

Long Life and High Quality Easy Maintenance

SINCE
1951

Made in JAPAN

TOYO BRUSHLESS

Powered by **Kubota**

Direct injection

High fuel efficiency

Horizontal water - cooled, 4-cycle Diesel Engine

GENERATOR



MODEL TK-10TE
(10kVA)



WELDER



MODEL TSW-250E
(250A)

GENERATOR

Alternator Concept

Brushless revolving field type. Carbon brushes and slip-rings are not used. Silicon rectifier built-in revolving field is in use.

Maintenance-free

Because of brushless, no regular maintenance is required. More than 95% of maintenance from alternator is said to come from carbon brushes and slip-rings in case of traditional slip-ring alternators.

No wave interference

Because of brushless, no measurable wave interference is developed.

Safety Devices

Low lubricating oil pressure, power generation is stopped.

※Only AVR model

Engine Concept

Horizontal single cylinder, 4 cycle, full diesel engine, water cooled with radiator, totally enclosed with automatic lubrication, and dust proof.

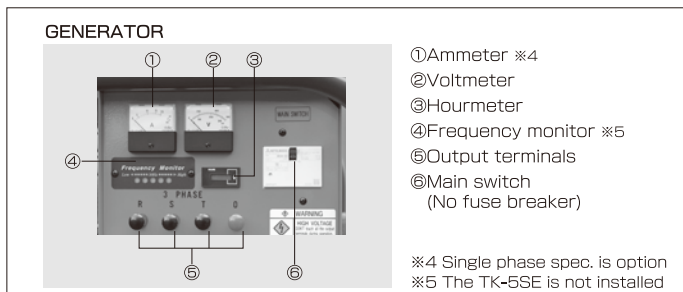
Fuel oil economy, easy handling, of the largest production in these range in the world from reputable Japanese diesel engine manufacturers.

Generator Specifications

Model		TK-5SE	TK-6.5TE	TK-8SE	TK-10TE
GENERATOR	Capacity	5.0kVA	6.5kVA	8.0kVA	10.0kVA
		5.0kW	5.2kW	8.0kW	8.0kW
	Frequency/Revolutions	50Hz / 3000min ⁻¹ or 60Hz / 3600min ⁻¹			
	No. of phase	Single phase	Three phase	Single phase	Three phase
	Power factor	1.0	0.8	1.0	0.8
	Excitation system	Brushless, self-excitation system			
	Drive system	V - belt drive			
	Voltages	※1 V Required			
	Voltage regulation	Condenser	※2 AVR		
	Type	Semi-enclosed, drip-proof, self ventilated			
Insulation class	Stator = E Rotor = F				
Safety Devices	Not available	※3 Safety			
Model		RK95-1-NB	RT140DI-NB		
ENGINE	Type	Horizontal water-cooled, 4-cycle diesel engine			
	Bore × Stroke	86 × 84mm		97 × 96mm	
	Displacement	0.487ℓ		0.709ℓ	
	Max. Output	7.01kW		10.3kW	
		9.5hp		14hp	
	Revolutions	2400min ⁻¹		2400min ⁻¹	
	Compression ratio	18			
	Starting system	Hand & Electric			
	Cooling system	Radiator			
	Lubricating system	Forced lubrication with trochoid pump			
Combustion system	Direct injection system				
Fuel consumption (at 70% load)	1.4ℓ/h		2.0ℓ/h		
Fuel tank capacity	9.5ℓ/h		11.0ℓ/h		
UNIT	Dimensions (L×W×H)	1130×550×630(mm)		1300×620×675(mm)	
	with 4 caster	1130×550×740(mm)		1300×620×825(mm)	
	Net Weight	210kg		295kg	
	with 4 caster	215kg		301kg	

※1 Single phase = AC200, 230, 240 (110 / 220, 120 / 240) V required Three phase = AC200~480V required
 ※2 AVR(Automatic Voltage Regulation) ※3 Power generation stops when the Low lubricating oil pressure.

Control Panel



WELDER

Brushless

No carbon brushes or slip rings. Instead, silicon rectifier built-in field is incorporated.

Maintenance-free

There are no carbon brushes, slip rings or commutator, so maintenance is almost eliminated.

No wave interference

There are no brushes, so no wave interference is generated.

Stable arc

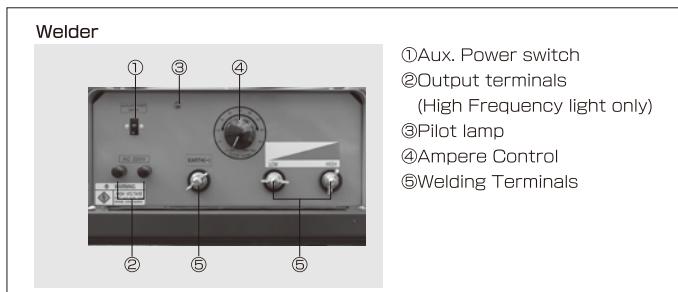
High frequency welder (220-250Hz) making are as stable as that of DC welder.

KUBOTA diesel engines

- Lower fuel costs.
- Low maintenance costs.
- Dust proof.
- Unattended operation.

Welder Specifications

Model		TSW-250E
WELDER	Welding current range	70~250A
	Rated welding current	250A
	Rated welding voltage	32V
	Welding capacity	8.0kW
	No load voltage	70~75V
	Rated use	70%
	Frequency	220~240Hz
	Rated speed	4400~4800min ⁻¹
	Welding rod	2.6~5.0mm
	Auxiliary power (Light only)	1.0kW
Cable size Recommended (40~60m)	22~38	
Model		RT140DI-NB
ENGINE	Type	Horizontal water-cooled, 4cycle diesel engine
	Bore × Stroke	97 × 96mm
	Displacement	0.709ℓ
	Continuous rating Output	10.3kW
		14hp
	Revolutions	2400min ⁻¹
	Compression ratio	18
	Starting system	Hand & Electric
	Cooling system	Radiator
	Lubricating system	Forced lubrication with trochoid pump
Combustion system	Direct injection system	
Fuel consumption (at 70% load)	2.0ℓ/h	
Fuel tank capacity	11.0ℓ/h	
UNIT	Dimensions(L×W×H)	1280×550×675
	with 4 wheel	1280×550×880
	Net Weight with 4 wheel	305kg



●We strive constantly to improve the quality of the product, so we can change photos and images at any time without notice.



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