3 4	2.0(3.2) 2.5(4.0) 8.1(13.0) 10.2(16.5)

POWER TAKE OFF			
Operation	Independent, hydraulic and shiftable P.T.O system		
I.P.T.O speeds	540 rev/min @ 1900 - engine rev/min		
	1000 rev/min @ 2000 - engine rev/min		
Shaft diameter	35 mm(1.38 in)		
No.of splines (r	rev/min) 6(540),21(1000)		
HYDRAULICS			

Function	Draft control, pos	ition control
	Respo	onse control
Max pressure		231 bar
Max. lift capacity at lower links	are horizontal	3678 kg

Туре

STEERING	
	Hydrostatic

	INSTRUMENTATION
Gauges	Tachometer/hourmeter,Fuel, water temperature
Warning lights	Direction indicators electric charge
	Head light main beam, Diff lock engaged, Hand brake, low fuel, low engine oil pressure Engine air cleaner blockage , Transmission oil filter blockage , 4WD engaged

AUXILIARY HYDRAULIC			
Pump location		En	gine mounted
Pump type		Tandu	m gear Pump
Max oil flow	35 litre / min	@ 175 bar	(2500 lbf/in ²)
Combined flow with high	n flow pump		63 litre/min
Control		ş	selector valve
Spool valves		2 spool	s, 3 positions



BRAKES				
Туре	Multi disc oil immersed			
No.of plates	4 friction 2 steel each side			
Diameter	222.4 mm			
Operation	Hydraulic independent			
Parking brake	Mechanical, Hand lever			
WHEELS AND) TYRES			
Front	14.9 - 24 6 ply			
Rear	18.4- 34 8 ply			
OPERATOR ENV				
Seat	Spring suspension system			
Fenders	Flat top			
Tool box	With set of tools			
1001 00X				
WEIGHTS AND D	IMENSIONS			
weight with full fuel, oil and water,	front weights			
Weight - front	1680 kg			
- Rear	2030 kg			
- Total	2030 kg 3890 kg			
	5			
Overall length	4330 mm			
Width - minimum	1970 mm			
Height - over of ROPS	2630 mm			
- over of steering wheel	1910 mm			
wheel base	2640 mm			
Turning radius Without braking	9410 mm			
Ground clearance	100			
- Under drawbar	430 mm			
- Under front axle	490 mm			
CAPACI	ſIES			
Fuel tank	126 litre			
Engine sump	15.4 litre			
Cooling system	23 litre			
Hydraulic system	47.4 litre			
OTHER EQUIPMENT				

- Drawbar with heavy trailer hitch
- Hydraulic quick couplers
- Hydraulic valve for implements Rear wheels(Disk type) weights
- Toolkit
- Front weights
- Roll-over protective structure(ROPS)

OPTIONS

Falling object protection (FOP) Cabin



PERFORMANCE		
Rated engine power@2200 rev/min	110	hp
Max engine torque@1200 rev/min	444 N	.m
Max P.T.O power	95	hp
ELECTRICS		

Voltage	12v, negative earth
Alternator / Starter	45 Amp / 2.8 KW
Lights	Headlights, Side lights - Brake lights Direction indicators - Rear work lights
Other	Horn - 7 pin trailer socket

	CLUTCH
Туре	Split torque
Diameter	330 mm(13 in) dia.
Material	cerametalic

	ENGINE
Make/Type	Motorsazan / MN660 A - 110 AD
Number of cylinders	6
Injection	Diesel, Direct injection
Bore	100 mm (3.937 in)
Stroke	127.0 mm (5.0 in)
Capacity	6 litre (365 in ³)
Compression Ratio	16.5:1
Starting Aid	Thermostart
Throttle control	Hand and foot
Cooling System	Water
Air cleaner	Dry, dual element
Air Pre-cleaner	Element Over-bonnet centrifugal
Fuel filter	Dual, high capacity
Exhaust	Vertical

ITM 399 2 WD

	TRAC	CK ADJUSTN	IENT			
Front			1370 r	nm-1980 mm		
Rear - pressed	essed 1525 mm-2235 mm					
	TF	RANSMISSIO	N			
Synchro				rd, 4 reverse		
2		synch		anual change		
Road speeds-at Rear tires, mile/		gine speed, 1	6.9/15 - 38			
Forward	1 2 3 4 5 6	1.3(2.1) 1.7(2.7) 2.0(3.2) 2.5(4.0) 3.6(5.8) 4.6(7.4)	7 8 9 10 11 12	5.4(8.7) 6.8(11.0) 8.0(13.0) 10.2(16.5) 14.8(23.8) 18.8(30.2)		
Reverse			1 2 3 4	2.0(3.2) 2.5(4.0) 8.1(13.0) 10.2(16.5)		
	PO	WER TAKE O)FF			
Operation Ir		ent, hydraulic a		P.T.O system		
I.P.T.O speeds		540 rev/min @	<u>д</u> 1900 - е	ngine rev/min		
	ŕ	1000 rev/min (@ 2000 - e	ngine rev/min		
Shaft diameter			35	5 mm(1.38 in)		
No.of splines (re	No.of splines (rev/min) 6(540),21(1000)			640),21(1000)		
HYDRAULICS						
Function		Draft	control, po	osition control		
			Res	ponse control		
Max pressure		231 bar				
Max. lift capacity 3678 kg						
		STEERING	STEERING			
Turne						
Туре				Hydrostatic		
Туре	INS	TRUMENTAT	ION	Hydrostatic		
		TRUMENTAT	- 7	-		
		ter/hourmeter,	Fuel, wate	-		
Gauges	Fachome Head I Hand b	ter/hourmeter, Direction i ight main be rake, low fuel air cleaner blo	,Fuel, water ndicators e am, Diff lo , low engin ockage ,Tra	r temperature lectric charge ck engaged,		
Gauges	Fachome Head I Hand b Engine	ter/hourmeter, Direction i ight main be rake, low fuel air cleaner blo	Fuel, wate ndicators e am, Diff Io , low engin ockage , Tra lockage, 41	r temperature lectric charge ck engaged, e oil pressure ansmission oil		
Gauges	Fachome Head I Hand b Engine	ter/hourmeter, Direction i ight main be rake, low fuel air cleaner blo filter b	Fuel, wate ndicators e am, Diff Io , low engin ockage , Tra olockage, 41	r temperature lectric charge ck engaged, e oil pressure ansmission oil		
Gauges Warning lights	Fachome Head I Hand b Engine	ter/hourmeter, Direction i ight main be rake, low fuel air cleaner blo filter b	Fuel, water ndicators e am, Diff Io , Iow engin ockage , Tra olockage, 41 AULIC Eng	r temperature lectric charge ck engaged, e oil pressure ansmission oil WD engaged.		
Gauges Warning lights Pump location	Fachome Head I Hand b Engine	ter/hourmeter, Direction i ight main be rake, low fuel air cleaner blo filter b	Fuel, water ndicators e am, Diff lo , low engin, ockage , Tra olockage , 41 AULIC Eng	r temperature lectric charge ck engaged, e oil pressure ansmission oil WD engaged.		

Control

Spool valves



BR	AKES		
Туре	Ν	/lulti disc o	il immersed
No.of plates	4 frie	ction 2 stee	el each side
Diameter			222.4 mm
Operation	ŀ	lydraulic i	ndependent
Parking brake	Me	chanical,	Hand lever
WHEELS	AND TIRE	s	
Front	7.50-18	. 0 8 ply	/ pressed
Rear	18.4-34	8 ply	-
T COL		0 p.;	proceed
OPERATOR			· ·
Seat	Sprii	ng suspen	sion system
Fenders			Flat top
Tool box		With	set of tools
WEIGHTS AN		IONS	
with full fuel, oil and water, fro	ont weights		
Weight			
- front			1620 kg
- rear			1990 kg
- Total			3610 kg
Overall length			4330 mm
Width - minimum			1970 mm
Height - over of ROPS			2630 mm
- over steering wheel			1910 mm
wheel base			2580 mm
Turning radius Without brakin	g		8430 mm
Ground clearance			
- Under drawbar			430 mm
- Under front axle			580 mm
CAP	ACITIES		
Fuel tank			126 litre
Engine sump			15.4 litre
Cooling system			23 litre
Hydraulic system			47.4 litre
		-	
		1	
Drawbar with heavy – trailer h Hydraulic quick couplers	litch		
Hydraulic valve for implement	s		
Rear wheels(Disk type) weigh			
Toolkit			
Front weights ROPS			
1101'0			

OPTIONS

11

Falling object protection (FOP) Cabin

selector valve

2 spools - 3 positions

ITM 800 4 WD

	ENGINE
Make/Type	Motorsazan / Turbocharge - MT440 C - 82 AD
Number of cylind	lers 4
Injection	Direct
Bore	100 mm(3.937 in)
Stroke	127.0 mm(5.0 in)
Capacity	3.99 litre
Compression Ra	tio 17.5:1
Pollution standar	d ECE R96, R24 - Stage II
Air inlet system	Turbocharge
Starting Aid	Thermostart
Throttl control	Hand/foot control
Cooling system	Water
Air cleaner	Dual,dry element with pre-cleaner
Fuel filter	High capacity,with sediment bowl
Exhaust	Vertical

MD

800

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PERFORMANCE

Rated engine power at 2000 rpm

Max. P.T.O. Power

Max. engine torque at 1400 engine rpm

82 hp

72 hp

360 N.m

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ITM

	ELECTRICS	
Voltage	12 , negative ground	
Starter	2.8 KV	
Lights	Head, Side, Brake, Rear and turn signals	
	CLUTCH	
Туре	split torque	
Diameter	305 mm(12 in	
	TRANSMISSION	
Synchromesh	12 forward, 4 reverse, Manua	
	POWER TAKE OFF	
Туре	Independent, hydraulic and changeable	
Engine speed at 54	0 / 1000 PTO rpm 1900 / 2000 rpm	
Shaft diameter	35 mm(1.38 in	
No.of splines	6(540 rpm),21(1000 rpm	
	HYDRAULICS	
Function	Draft, position and response control by central sensitive arr	
Max lift capacity at	ower links horizontal 2227 K	
Max flow pump	27.6 Liter/ mi	
	STEERING	
Туре	Hydrostati	
Pump position	Engine-mounte	
Max. Turning angel	55 degree	
	EQUIPMENT	
Oil Pressure Switch, air Filter Blockage Switch, Starting Safety Switch, Differential Lock		

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AUXILIARY HYDRAULIC			
Pump type	Engine mounted tandem gear pump		
Max pump flow at 175 ba	r 35 litre/min		
Total flow (main & aux.pumps) 63 litre/r			
Control	selector valve		
Spool valve	1 valve with 2 spools(3 positions)		
BRAKES			
Туре	oil immersed		
No of disks	5 friction 3 steel each side		

.)po	on minersea
No.of disks	5 friction 3 steel each side
Diameter	222.4 mm
Function	Hydraulic
Parking brake	Mechanical , Hand lever

WHEELS AND TIRES			
12.4 / 24 , 6 ply			
18.4 / 15 - 30 , 6 ply			
OPERATOR ENVIRONMENT			
Spring suspension system			
Flat top			
With set of tools			

WEIGHTS AND DIMENSIONS WITH FULL FUE	EL OIL AND WATER
Weight front axle	1710 kg
Weight rear axle	1770 kg
Total	3480 kg
Overall length	4190 mm
Width	2060 mm
Height(Over of ROPS)	2520 mm
Height Over steering, wheel	1850 mm
wheel base	2290 mm
Turning radius(without braking)	7740 mm
Ground clearance (Under drawbar)	380 mm

CAPACITIES	
Fuel tank	126 litre
Engine sump	8 litre
Cooling system (water)	18 litre
Hydraulic system	45 litre

