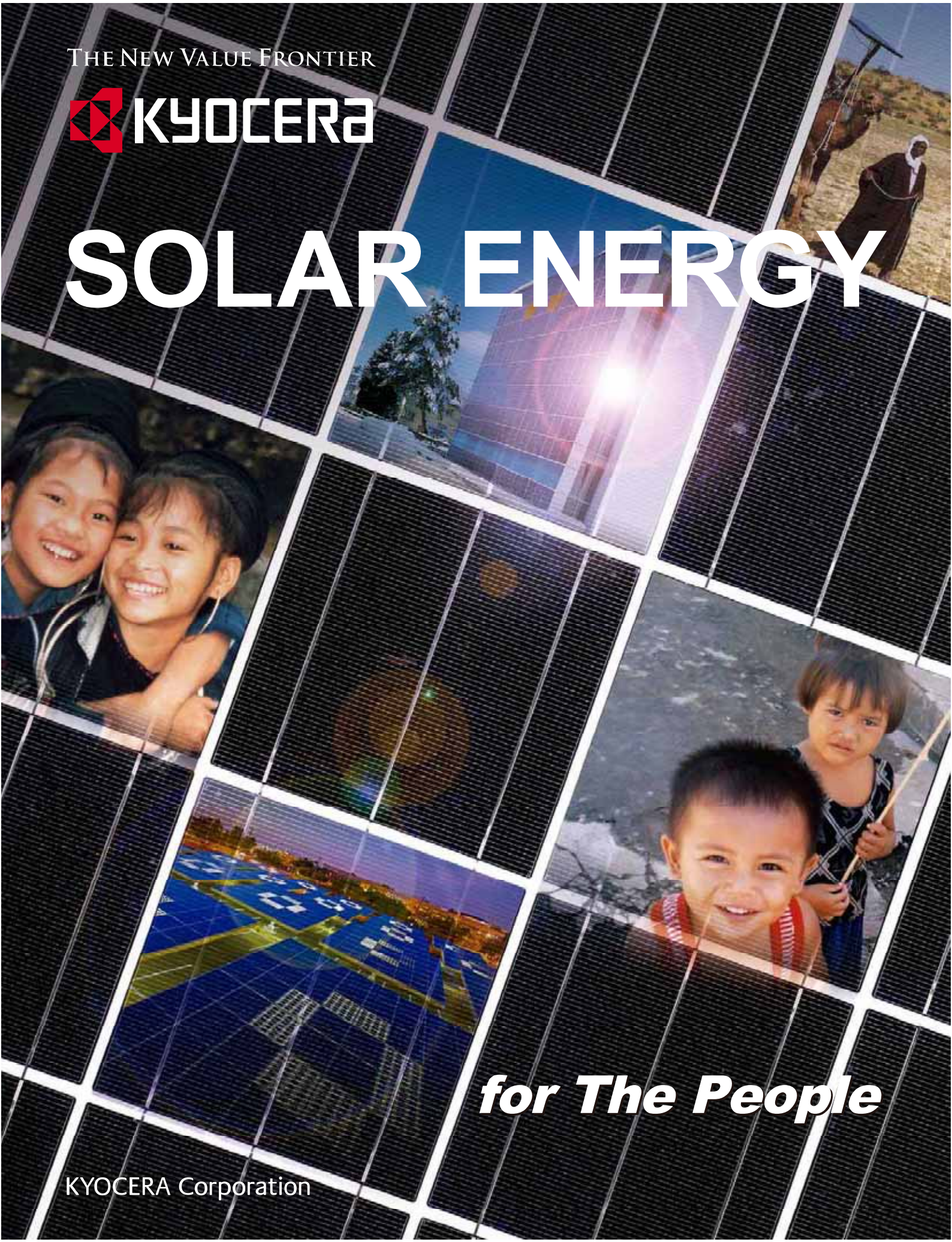
THE NEW VALUE FRONTIER

KYOCERA

SOLAR ENERGY



for The People

KYOCERA Corporation

for The People

Our foundation is based on our Kyocera Philosophy, "Do what is right as a human being".
We are dedicated to serve mankind by providing clean and affordable electricity through our solar energy products for all the people.

Kyocera solar modules are in operation throughout the world

Kyocera solar modules have played an active role in a variety of areas throughout the world.
They contribute to society everywhere around the world by supplying electricity to the people who need it.

