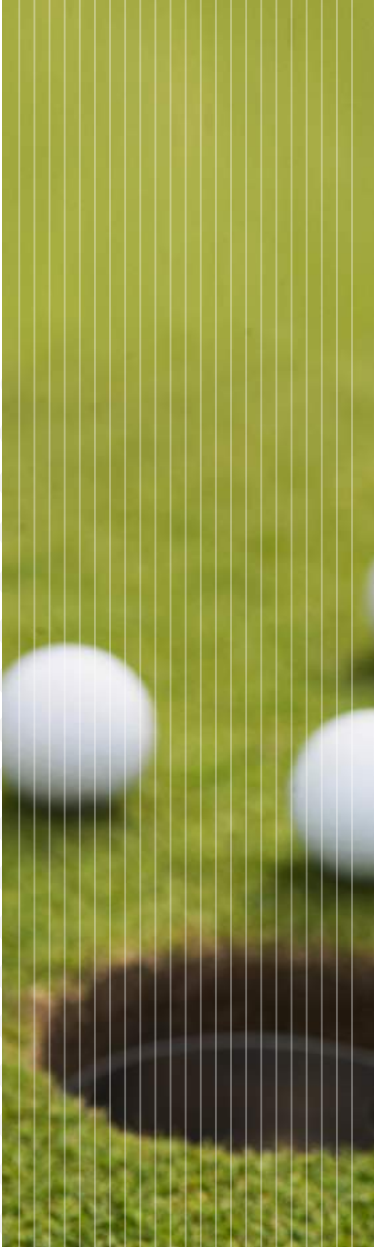


SANDONG METAL INDUSTRY

Electric Motorcycle | LSV | AFPM Generator for Wind Turbine



Sandong Metal Industry Co., Ltd.

GREETINGS from the founder

About SMI

Sandong Metal Industry Co., Ltd.(SMI)established in 1998 is a leading Korean manufacturing and exporting company that focuses on High pressure Flow line equipments in Oil & Gas industry.

We have all kind of API certificates for Flow line equipments such as API 6A, 6D, 16C and we are also ISO 9001, 14001 certified company. Our Products are fully interchangeable with global major brand of Flow line equipments.

From 2005, we developed these high pressure equipments related with Upstream industry for oilfield through our R&D department and have exported these products to oil-producing countries and regions such as North and South America, Europe, Middle east, Australia and South east Asia.

We promise that all staff members of SMI will do our best to satisfy our customers.

Thank you

With Best Wishes
Sun-Bong Bae
Chief Executive Officer.



COMPANY Information

Sandong Metal Industry

- 2019
 - Signed a joint production investment agreement with SUNRA Electric Scooter
 - Acquired Daechang Motors utility vehicle part
 - Established JV, Texas, USA (manufacturing plant)
- 2018~2012
 - Acquired original technology of AFPM BLDC motor
 - Achieve \$20Million export
 - Processing to be registered in Vendor of KOC(Kuwait Oil Company)
 - Processing to be registered in Vendor of ADMA-OPCO
 - Registered in Vendor of Samsung Heavy Industry and DSME
 - Certified with the ISO 14001
 - Achieve \$10million export
 - Designated as Korean global hidden champion
 - Award-winning \$5Million export top from Korea President
- 2011~1998
 - Registered in Vendor of NIDC (National Iranian Drilling Company)
 - Designated a venture business (Korea technology finance corporation)
 - Establish a Technical Development Division
 - Certified ISO 900
 - Sandong Metal Industry co.ltd is established

Certificates



TS-0744

Q1-0883

ISO-9001:2008

ISO-14001:28229



6A-1064

6D-0988

16C-0134

PRODUCT

YOLO



Model	YOLO
Color	Red Green Blue Black
Weight	61.5kg
Motor	1.3kW(Max)
Battery	60V 20Ah Li-Ion (1.2kWh)
Max. spd	55km
Distance to drive	57km
Charging Time	6hours
Break(F/R)	DISC Break
Tire(F/R)	9.50-8