OTHER EQUIPMEN	т	
Drawbar with heavy trailer hitch Rear wheels (Disk type) weights Front weights Trailer hydraulic pipe		
OPTIONS		
Falling object protection (FOP) Cabin		
Rear wheel	13.6 / 12 - 38	

ITM 800 2 WD

	ENGINE
Make/Type	Motorsazan /Turbocharge - MT440 C - 82 AD
Number of cylinde	ers 4
Injection	Direct
Bore	100 mm(3.937 in)
Stroke	127.0 mm(5.0 in)
Capacity	3.99 litre
Compression Rat	tio 17.5:1
Pollution standard	ECE R96, R24 - Stage II
Air inlet system	Turbocharge
Starting Aid	Thermostart
Throttle control	Hand/foot control
Cooling system	Water
Air cleaner	Dual,dry element with pre-cleaner
Fuel filter	High capacity, with sediment bowl
Exhaust	Vertical

ELECTRICS			
Voltage	12 , no	egative ground	
Starter		2.8 KW	
Lights	Head, Side, Brake, Rear a	and turn signals	
	CLUTCH		
Туре		split torque	
Diameter		305 mm(12 in)	
	TRANSMISSION		
Synchromesh	12 forward, 4 r	everse, Manual	
POWER TAKE OFF			
Type Independent, hydraulic and changeable		and changeable	
Engine speed at 54	40 / 1000 PTO rpm 1	900 / 2000 rpm	
Shaft diameter		35 mm(1.38 in)	
No.of splines	6(540 rpm	n),21(1000 rpm)	
	HYDRAULICS		
Function	Draft, position	n and response	
control by central sensitive arr		al sensitive arm	
Max lift capacity at	lower links horizontal	2227 Kg	
Max flow pump	Max flow pump 27.6 liter / min		
STEERING			
Туре		Hydrostatic	
Pump Engine-mounted Tandum gear pump		dum gear pump	
	EQUIPMENT		
Oil Pressure Switch, air Filter Blockage Switch, Starting Safety Switch, Differential Lock			

800

-0

PERFORMANCE

Rated engine power at 2000 rpm

Max. P.T.O. Power

Max. engine torque at 1400 engine rpm

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64.5

82 hp

72 hp

360 N.m

ITM



AUXILIARY HYDRAULIC		
Pump type	Engine mounted tandem gear pump	
Max pump flow at 175 bar 35 litre/min		
Total flow (main & aux.pum	nps) 63 litre/min	
Control	selector valve	
Spool valve 1 valve with 2 spools(3 positions)		
BRAKES		

Туре	oil immersed
No.of disks	5 friction 3 steel each side
Diameter	222.4 mm
Function	Hydraulic
Parking brake	Mechanical, Hand lever

	WHEELS AND TIRES
Front	7.5 / 16 , 6 ply
Rear	18.4 / 15 - 30 , 6 ply

OPERATOR ENVIRONMENT	
Seat	Spring suspension system
Fenders	Flat top
Tool box	With set of tools

WEIGHTS AND DIMENSIONS WITH FULL FUEL	OIL AND WATER
Weight front axle	1500 kg
Weight rear axle	1770 kg
Total	3270 kg
Overall length	4190 mm
Width	2060 mm
Height(Over of ROPS)	2520 mm
Height Over steering, wheel	1850 mm
wheel base	2290 mm
Turning radius(without braking)	6940 mm
Ground clearance (Under drawbar)	380 mm

CAPACITIES		
Fuel tank	126 litre	
Engine sump	8 litre	
Cooling system (water)	18 litre	
Hydraulic system	45 litre	

Hydraulic system

OTHER EQUIPMENT

Drawbar with heavy trailer hitch Rear wheels (Disk type) weights

Front weights

Trailer hydraulic pipe

OPTIONS

Falling object protection (FOP) Cabin Rear wheel

13.6 / 12 - 38

ITM 485 4 WD

	ENGINE
Make/Type	Motorsazan / MT 440C - 82AD
Aspiration	Turbocharged
Number of cylinders	4
Injection	Direct
Bore	100 mm(3.976 in)
Stroke	127.0 mm(5.0 in)
Capacity	3.99 litre(247.7 in ³)
Compression Ratio	17.5:1
Starting Aid	Thermostart
Throttle control	Hand and foot
Cooling System	Water
Air cleaner	Dual,dry element
Fuel filter	Single, high capacity with sedimentor
Exhaust	Vertical
	ELECTRICS
Alternator / Starter	45 Amp / 2.8 KW
Battery	Dual Battery 66 A.H
Lights	Headlights, Side lights - Brake lights
Lights	Direction indicators - Rear work lights
Other	Horn
Туре	CLUTCH Dual - Cerametalic
Diameter	305 mm(12 in) dia.cerametalic
Diameter	
	CK ADJUSTMENT
Front	1575-1930 mm
Rear - pressed	1422-2134 mm
Т	RANSMISSION
Synchro	12 forward , 4 reverse
	synchromesh, manual change
PC	OWER TAKE OFF
Shaft diameter	35 mm(1.38 in)
No.of splines (rev/min)	6(540)
	BRAKES
Туре	Multi disc oil immersed
No.of plates	5 Friction, 3 Steel eachside
Diameter	222.4 mm
Parking brake	Mechanical , Hand lever
i annig biano	
E dia	HYDRAULICS
Function	Draft control, position contro
	Response control
Max oil flow	16.7 liter /min
Max pressure	214 bar
Max lift capacity at lower li	inks are horizontal 2227 kg(8109 lb)

ITM 485 IRAN 485 IRAN 485 INDUSTRIAL GROUP
TRACTOR

PERFORMANCE	
Rated engine power@2000 rev/min	82 hp
Max engine torque@1400 rev/min	360 N.m



	STEERING	
Туре		Hydrostatic
	INSTRUMENTATI	ON
Gauges		Fuel, water temperature
Warning lights		dicators, electric charge
	Hand brake, low fuel, Engine air cleaner blo	am, Diff lock engaged, low engine oil pressure ockage, Transmission oil lockage, 4WD engaged.
	4WD FRONT AX	LE
Axle type		AG 85
Engagement		mechanical
Turning deg		55
	WHEELS AND TH	
Front	WHEELS AND TH	12.4 - 24, 6 ply
Rear		18.4/15 - 30 , 6 ply
		, 13
	WEIGHTS AND DIME	
<u> </u>	ar weight and full of fue	
Weight - front a		1620 kg
	xie	1760 kg 3380 kg
- Total Overall length		0
Width		4190 mm 2060 mm
Height - over o	f ROPS	2520 mm
•	teering wheel	1850 mm
wheel base		2290 mm
	Without braking	7740 mm
	nce under drawbar	380 mm
E al ta al	CAPACITIES	400 //
Fuel tank		126 litre
Engine sump Cooling system	<u> </u>	8 litre 18 litre
Hydraulic system		43 litre
Steering pump		43 litre
otooning pump		1.1 1100
	OTHER EQUIPME	ENT
Trailer tipping p Rigid stabilizers ROPS Hydraulic spool Delux seat Heavy duty swi Front weights Toolkit	valve kit	
	OPTIONS	
Cabin Sunroof		
Rear tire		13.6*12-38

ITM 485 2 WD

	ENGINE	
Make/Type	Motorsazan / MT 440C - 82AD	
Aspiration	Turbocharged	
Number of cylinders	4	
Injection	Direct	
Bore	100 mm(3.976 in)	
Stroke	127.0 mm(5.0 in)	
Capacity	3.99 litre(247.7 in ³)	
Compression Ratio	17.5:1	
Starting Aid	Thermostart	
Throttle control	Hand and foot	
Cooling System	Water	
Air cleaner	Dual,dry element	
Fuel filter	Single, high capacity with sedimentor	
Exhaust	Vertical	
	ELECTRICS	
Voltage	12v,negative earth	
Alternator / Starter	45 Amp / 2.8 KW	
Battery	Dual Battery 66 A.H	
Lights	Headlights, Side lights - Brake lights	
	Direction indicators - Rear work lights	
Other	Horn	
	CLUTCH	
Туре	Dual - Cerametalic	
Diameter	305 mm(12 in) dia.cerametalic	
Front	I370-1980 mm	
Rear - pressed	1370-1980 Min 1422-2134 mm	
Iteal - piesseu	1422-2134 1111	
Т	RANSMISSION	
Synchro	12 forward , 4 reverse	
Synchro	12 forward , 4 reverse synchromesh, manual change	
	synchromesh, manual change	
PC	synchromesh, manual change	
PC Shaft diameter	Synchromesh, manual change OWER TAKE OFF 35 mm(1.38 in)	
PC Shaft diameter	synchromesh, manual change OWER TAKE OFF 35 mm(1.38 in) 6(540)	
PC Shaft diameter No.of splines (rev/min)	synchromesh, manual change OWER TAKE OFF 35 mm(1.38 in) 6(540) BRAKES	
PC Shaft diameter No.of splines (rev/min) Type	synchromesh, manual change WER TAKE OFF 35 mm(1.38 in) 6(540) BRAKES Multi disc oil immersed	

HYDR	AULICS
Function	Draft control , position control
	Response control, intermix
Max oil flow	16.7 liter /min
Max pressure	214 bar
Max lift capacity at lower links are	horizontal 2227 kg(8109 lb)

PERFORMANCE	
Rated engine power@2000 rev/min	
Max engine torque@1400 rev/min	

485 2 WD

ITM

82 hp 360 N.m 485

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INDUSTRIAL

ITM 485



	STEERING	
Туре		Hydrostatic
	INSTRUMENTAT	
Gauges 1		r,Fuel, water temperature
Warning lights		ndicators, electric charge
Warning lights		eam, Diff lock engaged,
	Hand brake, low fue	el, low engine oil pressure
	-	lockage, Transmission oil
		olockage , 4WD engaged.
	WHEELS AND T	
Front		7.5 - 16,6 ply
Rear		18.4/15 - 30,6 ply
	WEIGHTS AND DIME	ENSIONS
Weight(with real	r weight and Full of fu	el, oil and water)
Weight - front av	de	1420 kg
- rear ax	le	1720 kg
- Total		3140 kg
Overall length		4190 mm
Width		2060 mm
Height - over of	ROPS	2520 mm
- over st	eering wheel	1850 mm
wheel base		2290 mm
Turning radius V	Vithout braking	6940 mm
Ground clearan	ce under drawbar	380 mm
	CAPACITIES	3
Fuel tank		126 litre
Engine sump		8 litre
Cooling system		18 litre
Hydraulic system	n	43 litre
Steering pump		1.1 litre
	OTHER EQUIP	MENT
Trailer tipping pi Rigid stabilizers	ре	
ROPS Hydraulic spool	valve kit	
Delux seat		
Heavy duty swin Front weights	iging drawbar	
Toolkit		
	OPTIONS	
Cabin		
Sunroof Rear tire		13.6*12-38
		10.0 12 00

ITM 475 4 WD

ITM 475 RANN 475 IRAN ATS INDUSTRIAL GROUP	
TRACTOR	

PERFORMANCE	
Rated engine power@2000 rev/min	75 hp
Max engine torque@1400 rev/min	295 N.m

	ENGINE
Make/Type	Motorsazan / MN440 A - 75 AD
Number of cylinders	4
Injection	Direct
Bore	100 mm(3.976 in)
Stroke	127.0 mm(5.0 in)
Capacity	3.99 litre(247.7 in ³)
Compression Ratio	16.5:1
Starting Aid	Thermostart
Throttle control	Hand and foot
Cooling System	Water
Air cleaner	Dry, with pre cleaner
Fuel filter	Single, high capacity with sedimentor
Exhaust	Vertical
	ELECTRICS
Voltage	12v, negative earth
Alternator / Starter	45 Amp / 2.8 KW
Battery	Dual battery 66 A.H
Lights	Headlights, Side lights - Brake lights
	Direction indicators - Rear work lights
Other	Horn
-	CLUTCH
Туре	Dual
Diameter	305 mm(12 in)

Туре	Dual	
Diameter	305 mm(12 in)	
IRA	ACK ADJUSTMENT	
Front	1575-1930 mm	
Rear - pressed	1422-2134 mm	
TRANSMISSION		
Synchro	12 forward , 4 reverse	
	synchromesh, manual change	

POWER TAKE OFF	
Shaft diameter	35 mm(1.38 in)
No.of splines (rev/min)	6(540)

BRAKES		
Туре	Multi disc oil immersed	
No.of plates	5 Friction, 3 Steel eachside	
Diameter	222.4 mm	
Parking brake	Mechanical, Hand lever	

HYDRAULICS		
Function	Draft control, position control	
	Response control	
Max oil flow	16.7 liter /min	
Max pressure	214 bar	
Max lift capacity at lower links are ho	rizontal 2227 kg(8109 lb)	



	STEERING	
Туре		Hydrostatic
	INSTRUMENTATIO	N
Gauges	Tachometer/hourmeter,Fu	
Warning lights		cators, electric charge
	Head light main beam Hand brake, low fuel, low Engine air cleaner block filter bloc	w engine oil pressure,
	4WD FRONT AXLE	
Axle type		AG 85
Engagement		mechanical
Turning deg		55
	WHEELS AND TIRE	S
Front		12.4 - 24,6 ply
Rear		18.4/15 - 30,6 ply
	WEIGHTS AND DIMENS	IONS
Weight(with rea	ar weight and full of fuel, of	
Weight - front a	. .	1560 kg
- rear a		1760 kg
- Total		3320 kg
Overall length		4190 mm
Width		2060 mm
Height - over	of ROPS	2520 mm
- over s	steering wheel	1850 mm
		2290 mm
Turning circle		
- less brakes 7740 mm		7740 mm
Ground clearance under drawbar 380 mr		380 mm
	CAPACITIES	
Fuel tank		126 litre
Engine sump		8 litre
Cooling system	1	18 litre
Hydraulic syste	em	43 litre
Steering pump		1.1 litre
	OTHER EQUIPMEN	т
Trailer tipping p Rigid stabilizer: ROPS Hydraulic spoo Delux seat Heavy duty swi Front weights Toolkit	s I valve kit	
OPTIONS		
Cabin	of fields	
Sunroof		
Rear tire		13.6*12-38

ITM 475 2 WD

	ENGINE
Make/Type	Motorsazan / MN440 A - 75 AD
Number of cylinders	4
Injection	Direct
Bore	100 mm(3.976 in)
Stroke	127.0 mm(5.0 in)
Capacity	3.99 litre(247.7 in ³)
Compression Ratio	16.5:1
Starting Aid	Thermostart
Throttle control	Hand and foot
Cooling System	Water
Air cleaner	Dry, with pre cleaner
Fuel filter	Single, high capacity with sedimentor
Exhaust	Vertical

	ELECTRICS	
Voltage	12v, negative earth	
Alternator / Starter	45 Amp / 2.8 KW	
Battery	Dual battery 66 A.H	
Lights	Headlights, Side lights - Brake lights	
	Direction indicators - Rear work lights	
Other	Horn	
CLUTCH		
Туре	dual	
B: /	205	

Diameter	305 mm(12 in) dia.
TRACK AD	JUSTMENT
Front	1370-1980 mm
Rear - pressed	1422-2134 mm

TRANSMISSION
12 forward , 4 reverse
synchromesh, manual change

POWER TAKE OFF		
Shaft diameter	35 mm(1.38 in)	
No.of splines (rev/min)	6(540)	

Synchro

BRAKES		
Туре	Multi disc oil immersed	
No.of plates	5 Friction, 3 Steel eachside	
Diameter	222.4 mm	
Parking brake	Mechanical, Hand lever	
HYDRAULICS		
Function	Draft control, position control	
	Response control	

Max oil flow	16.7 liter /min
Max pressure	214 bar
Max lift capacity at lower links are horizontal	2227 kg(8109 lb)



PERFORMANCE	
Rated engine power@2000 rev/min	75 hp
Max engine torque@1400 rev/min	295 N.m



	STEEDING	
Туре	STEERING	Hydrostatic
Type		Tydrostatio
	INSTRUMENTATIO	DN .
Gauges T	achometer/hourmeter,F	uel, water temperature
Warning lights	Direction ind	icators, electric charge
	Hand brake, low fuel, l Engine air cleaner bloc	n, Diff. lock engaged, low engine oil pressure skage , Transmission oil skage , 4WD engaged.
	WHEELS AND TIR	ES
Front		7.5-16,6 ply
Rear		18.4/15 - 30,6 ply
١	WEIGHTS AND DIMEN	SIONS
Weight(with rear	weight and full of fuel,	oil and water)
Weight - front ax	le	1300 kg
- rear axl	e	1760 kg
- Total		3060 kg
Overall length		4190 mm
Width		2060 mm
Height - over of	ROPS	2520 mm
- over ste	eering wheel	1850 mm
wheel base		2290 mm
Turning radius V	Vithout braking	6940 mm
Ground clearance	e under drawbar	380 mm
	CAPACITIES	
Fuel tank		126 litre
Engine sump		8 litre
Cooling system		18 litre
Hydraulic system	ı	43 litre
Steering pump		1.1 litre
OTHER EQUIPMENT		
Trailer tipping pip Rigid stabilizers ROPS Hydraulic spool v Delux seat Heavy duty swin Front weights Toolkit	valve kit	
	OPTIONS	
Cabin		
Sunroof Rear tire		13.6*12-38
]

285 New

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PERFORMANCE	
Rated engine power@2000 rev/min	82 hp
Max engine torque@1500 rev/min	345 N.m

ITM 285 4 WD NEW

ENGINE

	ENGINE
Make/Type	Motorsazan /MT 441A
Number of cylinder	rs 4
Injection	Diesel, Direct injection
Aspiration	Turbocharged
Bore	101 mm
Stroke	127 mm
Capacity	4.07 litre
Compression Ratio	D 16:1
Air cleaner	Dual, dry element with pre-cleaner
Fuel filter	Single, high capacity with prefilter
Exhaust	Vertical
	ELECTRICS
Voltage	12v,negative earth
Alternator / Starte	
Battery	Dual Battery , 66 A.H.
Lights	Headlights, Side lights - Brake lights
	Direction indicators - Rear plough lamp
Other	7 pin trailer socket
	CLUTCH
Туре	Dual
Diameter	305 mm
Diameter	303 1111
	TRANSMISSION
Sliding - gear	8Forward, 2 reverse speeds, manual change
	STEERING
Туре	Hydrostatic
,,	•
-	POWER TAKE OFF
Туре	Live with engine and transmition
Shaft diameter	35 mm
No.of splines	6
R	EAR AXEL AND BRAKES
Brake type	Oil immersed
Actuation	Mechanical independent or locked together
Parking brake	Mechanical, Hand lever
Differential lock	Mechanical
	4WD FRONT AXLE
Туре	AG 85
	//0 00

4WD FRONT AXLE			
Туре	AG 85		
Engagement	mechanical		
Diff. lock	Automatic		
Turn angel	55		



CAPACITIES			
90 litre			
43 litre			
8 litre			
14.2 litre			
1.1 litre			

WEIGHTS A	AND DIM	ENSIONS

with full fuel, oil and water and front weight			
Front	1180 kg		
Rear	1694 kg		
Total	2874 kg		
Overall length	4010 mm		
Wheel base	2290 mm		
Ground clearance under drawbar	380 mm		
Width	2060 mm		
Height - Over of ROPS	2520 mm		
- Over of steering wheel	1680 mm		

HYDRAULICS			
Linkage pump	Piston Pump		
Max oil flow	16.7 liter /min		
Max pressure	214 bar		
Three point linkage	Cat 2		
Max lift capacity at lower links are horizontal	2227kg		

TRACK ADJUSTMENT			
Front	1575 mm - 1930 mm		
Rear - pressed	1422 mm - 2134 mm		
WHEELS AND TIRES			

Front	7.5 -16 ,	6 ply
Rear	18.4/15-30	,6 ply

OTHER EQUIPMENT

Drawbar with heavy – trailer hitch Hydraulic quick couplers Roll-over protective structure(ROPS) Rear wheels (Disk type) weights

Toolkit

Front weights

OPTIONS

Falling object protection (FOP) Synchromesh transmission (12+4) Speeds



ITM 285 2 WD NEW

PERFORMANCE			
Rated engine power@2000 rev/min		82 h	٦р
Max engine torque@1500 RPM		345 N.	m
	ENGINE		
Make/Type		Motorsazan /MT 441	A
Number of cylinders	;		4
Injection		Diesel, Direct injecti	on
Bore		101 m	m
Stroke		127 m	m
Capacity		4.07 lit	re
Compression Ratio		16	6:1
Air cleaner	Dry, dual el	ement with pre clean	er
Fuel filter	Single, hig	h capacity with prefilt	er
Exhaust		Vertic	al
	ELECTRICS		
Voltage		12v,negative ear	th
Alternator / Starter		45 Amp / 2.8 K	W
Battery		Dual Battery, 66 A.I	Η.
Lights	Headlights, Si	de lights - Brake ligh	ts
	Direction indicat	ors - Rear plough lan	np
Other		7 pin trailer sock	et
CLUTCH			
Туре		Du	al
Diameter		305 m	m
TRANSMISSION			
Sliding goor	TRANSMISSION	speeds, manual chang	10
Sliding-gear 8	Forward, 2 reverses	speeds, manual chang	Je
	STEERING		
Туре		Hydrostat	tic
	POWER TAKE OF	F	
Type/Speed Live		in at 1684 rev/min engir	ne
Shaft diameter		35 m	m
No.of splines			6
PF	AR AXEL AND BR	AKES	
Brake type		Oil immerse	ed
	Mechanical indepen	dent or locked togeth	
Parking brake		Mechanical, Hand lev	
		,	

Differential lock



CAPACITIES			
Fuel tank	90 litre		
Hydraulic system	43 litre		
Engine sump	8 litre		
Cooling system	14.2 litre		
Steering pump	1.1 litre		
WEIGHTS AND DIMENS	SIONS		
With full fuel , oil , water and front weight	S		
- Front	1118 kg		
- Rear	1694 kg		
- Total	2812 kg		
Overall length	4010 mm		
Width	2060 mm		
Height - Over of ROPS	2520 mm		
- Over of steering wheel	1680 mm		
Wheel base	2290 mm		
Ground clearance under drawbar	380 mm		
HYDRAULICS			
Linkage pump	Piston Pump		
Max oil flow	16.7 liter /min		
Max pressure	214 bar		
Three point linkage	Cat 2		
Max lift capacity at lower links are horizo	ntal 2227kg		
TRACK ADJUSTME	NT		
Front	1346 mm - 1753 mm		
Rear - pressed	1422 mm - 2134 mm		
OTHER EQUIPMEN	IT		
Drawbar with heavy – trailer hitch Hydraulic quick couplers Toolkit Front weights ROPS Disk type rear weights			
WHEELS AND TIRES			
Front	7.5 -16 , 6 ply		
Rear	18.4/15-30 , 6 ply		
OPTIONS			
Falling object protection (FOP)			

Synchromesh transmission (12+4 speeds)