MIKU-MAX



Model	MIKU-MAX
Motor	800W
Battery	60V 20Ah Li-Ion
Max. spd	55km/h
Distance to drive	60km
Charging Time	3hours

LIBERTAR



Model	LIBERTAR
Color	Black, White
Weight	110kg
Motor	2.1kW
Battery	72V 40Ah Li-Ion (2.8kWh)
Max. spd	60km
Distance to drive	80km
Charging Time	4hours
Break(F/R)	DISC Break
Wheel	12inch

ELECTIRC HOT/COLD MEAL CAR



Motor	DC 48V-500W(4800rpm)
Battery	48V-60Ah Li-ion Battery Pack(BMS)
Charger	200VAC-58VDC 16A 0.9kW
Tray Stackable	40EA
Display Monitor	8inch 4:3 Touch Screen
Door Lock	Magnetic Door Lock
Main Key	Smart Card Key(RFID Card Reader)

PRODUCT(LSV)

LSV (Low Speed Vehicle)



- Short distance LSV / Approve SAE by U.S Transportation
 - Speed, mileage, authorized driving area & scope
 - Korea Transport Department assigned vehicle identification number (VIN #) and WMI (World Manufacturer Identification)
- Currently being used in the gated community and silver towns in the U.S.
 - Supply about 40,000 gated community in the U.S
- USEV (DMC's affiliate) entered into supply agreements on carts and LSV with dealers in 8 Southern States

PRODUCT

GOLF CART (2P)



Motor	AC48V, 4.5kW
Battery	48V 190Ah
Controller	VC-Tech
Max. spd	25km/h
Climbing angle	27°
Weight	530kg

GOLF CART (5P)



Motor	AC48V, 4.5kW
Battery	5.4kW Li-ion Battery
Controller	VC-Tech
Max. spd	25km/h
Climbing angle	25°
Weight	560kg

PRODUCT

GOLF CART (NEW) (2P)



Motor	AC48V, 3.8kW
Battery	Trojan Lead Acid
Controller	Zapi ACEo
Max. spd	25km/h
Climbing angle	25°
Weight	360kg

UTILITY TOURING CAR (5P)



Motor	AC48V, 4.5kW
Battery	5.4kW Li-ion Battery
Controller	VC-Tech
Max. spd	25km/h
Climbing angle	25°
Weight	414kg

UTILITY DECK CAR(NEW) (5P)



Motor	AC48V, 3.8kW
Battery	Trojan Lead Acid
Controller	Zapi ACEo
Max. spd	25km/h
Climbing angle	25°
Weight	360kg

UTILITY TOURING CAR (8P)



Motor	AC48V, 4.5kW
Battery	5.4kW Li-ion Battery
Controller	VC-Tech
Max. spd	25km/h
Climbing angle	25°
Weight	558kg

PRODUCT

UTILITY DECK CAR (2P)



Motor	AC48V, 4.5kW
Battery	48V, 240Ah
Controller	VC-Tech
Max. spd	25km/h
Climbing angle	27°
Weight	630kg

UTILITY DECK CAR (5P)



Motor	AC48V, 4.5kW
Battery	48V, 240Ah
Controller	VC-Tech
Max. spd	25km/h
Climbing angle	27°
Weight	660kg

AFPM (Axial-Flux Permanent Magnet) Generator

- Disk shape Generator
- High Power per weight and volume
- Direct-drive Generator
- Low-speed, High-power characteristics
- No cogging torque due to coreless stator : Easy to rotate

Representative Models of AFPM Generators for Direct-Drive Wind Turbine

Series	Shape	Dia.(mm)	Weight	Watt	Rpm
208		245	11 kg	100 400 600	130 380 500
245		273	15 kg	400 1,000	200 500
340		340	34 kg	1,000	200
410		454	57/68 kg	2,000 3,000 5,000	200 300 300
510		510	150 kg	10,000	300
660		660	300 kg	10,000	150



Sandong Metal Industry Co., Ltd.

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