Mechanical

ITM 285 4 WD

	ENGINE
Make/Type	Motorsazan / MN440A - 75AD
Number of cylinders	4
Injection	Diesel, Direct injection
Bore	100 mm
Stroke	127 mm
Capacity	3.99 litre
Compression Ratio	16:1
Starting Aid	Thermostart
Throttle control	Hand and foot
Cooling System	Water
Air cleaner	Oil bath
Air Pre-cleaner	Centrifugal over-bonnet
Fuel filter	Single, high capacity with prefilter
Exhaust	Vertical

	TRANSINISSION
Туре	Sliding-gear
10 speed	8 forward, 2 reverse

4WD FRONT AXLE		
Axle type	AG 85	
Engagement	mechanical	
Diff. lock	Automatic	
Max turning deg	55	

HYDRAULICS		
Linkage pump		Piston pump
Max oil flow		16.7 liter /min
Max pressure		214 bar
Three point linkage		Cat 2
Function		Draft control
	Position control - Re	esponse control
Max lift capacity at Lower links are horizontal 2227kg		2227kg

REAR AXEL AND BRAKES	
Brake type	Oil immersed 5- plate disc each side
Actuation	Mechanical independent or locked together
Diameter	222.4 mm
Parking brake	Mechanical, Hand lever
Differential lock	Mechanical

	WHEELS AND TIRES
Front	12.4 - 24 6 ply
Rear	18.4/15 - 30 , 6 ply

RANN ITM 285 4 WD INDUSTRIAL GROUP	
JRACTOR	

PERFORMANCE	
Rated engine power@2000 rev/min	75 hp
Max engine torque@1400 rev/min	290 N.m
Max P.T.O power@540 rev/min	63 hp
CLUTCH	
Туре	Dual
Diameter	305 mm

	ELECTRICS	
Voltage	12v,negative earth	
Alternator / Starter	45 Amp / 2.8 KW	
Battery	Dual battery, 66 A.H	
Lights	Headlights, Side lights - Brake lights Direction indicators - Rear plough lamp	
Other	Horn, 7 pin - trailer socket	

TRACK ADJUSTMENT		
Front	1575 mm - 1930 mm	
Rear - pressed	1422 mm - 2134 mm	



	CAPACITIES	
Fuel tank		90 litre
Hydraulic system		43 litre
Engine sump		8 litre
Cooling system		14.2 litre
Steering pump		1.1 litre
N	EIGHTS AND DIMENSIO	DNS
with full fuel, oil a	nd water and Front weigh	ts
Weight		
- Front		1420 kg
- Rear		1694 kg
- Total		3114 kg
Overal length		4010 mm
Width		2060 mm
Height - over of F	ROPS	2528 mm
- over ste	ering wheel	1680 mm
Wheel base		2290 mm
Turning radius Without braking		7600 mm
Ground clearance under drawbar		380 mm
	POWER TAKE OFF	
Type/Speed	Single speed / 540 rev/	min live at 1684 rpm
Shaft diameter		35 mm
No of oplinoo		0

Type/Speed	Single speed / 540 rev/min live at 1684 rpm
Shaft diameter	35 mm
No.of splines	6

STEERING

Туре

Hydrostatic

OTHER EQUIPMEN	т		
Drawbar with heavy – trailer hitch Hydraulic quick couplers Roll-over protective structure(ROPS) Disk type rear wheels weights Toolkit Front weights			
OPTIONS			
Transmission (12+4) speed	Synchromesh		
Falling object protection (FOP)			

<text>

PERFORMANCE		
Rated engine power@2000 rev/min	75 hp	
Max engine torque@1400 rev/min	290 N.m	
Max P.T.O power@540 rev/min	63 hp	
CLUTCH		
Туре	Dual	
Diameter	305 mm	

	ELECTRICS
Voltage	12v,negative earth
Alternator / Starter	45 Amp /2.8 KW
Battery	Dual Battery, 66 A.H.
Lights	Headlights, Side lights - Brake lights Direction indicators - Rear plough lamp
Other	Horn, 7 pin - trailer socket

ITM 285 2 WD

ENGINE			
Make/Type	Motorsazan / MN 440 A - 75 AD		
Number of cylinde	ers 4		
Injection	Diesel, Direct injection		
Bore	100 mm		
Stroke	127 mm		
Capacity	3.99 litre		
Compression Rati	0 16.5:1		
Starting Aid	Thermostat		
Throttle control	Hand and foot		
Cooling System	Water		
Air cleaner	Oil bath		
Air Pre-cleaner	Over - bonnet bowltype		
Fuel filter	Single, high capacity with prefilter		
Exhaust	Vertical		
	TRACK ADJUSTMENT		
Front	1346 mm - 1753 mm		
Rear - pressed	1422 mm - 2134 mm		
TRANSMISSION			
Туре	Sliding-gear		
10 speed 8 forward, 2 reverse			
HYDRAULICS			
Linkage pump	piston Pump		
Max oil flow	16.7 liter /min		
Max pressure 214 bar			
Three point linkage Cat 2			
Function	Draft control		
	Position control - Response control		
Max lift capacity a	t lower links are horizontal 2227kg		
F	REAR AXEL AND BRAKES		
Brake type	Oil immersed		
Actuation	Mechanical independent or locked together		
Diameter	222.4 mm		
Parking brake			
Differential lock	Mechanical		
	WHEELS AND TIRES		
Front	7.5-16 , 6 ply		

Rear

18.4/15 - 30 , 6 ply

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CAPACITIESFuel tank90 litreHydraulic system43 litreEngine sump8 litreCooling system14.2 litreSteering box0.9 litreSteering pump1.1 litre

OTHER EQUIPMENT

Drawbar with heavy – trailer hitch Hydraulic quick couplers Toolkit Front weights ROPS

Disk type rear weights

WEIGHTS AND DIMENSIONS
with full fuel, oil and water and front weights

Weight		
- Front	1118 kg	
- Rear	1694 kg	
- Total	2812 kg	
Overal length	4010 mm	
Width	2060 mm	
Height - over of ROPS	2520 mm	
- over steering wheel	1680 mm	
Wheel base	2290 mm	
Turning radius With braking	7600 mm	
Ground clearance under drawbar	380 mm	

POWER TAKE OFF			
Type/Speed	Single speed/540 rev/min live at1684 rev/mi	n engine	
Shaft diameter 35 mm			
No.of splines 6			

STEERING			
Туре	Hydraulic steering system		
ORTIONS			
OPTIONS			
Transmission (12+4) speed	Synchromesh		
Falling object protection (FOP) Hydraulic valve for implements			

ITM 470 4 WD

PERFORMANCE			
Rated engine power@	2250 rev/min	47 hp	
Max engine torque@1	400 rev/min	170 N.m	
Max P.T.O power@540 rev/min 37.7 hp		37.7 hp	
	ENGINE		
Make/Type Motorsazan /MN325D - 47AD			
Number of cylinders		3	
Injection	Di	iesel direct injection	
Bore		91.4 mm	
Stroke		127.0 mm	
Capacity		2.5 litre	
Compression Ratio		18.5:1	
Starting Aid		Thermostart	
Cooling		Water	
Air cleaner		Dry	
Fuel filter	Single, High capa	city with sedimentor	
Exhaust		Horizontal	
	ELECTRICS		
Voltage		12v,negative earth	
Starter		2.8 KW	
Alternation		45 Amp	
Battery		66 AH	
Lights	Headlights - Side I	lights -Brake lights	
	Direction indicators	- Rear plough lamp	
Other	Horn,	7 pin -trailer socket	
	CLUTCH		
Туре		dual	
Diameter		305 mm	
TR	ACK ADJUSTMENT		
Front		1123 mm-1624 mm	
Rear - pressed		1227 mm-1930 mm	
	TRANSMISSION		
Туре		Sliding-gear	
10 speed	8	3 forward, 2 reverse	
	HYDRAULICS		
Max oil flow		16.7 liter /min	
Max pressure		173 bar	
		0-1490	
Three point linkage		Cat 1&2	

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ITM 470 4 WD

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ITM



WHEELS AND TH	RES	
Front	7.5 - 18	6 ply
Rear	12.4-28	6 ply
CAPACITIES		
Fuel tank		48 litre
Engine sump		5.7 litre
Cooling system		10.2 litre
Hydraulic system		31 litre
WEIGHTS AND DIME	NSIONS	
With full fuel, oil and water, 12.4 / 28 re	ear tires weigl	nt
Weight		
- front		1050 kg
- rear		1300 kg
- Total		2350 kg
Overall length		3290 mm
Width		1670 mm
Height		
-over of ROPS		2320 mm
-over stg, wheel		1530 mm
wheel base		2000 mm
Ground clearance under drawbar		260 mm
POWER TAKE O	FF	
Type 540 rev/min live	e at 1789 rev/	min engine
Shaft diameter		35 mm
No.of splines		6
STEERING		
Туре	l	Hydrostatic
OTHER EQUIPME	ENT	
Drawbar with heavy – trailer hitch Hydraulic quick couplers Hinge roll-over protective structure(RO Toolkit Front weights	PS)	

OPTIONS

Falling object protection (FOP)

ITM 470 2 WD

PERFORMANCE			
Rated engine power@2250 rev/min		47 hp	
Max engine torque@1400 rev/min		170 N.m	
Max P.T.O power@540) rev/min	37.7 hp	
	ENGINE		
Make/Type	Мо	torsazan - MN325D-47AD	
Number of cylinders		3	
Injection		Diesel, direct injection	
Pollution standard		ECE R96,R24-STAGE 3A	
Bore		91.4 mm	
Stroke		127.0 mm	
Capacity		2.5 litre	
Compression Ratio		18.5:1	
Starting Aid		Thermostart	
Cooling System		Water	
Air cleaner		Dry	
Fuel filter	Single, High	capacity with Sedimentor	
Exhaust		Horizontal	
ELECTRICS			
Voltage		12v,negative earth	
Starter		2.8 KW	
Alternation		45 Amon	

	ELECTING
Voltage	12v,negative earth
Starter	2.8 KW
Alternation	45 Amp
Battery	66 AH
Lights	Headlights - Side lights -Brake lights
	Direction indicators - Rear plough lamp
Other	Horn, 7 pin -trailer socket

CLUTCH	
Туре	Dual
Diameter	305 mm
TRACK ADJUSTMENT	

Front	1227mm -1836 mm
Rear - pressed	1227 mm-1930 mm

TRANSI	MISSION
Туре	Sliding - gear
10 speed	8 forward, 2 reverse
HYDRA	AULICS

Max oil flow	16.7 liter /min
Max pressure	173 bar
Three point linkage	Cat 1&2
Max lift capacity at lower links are horizontal	1415 kg

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ITM 470 2 WD

INDUSTRIAL GROUP

470

ITM

ITM 470



WHEELS AND TIRES			
Front	6-16	6 ply	
Rear	12.4-28	6 ply	
CAPACITI	ES		
Fuel tank		48 litre	
Engine sump		5.7 litre	
Cooling system		10.2 litre	
Hydraulic system		31 litre	
WEIGHTS AND DI			
WEIGHTS AND DI With full fuel, oil and water, 12.4 / 2			
With full fuel, on and water, 12.472 Weight	o rear tires weight		
- front		890 kg	
- rear		1280 kg	
- Total		2170 kg	
Overall length		3290 mm	
Width		1670 mm	
Height			
-over of ROPS		2320 mm	
-over stg, wheel		1530 mm	
wheel base		2000 mm	
Ground clearance under drawbar		260 mm	
POWER TAK			
	live at 1789 rev/m	in engine	
Shaft diameter	live at 1703 lev/li	35 mm	
No.of splines		6	
		0	
STEERIN			
Туре	Н	ydrostatic	
OTHER EQUI	PMENT		
Drawbar with heavy – trailer hitch			
Hydraulic quick couplers			
Toolkit and front weights			

Hinge roll-over protective structure(ROPS)

OPTIONS

Falling object protection (FOP)



ITM 240 4 WD NEW

P	ERFORMANCE	
Maximum hp(Bs.AU.141	.a)@2250 rpm	47
Maximum torque Nm(Bs.AU.141.a)@1400rpm 170		
Max. power available hp	@PTO shaft	44
Max. power available hp	@PTO shaft in 540rpm	37.7
	ENGINE	
Make	М	otorsazan
Model MN325D-47AD		
Type Diesel,Direct injection		
Number of cylinders 3		
Aspiration	Normal r	respiration
Pollution standard	ECE R96,R24-S	STAGE 3A
Bore		91.4mm
Stroke		127mm
Capacity		2.5litre
Compression ratio		18.5 :1
Start aid	Th	ermostart
Cooling system		Water
Air cleaner	Dry , dual element with pr	re-cleaner
Fuel filter	Single , high capacity with se	edimentor
Exhaust		Horizontal
	ELECTRICS	
Voltage	12v Negativ	ve to earth

	ELECTRICS
Voltage	12v, Negative to earth
Alternator / Starter	45 Amp / 2.8 KW
Battery	66 AH
Lights	Head, Side, Brake, Rear plough Light, and Turn signals
Other equipment	Horn, Trailer 7 - pin plug
СШТСН	

OLUTON	
Туре	Dual
Main clutch size	305 mm

TRANSMISSION Sliding-gear, 8Forward, 2Reverse

Туре	Sliding-gear , 8Forward, 2Reverse
	POWER TAKE OFF
Туре	Single - speed , live
P.T.O. speed	540rpm at 1789 rpm engine
Shaft diameter	35 mm
No. Of splines	6
	STEERING
Туре	Hydrostatic



BRAKES	
Туре	Oil immersed, wet brakes
Function	Mechanical, Independent or both wheels together
Plates diam	neter 222.4mm
Parking bra	ke Mechanical , Hand lever
Differential	lock Mechanical

WEIGHTS AND DIMENSIONS

With full fuel, oil, water and front weights	
Weight on front axle	1050Kg
Weight on rearaxle	1300Kg
Total weight	2350Kg
Length(Lower links are horizontal)	3.29m
Width	1.67m
Height(Over of ROPS)	2.32m
Height(Over of steering wheel)	1.53m
Wheel base	2m
Turning radius(With braking)	3m
Height over ground (Drawbar beneath)	0.26m

HYDRAULICS		
Three Point linkage	Category1,2 Changeable	
Accessories	Draft, position and response control	
Max. lift capacity	1415 Kg @ lower inks are horizontal	
Hydraulic pump	Piston pump	
Max. delivery	16.7lpm	
Max. pressure	173bar	

CAPACITIES	
Fuel tank	48 litre
Hydraulic system	31 litre
Engine Sump	5.7 litre
Cooling system	10.2 litre
Steering pump	0.9 litre

OTHER EQUIPMENT

Drawbar with heavy - trailer hitch Toolkit Front weights Hydraulic quick couplers

Hinge roll - over protective structure(ROPS)

OPTIONS

Falling object protection (FOP)

ITM 240 2WD NEW

Π

	F	PERFORMANC	E
	Rated engine power @	2250 rev/min	47 hp
	Max engine torque @14	100 rev/min	170 N.m
	Max P.T.O horse power	@540 rev/min	37.7 hp
		ENGINE	
	Made		Motorsazan Co
	Model		MN325D-47AD
1	Туре		Diesel, direct injection
	Number of cylinders		3
	Bore		91.4 mm
	Stroke		127 mm
	Capacity		2.5 litre
	Compression Ratio		18.5:1
	Starting Aid		Thermostart
	Cooling system		Water
	Air cleaner	Dry	type with dual elements
	Fuel filter	Single, High c	apacity with Sedimenter
	Exhaust		Horizontal
		ELECTRICS	
	Voltage		12v, Negative earth
	Alternator / Starter		45 Amp / 2.8 KW

Voltage	12v, Negative earth
Alternator / Starter	45 Amp / 2.8 KW
Battery	66 AH
Lights	Head, Side, Brake, Rear plough Light, and Turn signals
Other equipment	Horn, Trailer 7 - pin plug

CLUTCH	
Туре	Dual
Main clutch size	305 mm

 TRANSMISSION

 Sliding - gear
 8 Forward, 2 Reverse

POWER TAKE OFF		
Туре	Single - speed , live	
P.T.O. speed, at engine speed: 1789 rpm	540 rpm	
Shaft diameter	35 mm	
No. Of splines	6	
Max. Lift capacity at lower links horizontal	1415 kg	
Hydraulic pump	Piston pump	
Max. Pump flow	16.7 liter/min	
Max. Pressure	173 bar	
STEERING		

Туре

Hydrostatic

3	8
-	-

240 NEW ITM



	BRAKES
Туре	Oil immersed, wet brakes
Actuation	Mechanical independent or locked together
Parking brake	Hand level wired control
Differential lock	Mechanical

WEIGHTS AND DIMENSIONS	
weight with full fuel, oil and water and front weights	
weight	
- Front	890 kg
- Rear	1280 kg
- Total	2170 kg
Length(with rear link at horizontal position)	3290 mm
Width	1670 mm
Height - over of ROPS	2320 mm
- over of steering wheel	1530 mm
Wheel base	2000 mm

CAPACITIES	
Fuel tank	48 litre
Hydraulic system	31 litre
Engine Sump	5.7 litre
Cooling system	10.2 litre

OTHER EQUIPMENT

Drawbar with heavy-trailer hitch Toolkit Front weights Hydraulic quick couplers Roll-over protective structure(ROPS)

OPTIONS

Garden horizontal exhaust Falling object protection (FOP)

ITM 240 4 WD

	ENGINE
Model	3.152
Туре	Diesel, Direct injection
Number of cylinders	3
Bore	91.4 mm
Stroke	127 mm
Capacity	2.5 litre
Compression Ratio	18.5:1
Starting Aid	Thermostart
Cooling System	Water
Air cleaner	Oil bath with pre cleaner
Fuel filter	Single, High capacity with Sedimentor
Exhaust	Vertical

HYDRAULICS

Three point linka	ge Cat 1&2 interchangeable
Function D	raft control, position control, Response control
Max. lift capacity	1415 Kg@ lower links are horizontal
Max oil flow	16.7 liter /min
Max pressure	173 bar
Hydraulic pump	Piston pump

STEERING Hydrostatic Туре TRANSMISSION Туре Sliding - gear Speeds 8 forward , 2 reverse P.T.O Single Speed Туре P.T.O speed 540 rev/min @1789 engine rev/min No. Of splines 6 Shaft diameter 35 mm ELECTRICS Voltage 12v, Negative earth Alternator / Starter 45 Amp / 2.8 KW Battery 66 AH Lights Headlights, Side lights Brake lights Direction indicators, Rear plough lamp Horn, 7 pin trailer socket Other BRAKES AND REAR AXLE

Туре	Oil immersed , Wet brakes
Function	Mechanical ,Independent or both locked together
Plates diam	eter 222.4 mm
Parking bra	ke Mechanical , Hand lever
Differential	ock Mechanical

PERFORMANCE	
Rated engine power @ 2250 rev/min	47 hp
Max engine torque @1400 rev/min	170 N.m
Max P.T.O horse power@540 rev/min	37.7 hp
Max P.T.O horse power	44 hp

240 awa

40



WHEELS &TIRES				
Front	6-16	6 Ply		
Rear	12.4*11 – 28	6 Ply		
TRACK ADJUSTMENT				
Front 1123 mm - 1624 mm				
Rear - pressed 1227 mm - 1930 mm		30 mm		

WEIGHTS AND DIMENSIONS			
weight with full fuel, oil and water and front weights			
Weight			
- Front	1050 kg		
- Rear	1260 kg		
- Total	2310 kg		
Length	3390 mm		
Width	1800 mm		
Height - over of ROPS	2430 mm		
- over of steering wheel	1620 mm		
Wheel base	1890 mm		
Turning radius with braking	3000 mm		
Ground clearance Under drawbar	260 mm		

CAPACITIES	
Fuel tank	48 litre
Hydraulic system	31 litre
Engine Sump	5.7 litre
Cooling system	10.2 litre
Steering pump	0.9 litre

OTHER EQUIPMENT

- Drawbar with heavy trailer hitch
- Hydraulic quick couplers
- Toolkit
- Front weights Roll-over protective structure(ROPS)

OPTIONS

Garden horizontal exhaust Garden fenders Falling object protection (FOP)

	CLUTCH
Туре	Dual
Diameter	305 mm

ITM 240 2 WD

	PERFORMANCE		BRAKES	
Rated engine power (@ 2250 rev/min 47 hp	Туре	Oil immersed, w	/et brake
Max engine torque @	1400 rev/min 170 N.m	Actuation	Mechanical independent or locked	together
Max P.T.O horse pow	er@540 rev/min 37.7 hp	Parking brake	Mechanical , Ha	and lever
Max P.T.O horse pow	er 44 hp	Differential lock	Me	chanical
	ENGINE		WHEELS &TIRES	
Nodel	3.152	Front	6-16	6 Ply
Туре	Diesel, Direct injection	Rear	12.4*11 – 28	6 Ply
Number of cylinders	3		TRACK ADJUSTMENT	
Bore	91.4 mm	Front	1227 mm - 1	836 mm
Stroke	127 mm	Rear - pressed	1227 mm - 1	
Capacity	2.5 litre			
Compression Ratio	18.5:1		WEIGHTS AND DIMENSIONS	
Starting Aid	Thermostart	with full fuel, oil,	water and front weights	
Cooling System	Water			
Air cleaner	Oil bath with pre cleaner	Weight		
Fuel filter	High capacity with sedimentor	- Front		870 kg
Exhaust	Vertical	- Rear		1200 kg
	HYDRAULICS	- Total		2070 kg
Three point linkage	Category1, 2 Changeable	Length	3	3210 mm
Function	Draft , position and Response control	Width		800 mm
Max. lift capacity	1415 Kg@ lower links are horizontal	Height - over of		2430 mm
Max oil flow	16.7 liter /min			1680 mm
Max pressure	173 bar	Wheel base		1890 mm
Hydraulic pump	Piston pump	Turning radius v		3000 mm
		Ground clearan	ce Under drawbar	260 mm
	STEERING		CAPACITIES	
Туре	Hydrostatic	Fuel tank		48 litre
	TRANSMISSION	Hydraulic syster	n	31 litre
Туре	Sliding - gear,	Engine Sump		5.7 litre
Speeds	8 forward , 2 reverse	Cooling system		10.2 litre
		Steering pump		0.9 litre
Trees	P.T.O			
Туре	Single Speed , Live with engine		OTHER EQUIPMENT	
P.T.O speed	540 rev/min @1789 engine rev/min	Drawbar with he	eavy – trailer hitch	
No. Of splines	6	Hydraulic quick	-	
Shaft diameter	35 mm	Toolkit		
	ELECTRICS	Front weights	tive structure (DODC)	
Voltage	12v, Negative earth	Roll-over protec	tive structure(ROPS)	
Alternator / Starter	45 Amp / 2.8 KW		OPTIONS	
Battery	66 AH	Garden horizont		
Lights	Head, Position, Number plate	Garden fenders		
	Brake and Rear plow	Ealling object or	rotaction (EOD)	

Head, Position, Number plate Brake and Rear plow

Digitaly panel Horn, trailer7 - pin plug

Other

240 awo



Falling object protection (FOP)

50 Q



ITM 950

	Engine specification	on
Make / Type		Motorsazan / 3.152
Maximum hp(Bs.AU	.141.a)@2250 rpm	45 hp
Cooling system		Water
Number of cylinders		3
	Clutch	
single plate with peda	l control	
	Brakes	
Drum Brake		
mechanical on rear	wheel	
	Transmission	
9 Speeds - 6 speed	forward & 3 reverse	
	Weight	
Front		870 kg
Rear		400 kg
Total		1270 kg
	Power take off	
Туре	Single-spe	eed , Live with engine
P.T.O speed	540 rpm@ 18	341 rpm engine speed
	Differential	
Hydraulically control	led through a pedal	
actioned simulaneou	usly onthe 4 wheels	
	Lift	
Three point hydrauli		
	Tires	
8.25 - 16	1100	
	Steering	
type	oteening	Hydraulic , Articulate
		. ,

Eng	jine specificatio	n
/lake / Type		Motorsazan / 3.152
/laximum hp(Bs.AU.141	.a)@2250 rpm	45 hp
Cooling system		Water
Number of cylinders		3
	Clutch	
single plate with pedal cor		
	Brakes	
Drum Brake	Diakes	
nechanical on rear whe	ما	
	Transmission	
9 Speeds - 6 speed forw	ard & 3 reverse	
	Weight	
Front		870 kg
Rear		400 kg
Fotal		1270 kg
	Power take off	
Гуре		eed, Live with engine
P.T.O speed		41 rpm engine speed
I day Parth and the last	Differential	
hydraulically controlled t	• •	
actioned simulaneously	onthe 4 wheels	
	Lift	
Three point hydraulic lift	(cat 1)	
	Tires	
3.25 - 16		
	Cto onin n	
	Steering	Lindeaulia Antiaulutu
уре		Hydraulic , Articulate









General Dimension

Capacities		
Fuel tank	120 lit.	
Engine oil tank	8 lit.	
Hydraulic oil tank	120 lit.	
Hydraulic System	150 lit.	
Gear box oil	43 lit.	
Cooling tank	23 lit.	

Hydraulic System	
Pump type	Gear model
Hydraulic pump's flow	116 lit/min
Max. Working pressure	260 bar

	Electric System:	
Battery		12 V, 150 Ah

Engine		
Power	hp82	
Туре	Perkins Turbo MT4-248	
No. of cylinders	4	
Capacity	lit.4.06	

Transm	ission
Туре	Shuttle
Forward	8 Speed
Reverse	8 Speed
System	4WD

Tyre	es	
Front	12.5 / 80 - 18	14 ply
Rear	17.5 - 25	16 ply

Total Weight of Machine: 6550 kg

Specification are subject to change without notice.

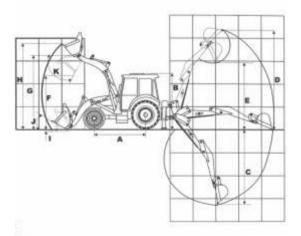
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Specification

Dimensions		
Overall length	6180 mm	
Max. digger height	3680 mm	
A: Wheel base	2305 mm	
B: Height to top of cabin	2700 mm	
Width of machine	2250 mm	

Loader	
F: Dump height on 45°	2740 mm
G: Height to hinge pin	3470 mm
H: Max. working height	4230 mm
I: Digging depth	80 mm
J: Max. angle when loading	56°
K: Max. angle when unloading	45°
Capacity of bucket	760 lit.
Loader bucket width	2200 mm

Backhoe	
Max. Rotation angel of backhoe	170°
C: Digging depth Max.	3980 mm
D: Working height Max.	5340 mm
E: Loading height	3800 mm
Width of bucket	600 mm
Bucket capacity	193 lit.
Air Conditioning & Cab with R	adio / Tape



Total Weight of Machine: 7500 kg

General Dimension

Capacities	
Fuel tank	120 lit.
Engine oil tank	15.4 lit.
Hydraulic oil tank	120 lit.
Hydraulic System	150 lit.
Gear box oil	47.4 lit.
Cooling tank	30 lit.

Hydraulic System		
Pump type	Gear model	
Hydraulic pump's flow	116 lit/min	
Max. Working pressure	260 bar	

Electric Sys	stem
Battery	2 x 12 V, 70 Ah
Engine	
Power	hp110
Туре	Perkins 1006
No. of cylinders	6
Capacity	lit.6

Shuttle
Speed
Speed
4WD
8

Tyres		
Front	12.00 - 20	16 ply
Rear	20.50 - 25	16 ply

Specification are subject to change without notice.

Backhoe Loader

Specification

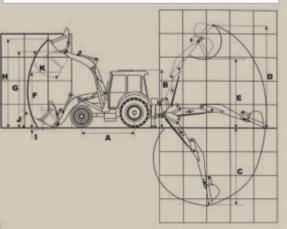
Dimensions				
Overall length	6350 mm			
Max. digger height	3690 mm			
A: Wheel base	2570 mm			
B: Height to top of cabin	2800 mm			
Width of machine	2310 mm			
Loader				
F: Dump height on 45°	2740 mm			
G: Height to hinge pin	3510 mm			
H: Max. working height	4370 mm			
I: Digging depth	100 mm			
J: Max. angle when loading	45°			
K: Max. angle when unloading	49°			
Capacity of bucket	1200 lit.			
Loader bucket width	2200 mm			

Backhoe			
Max. Rotation angel of backhoe	170°		
C: Digging depth Max.	3980 mm		
D: Working height Max.	5340 mm		
E: Loading height	3800 mm		
Width of bucket	600 mm		
Bucket capacity	193 lit.		

Possible additional options

Air Conditioning

Cab with Radio / Tape





Dashboard Assy.

ITM 475 - A5344 ITM 399- A5830

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Selector Valve

ITM 399 - ITM 485 - ITM 800 No: 1682842 M 94

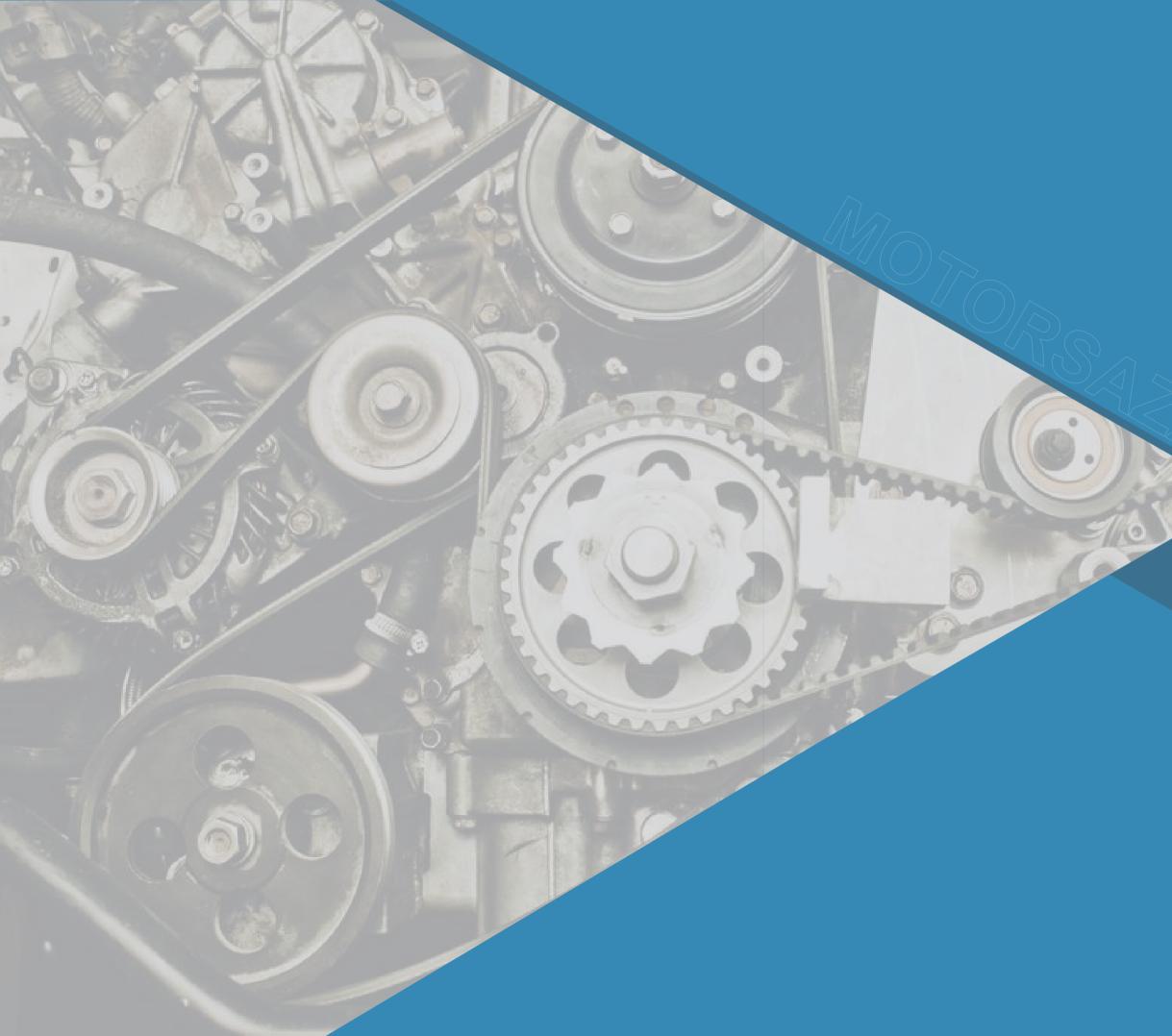


Pressure Maintaining Valve ITM 399 2WD - ITM 399 4WD No: 3759547 M 93



Spool Valve

ITM 399 No: 1696239 M 93

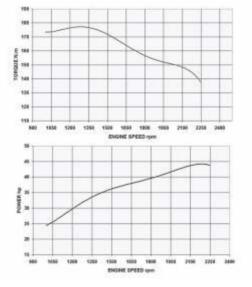




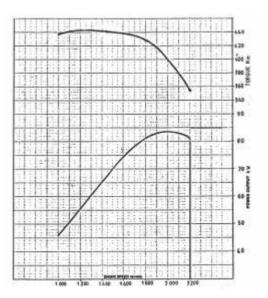


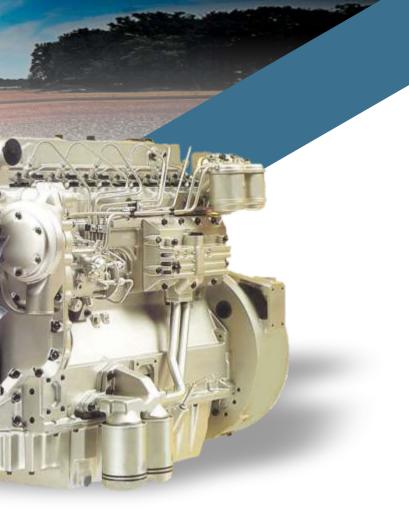
Performance	
Max power	35 kW at 2250 rpm
Max torque	170 N.m at 1400 rpm

Basic technical data			
Bore	91.4 mm(3.6 in)		
Stroke	127 mm (5 in)		
Number of cylinder	3		
Cylinder arrangement	Vertical, Inline		
Cubic capacity	2.5 litres (152.7 in ³)		
Induction system	Naturally aspirated		
Combustion system	Direct Injection		
Compression ratio	18.5:1		
Direction of rotation	Clockwise viewed from front		
Cooling	Liquid		
Weight*	270 kg		
Overall dimensions* :			
Length	700 mm		
Width	520 mm		
Height	780 mm		



1006.6 Agricultural Engine





Performance			
Max power	81.5 kW at 2200 rpm		
Max torque	444 N.m at 1200 rpm		
Basic technical data			
Bore	100 mm(3.937 in)		
Stroke	127 mm (5 in)		

Number of cylinder	6
Cylinder arrangement	Vertical, Inline
Cubic capacity	6 litres (365 in ³)
Induction system	Naturally aspirated
Combustion system	Direct Injection
Compression ratio	16.5:1
Direction of rotation	Clockwise viewed from front
Cooling	Liquid
Weight*	410 kg
Overall dimensions* :	
Length	944 mm
Width	632 mm
Height	780 mm

Approximate only and depends on application.

MN440A-45GN GENSET POWER (NG)

Standard specifications

Air Filter: Mounted air filter

Fuel system:(Natural Gas, %25 Psi) Single diaphragm air gas valve carbureto Electrical governing-controlled by ECU Shut off valve, gas filter included

Lubrication system:

Grav cast iron oil-sump with filler and dipstick Spin-on full-flow oil filter Water cooled oil cooler

Cooling system: Belt driven circulating pimp 22["] Belt driven fan Mounted radiator and pipework

Electrical equipment:

12 volts starter motor 12 volts, 55 Amps alternator with DC output Switch for oil pressure 12 volts, 4 Amps ECU & throttle

Flywheel and Housing: High inertia flywheel to SAE J620 size $10/11^{\frac{1}{2}}$ Cast iron SAE3 flywheel housing

Mountings:

Front mounting brackets

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Optional equipment:

Coolant temperature gauge Lubrication oil pressure gauge and sender Flywheel and coupling suitable for double bearing alternators Rear mounting brackets

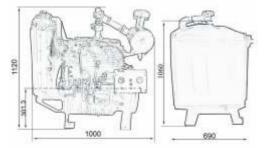
Basic technical data

Number of cylinder:	4
Cylinder arrangment:	Vertical, Inline
Cycle:	4 stroke
Induction system:	Naturally aspirated
Cubic capacity:	3.99 Litres (244 cu-in)
Bore:	100mm (3.935 in)
Stroke:	127 mm(5 in)
Compression ratio:	9.5:1
Direction of rotation: Cloc	kwise viewed from front
Firing order:	1,3,4,2
Total Lubrication system of	capacity: 7.5 liter
Coolant capacity (includin	g radiator): 16 liter
Engine total weight (dry):	424kg
Engine total weight (wet):	447kg

Performance

Engine speed rev/min	Type of operation	Typical generator output(net) kVA	Engine kW	e Power bhp
1500	Standby power	33	30	40
1500	Standby power	33		30

Fuel consumption M ³ / hour		
Power rating	1500 rev/min	
Standby power 75% of prime power 50% of prime power 25% of prime power	13 10.6 8.3 6	



MN440A-60C **GENSET POWER**

Standard specifications

Air Filter: Mounted air filter

Fuel system: Rotary fuel injection pump Mechanical governing Single cartridge fuel filter and prefilter

Lubrication system: Gray cast iron oil-sump with diller and dipstick Spin-on full-flow oil filter

Cooling system: Belt driven circulating pimp 22" belt driven fan Mounted radiator and pipework

Electrical equipment: 12 volts starter motor 12 volts, 55Amps alternator with DC output Switch for oil pressure 12 volts shut down solenoid Cold start aid

Flywheel and Housing: High inertia flywheel to SAE J620 size 10/11^{1/2} Cast iron SAE3 flywheel housing

Mountings: Front mounting brackets

Optional equipment:

Coolant temperature gauge Lubrication oil pressure gauge and sender Heater/Starter switch Flywheel and coupling suitable for double bearing alternators Rear mounting brackets

Basic technical data

Number of cylinder:	4
Cylinder arrangment:	Vertical, Inline
Cycle:	4 stroke
Induction system:	Naturally aspirated
Cubic capacity:	3.99 Litres
Bore:	100mm
Stroke:	127 mm(5 in)
Compression ratio:	16:1
Direction of rotation:	Clockwise viewed from front
Firing order:	1,3,4,2
Total Lubrication system	capacity: 7.5 liter
Coolant capacity (including	ng radiator): 16 liter
Engine total weight (dry):	455kg
Engine total weight (wet)	478kg

Performance Eng

speed i

Po Standby

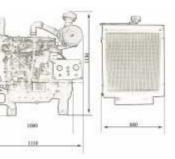
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D		
		:0
	R	

Engine ed rev/min	Type of operation	Typical generator output(net) kVA	Engin kW	e Power bhp
1500	Prime power	45	40	53.6
	Standby power	49.5	44	58.9

Fuel consumption Litres / hour

ower rating	1500 rev/min	
power	11.5	
ver	9.2	
orime power	6.4	
orime power	4.1	
orime power	2.2	
	I I	



MTTI 440C-100GD GENSET POWER

Standard specifications

Air Filter: Mounted air filter

Fuel system:

In-Line fuel injection pump Mechanical governing Twin cartridge fuel filter and prefilter Sedimenter/water trapfilter supplied loose

Lubrication system: Mild steel sheet with filler and dipstick Spin-on full-flow oil filter

Cooling system:

Gear driven circulating pump 22["] belt driven, pusher type, polyamide fan Mounted radiator, intercooler and pipework Lubricating oil cooler

Electrical equipment:

12 volts starter motor 12 volts, 55 Amps alternator with DC output Switch for oil pressure 12 volts shut down solenoid energized to run Thermostart cold start aid

Flywheel and Housing:

High inertia flywheel to SAE J620 size $10/11^{1/2}$ Cast iron SAE3 flywheel housing

Mountings:

Front mounting brackets

Optional equipment:

Coolant temperature gauge Lubrication oil pressure gauge and sender Heater/Starter switch Flywheel and coupling suitable for double bearing alternators Rear mounting brackets

Basic technical data

Number of cylinder:	4
Cylinder arrangment: V	ertical, Inline
Cycle:	4 stroke
Induction system: Turbocharged and	d intercooled
Cubic capacity:	4 Litres
Bore:	100mm
Stroke: 1	27 mm(5 in)
Compression ratio:	16:1
Direction of rotation: Clockwise view	ed from front
Firing order:	1,3,4,2
Total Lubrication system capacity:	8 liter
Coolant capacity (including radiator):	22 liter
Engine total weight (dry):	650kg
Engine total weight (wet):	679kg

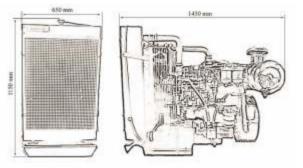


Performance

Engine speed rev/min	Type of operation	Typical generator output(net) kVA	Engine kW	Power bhp
1500	Prime power	72	64.3	85.7
1500	Standby power	80	71.4	95.2

· SECTOR

Fuel consumption Litres / hour		
Power rating 1500 rev/r		
Standby power	15.5	
Print power	14.7	
75% of prime power	11	
50% of prime power	7.3	



All dimensions are in mm

4.248 **General Industrial** · And the state

Standard specifications

Air Filter: Mounted air filter

Fuel system: Rotary fuel injection pump Mechanical governing

Lubrication system: Gray cast iron oil-sump with filler and dipstick Spin-on full-flow oil filter

Cooling system:

Belt driven circulating pump 22⁴ belt driven fan Mounted radiator and pipework

Electrical equipment:

12 volts starter motor 12 volts, 55 Amps alternator with DC output Switch for oil pressure 12 volts shut down solenoid Cold start aidy

Flywheel and Housing: High inertia flywheel to SAE J620 size 10/11^{1/2} Cast iron SAE3 flywheel housing

Mountings: Front and rear mounting brackets

PTO:

Single plate, SAE 3, Manual operated clutch with drive shaft.

Control panel:

Starter switch Alternator Ammeter Coolant temperature gauge Heater button Safety shutdown system for high coolant temperature and low lubricating oil pressure

Basic technical data

4
Vertical, Inline
4 stroke
Naturally aspirated
4 Litres (248 cu-in)
101mm(3.975 in)
127 mm(5 in)
16:1
e viewed from front
1,3,4,2
city: 7.5 liter
diator): 16 liter
554kg
577kg

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Ма

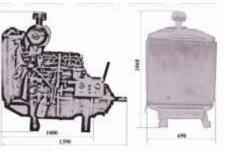
Max Max 75% 50% 25%



Performance

x power (intermittent)	44 kW at 1500 rpm
x power (continues)	40 kW at 1500 rpm
x torque (intermittent)	280 N.m
x No-load speed	1575 rpm
w idle speed	750 rpm

Fuel consumption Litres / hour		
Power rating	1500 rev/min	
x intermittent power	11.9	
x continues power	9.5	
6 of max continues power	6.6	
6 of max continues power	4.3	
6 of max continues power	2.3	



All dimensions are in mm



Performance

Euro II 101kW / 135bhp

62

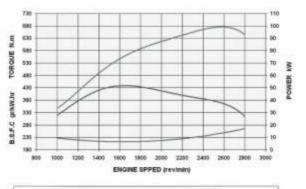
Basic technical data

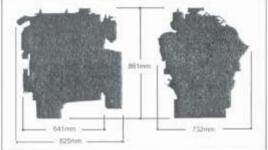
Bore/Stroke:	100 mm(3.937 in) / 127 mm
Number of cylinder:	4 in-line Vertical
Cubic capacity:	3.99 litres
Cycle:	4 stroke
Aspiration:	Turbocharged, intercooled
Combustion system:	Fastram direct Injection
Compression ratio:	17.25:1
Firing order:	1.3.4.2
Rotation:	Clockwise viewed from front
Fuel pump:	Bosch rotary, with boost control
Governing:	Mechanical
Cooling:	Liquid, belt driven water pump
Weight*:	330kg (727lb)
Thread form:	Metric
Electrical system:	12 volts (24 volts optional)
Power take-off :	From crankshaft axially or radially.
	Gear driven PTO from timing case
	on LHS beneath fuel pump
Air compressors: Bendix	x 150 with steering pump PTO in tandem
Vacuum pump :	Clayton H175(optional)

* Engine without fan drive, flywheel, flywheel housing and starter motor. Weight does include alternator and filters.

Phaser 135Ti

TATE AND ADDRESS





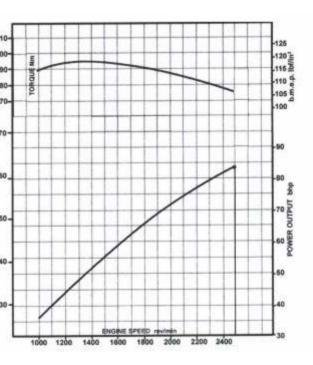
Performance

Max power	60 kW at 2500 rpm
Max torque	263 N.m at 1400 rpm

Basic technical data

Bore:	101 mm(3.975 in)
Stroke:	127 mm (5 in)
Number of cylinder:	4
Cylinder arrangment:	Vertical, Inline
Cubic capacity:	4/07 litres (248 in ³)
Induction system:	Naturally aspirated
Combustion system:	Direct Injection
Compression ratio:	16:1
Direction of rotation:	Clockwise viewed from front
Cooling:	Liquid
Electrical system:	12V
Power take off (P.T.O):	Additional crankshaft V belt
pulley or axial P.T.O cho P.T.O position.	pice of two optional timing case
Weight *:	272 kg
Overall dim ensions *:	5
Length:	678.7 mm
Width:	560 mm
Height:	748 mm
0	

* Approximate only and depends on application



21.26M **GENERATING SET**

III

Engine: Make: Motorsazan Model: D3.152 Number of cylinders: 3 Cylinder arrangement: Vertical, Inline Cycle: 4 stroke Induction system: Naturally aspirated Cubic capacity: 2.5 litres (152.7 cu-in) Bore: 91.4 mm (3.6 in) Stroke: 127 mm (5 in) Compression ratio: 18.5:1 Firing order: 1,3,2 Direction of rotation: Clockwise viewed from front Air filter: Mounted air filter Fuel system: Rotary fuel injection pump, mecganical governing, single cartridge fuel filter and pre-filter Lubrication system: Gray cast iron oil-sump with filler and dipstick, spin-on full-flow oil filter Cooling system: Belt driven circulating pump, 17" belt driven fan, mounted radiator and pipework Total lubrication system capacity: 6 litres Coolant capacity (including radiator): 11 litres Genset total weight approximately (dry): 731 kg

Alternator:

Make: Newage International Limited-England Model: Stamford BCI184F Specification: Single bearing, 4 poles, 3 phases Voltage: 380 V Frequency: 50 HZ

Chassis:

Sheet metal of 5mm thickness, daily usage fuel tank, engine and alternator securely coupled and mounted on flexible rubber mountings.

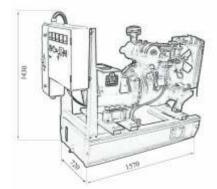
Electrical system:

Twin sheet metal cases, 1.5 mm metal thickness, special rubber mountings to minimize panel vibration Manual Deepsea PLC Model 701 HC with hour counter Automatic shut down device on fault conditions for high coolant temperature and low lubricating oil pressure Ammeters Voltmeter with 7 positions selector switch Frequency meter Engine coolant temoerature gauge Charge alternator current ammeter Emergency stop push button 50 Amp C.B. switch mounted on secondary case Maintenance free 12 V battery (optional)

Performance

Engine speed rev/min	Type of operation	Output rating kVA	Max output current (Amp) 3 phases - 380 v
1500	Prime power	23.4	35.6
(50 HZ)	Standby power	25.7	39

Fuel consumption Litres / hour		
Power rating	1500 rev/min	
Standby power	7.3	
Print power	4.9	
75% of prime power	3.8	
50% of prime power	2.8	
25% of prime power	1.9	

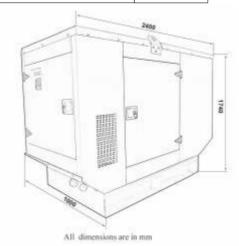


Performance

Engine speed rev/min	Type of operation	Output rating kVA
1500	Prime power	42.5
(50 HZ)	Standby power	46.8

ABB STO

Fuel consumption Litres / hour		
Power rating	1500 rev/min	
Standby power	11.9	
Print power	9.5	
75% of prime power	6.6	
50% of prime power	4.3	
25% of prime power	2.3	



E40-47AMF **GENERATING SET**

Engine: Make: Motorsazan Model: 4.248 G Air filter: Mounted air filter Fuel system: Rotary fuel injection pump, mechanical governing, single cartridge fuel filter and prefilter Lubrication system: Gray cast iron oil-sump with filler and dipstick, spin-on full-flow oil filter **Cooling sydtem:** Belt driven circulating pump, 22" polyamide pusher type fan, mounted radiator and pipework Number of cylinders: 4 Cylinder arrangement: Vertical, Inline Cycle: 4 stroke Induction system: Naturally aspirated Cubic capacity: 4 litres **Bore:** 101 mm (3.975 in) **Stroke:** 127 mm (5 in) Compression ratio: 16:1 Direction of rotation: Clockwise viewed from front Firing order: 1,3,4,2 Total lubrication system capacity : 7.5 litres Coolant capacity (including radiator): 16 litres

Alternator:

Make: Newage International Limited-England Model: Stamford UCDI224C1 Specification: Single bearing, 4 poles, 3 phases Voltage: 380 V

Chassis:

Sheet metal of 5mm thickness, daily usage fuel tank. Anti-vibration pads are fixed between the engine/alternator feet and the base frame.

Electrical system:

Automatic main failure Automatic engine starting and stopping and automatic crank disconnect Automatic load transfer switch Automatic shut down and alarm on fault conditions Emergency stop push botton 65 Amps automatic switch Frequency meter 1.5mm steel sheet metal case, electrostatically painted Battery charger Maintenance free 12V battery (optional)

Canopy:

1.5 mm sheet metal case, electrostatically painted High density P.V.C laminated foam for sound absorbing and inside shielding

Without welding assembly, Doors on each side, All metal canopy parts are painted by electrostatic polyester powder paint, Exhaust silencer is protected against invironment influences, Thermally insulated engine exhaust system, Emergency stop push button is installed outside of the canopy, Easy lifting and moving and Easy maintenance and operation.

55.68M GENERATING SET

Engine: Make: Motorsazan Model: 1006.6 Number of cylinders: 6 Cylinder arrangement: Vertical, Inline Cycle: 4 stroke Induction system: Naturally aspirated Cubic capacity: 5.985 litres (364.9 cu-in) Bore: 100 mm(3.937 in) **Stroke:** 127 mm(5 in) Compression ratio: 16.5:1 Firing order: 1,5,3,6,2,4 Direction of rotation: Clockwise viewed from front Air filter: Mounted air filter Fuel system Rotary fuel injection pump, mechanical governing, twin cartridge fuel filter and pre-filter Lubrication system: Flat cast iron oil-sump with filler and dipstick, spin-on full-flow oil filter Cooling system: Belt driven circulating pump, 20" belt driven fan, mounted radiator and pipework Total lubrication system capacity: 17 litres Coolant capacity (including radiator) : 27 liters Genset total weight approximately (dry):

Alternator:

Make: Newage International Limited-England Model: Stamford UCI224F Specification: Single bearing, 4 poles, 3 phases Voltage: 380 V, 72.5 kVA Frequency: 50 HZ

Chassis:

Sheet metal of 5mm thickness, daily usage fuel tank, engine and alternator securely coupled and mounted on flexible rubber mountings.

Electrical system:

66

Twin sheet metal cases, 1.5 mm metal thickness, special rubber mountings to minimize panel vibration Manual Deepsea PLC Model 701 HC with hour counter Automatic shut down device on fault conditions for high coolant temperature and low lubricating oil pressure Ammeters Voltmeter with 7 positions selector switch Frequency meter Engine coolant temperature gauge Charge alternator current ammeter Emergency stop push button 100 Amp C.B. switch mounted on secondary case Maintenance free 12V battery (optional)

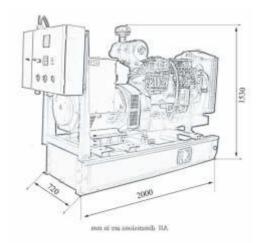


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306

Engine speed rev/min	Type of operation	Output rating kVA	Max output current (Amp) 3 phases - 380 v
1500	Prime power	61.5	93
(50 HZ)	Standby power	67.6	103

Fuel consumption Litres / hour		
Power rating	1500 rev/min	
Standby power	16	
Print power	14.5	
75% of prime power	11.4	
50% of prime power	8.1	
ere produced		



Mobile Water Pump SET

• Strong and sustainable chasis

- 4 Stabilizer jacks
- Tool box and repairing tools
- Emergency lights
- Adjustable draw-bar

Standard Specifications

Engine:

Make: Motorsazan Model: 6.60 G Number of cylinders: 6 Max. power (intermittent): 60 kW at 1500rpm Max. power (continuous): 55kW at 500rmp Max. Torque: 390 N.m Fuel tank capacity: 110 litres Cooling system capacity: 27 litres Lubrication system capacity: 17 litres

Pump specifications:

Head: 53 m Capacity: 150 m³/ h Inlet diameter: 123 mm Outlet diameter: 97 mm Operating temperature range : -50° C to 110° C

Pump specifications can be changed according to customer demand and regarding engine power.



Fuel consumption Litres / hour		
Power rating	1500 rev/min	
Intermittent power	16	
Continues power	14.5	
75% of prime power	11.4	
50% of prime power	8.1	
25% of prime power	5.3	



Iran Tractor Foundry Co.

The Designer and Manufacturer of Complex Cast - Iron Parts for Vehicles & Industries

Iran tractor foundry company was established in 1987 and is an independent company working with ITMCO group. This company is equipped with the latest modern automatic lines and facilities in industries, having 35 years of experience in producing all types of cast iron parts with annual capacity of 65000 ton. ITFCO has paid special attentfion to sustainable development and integral management systems for adaption of quality management system to attain strategic decision making for the organization , helping to improve its performance with regard to customer satisfaction.

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Technology Pattern Shop

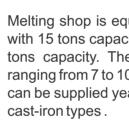
In I.T.F Co. pattern shop utilizes experts as well as special computer aided factilities such as Solid Work, Power Shape, Power Mill, Simulation Softwares & etc. Different types of pattterns, core boxes and fixtures for a variety of cylinder blocks, cylinder heads, central housings, hubs, axels, etc, have been desinged and manufactured, according to customers requirments. Also, tooling department is equipped with high-tech CNC(s), different types of universal milling machines, and CMM machine. This department has the capability of producing various methods of casting patterns, such as lost foam, green-sand, die-cast and other industrial facilities.





There are over 30 core producing machines in 5 types capable of producing more than 25,000 tons of complex cores. The method of core production is cold-box system . For large and complex components several cores are assembled ,coated and placed in molds by special fixtures rendering more accuracy.

stand & automatic snag grinding.







technology.

Line B with 180 mold capacity per-hour and flask dimensions of 965*711*305*305mm can produce cast-parts up to 80 kg. This unique line has a very high-tech of computer controlled operation to achieve modern specifications of top quality molds & cast-parts. The Dynapulse process causes a high degree of uniform density throughout the mold, that is each area of the molding sand is pressed with a pre-set and desired pressure to obtain higher dimensional accuracy and smoother cast-part surface.



Core - shop

Fettling shop

In fettling shop there are 100 grinding stations using manual grinding

Melting shop

Melting shop is equippped with 5 coreless induction furnaces each with 15 tons capacity, and 2 channel holding furnaces each with 45 tons capacity. There are also automatic melt pouring machines ranging from 7 to 10 tons of melt per-hour. Around 90,000 tons of melt can be supplied yearly to 4 molding lines consisting of gray & ductile,

Line A

Molding line A, with 240 mold capacity per-hour and flask dimensions of 610 * 457 *152 * 152 mm, can produce cast-parts from 100 g, up to 35 kg. The speciality of this line is its great flexibility in manufacturing small size cast-parts using high pressure & high - speed squeeze

Line **B**



Line C

Molding line C, with 110 molding capacity per-hour and flask dimensions of 1,420*915*405*405 mm, is one of the greatest molding lines incorporating great dimension, high speed and consequently great cast-parts both in guality and volume, up to 300 kg . This Line is generally for production of several kinds of cylinder blocks and other heavy duty requirements of gray and cast-iron components . Jolt, high pressure and squeeze methods are applied in this line to reach optimum cast-part quality.

Line E

Line E with 180 molding capacity and flask dimensions of 700*550*280*280 mm, is a high-tech line with regard to its economical productivity. Also manual molding is done in this workshop, up to 500Kg.





Sand-shop

Sand-shop in I.T.F co. has modern equipment to supply molding sand mixture needed in three lines (A.B.C) through huge conveyor-belts. About 400 tons, per-hour, of prepared molding sand is supplied to molding lines undergoing nearly 20 specific property tests in laboratories.



Shot blast

Shot blast workshop consists of 8 types of shot-blast machines. This workshop has the capacity to shot 250 tons of cast-parts everyday, rating from 0.5 kg to 500 kg.



attainments. 1- Controlling of inlet materials.

Quality control

One of the key factors in competitive markets is quality

Quality control department in I.T.F Co. has three tasks :

2-Supervising the production process.

3- Final complete control of mechanical , metallurgical properties and specifications of components.

Of course modern equipment have been of great aid and importance in measuring and coordinating product quality by constant testing in sand, mechanical, wet chemistry, metallographic, none-destructive tests, guantometer, and X-ray laboratories that do their best to give the customer the desired standard end-product.





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