Corporate Profile

Corporate Profile

Solar System Summary on Kyocera's Headquarters

The total capacity of the system
214kW
(504pcs on rooftop/1,392pcs on the southern wall)

Annual generated output
131,472kWh
(actual results from Apr. 1st, 2005 to Mar. 31st, 2006)

Reduction in oil consumption
31,980 liters / year

Reduction in carbon dioxide emissions
96t-CO_2 / year

Corporate Profile
(as of March 2007)

Established
April 1, 1959

President
Makoto Kawamura

Capital
115,703 million yen

Global Production Sites

Japan

Yohkaichi Plant
Ingot, Wafer, Cell, R&D, since 1980

Ise Plant
Module Assembly, since 2000

Sakura Solar Energy Center (established 1984)
Engineering, system design, R&D

China

KYOCERA (Tianjin) Solar Energy Co., Ltd. (established 2003)
Module Assembly

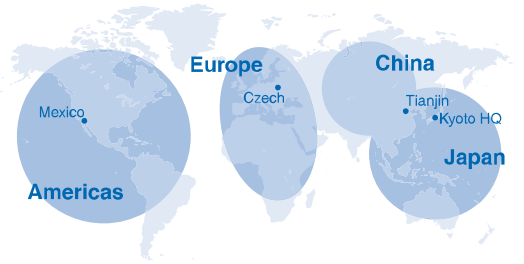
Americas

KYOCERA Mexicana, S.A. de C.V. (established 2004)
Module Assembly

Europe

KYOCERA Solar Europe s.r.o. (established 2005)
Module Assembly

Area map



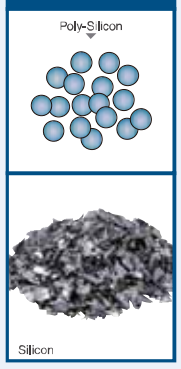
Technology

Kyocera has a large capacity with an integrated system of production.

Since the very beginning of its solar cell business, Kyocera has maintained integrated production in all processes from the production of silicon ingots to the assembly of modules. We continue to supply high quality products to our customers meeting the commitment to control each and every production process.

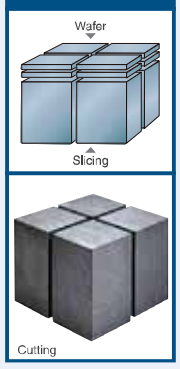
Materials

1 **Raw material**



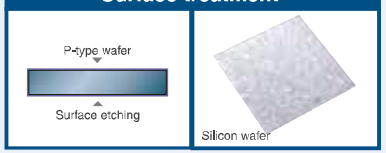
2 **Casting**

3 **Cutting/Slicing**

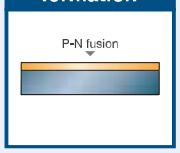


Cells

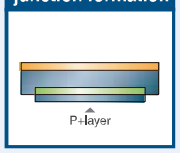
4 **Multicrystalline silicon wafer/ Surface treatment**



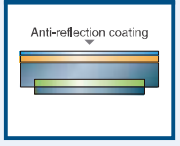
5 **Junction formation**



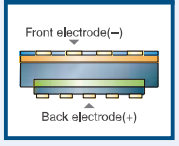
6 **Back side junction formation**



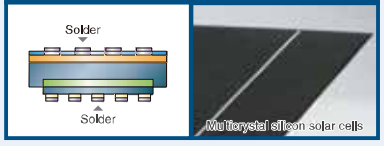
7 **Anti-reflection coating**



8 **Electrode formation**

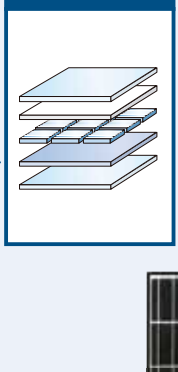


9 **Solar immersion**

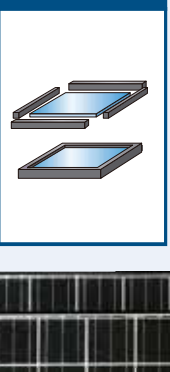


Module

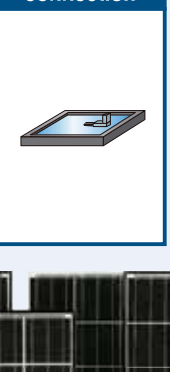
10 **Setting**



11 **Framing**

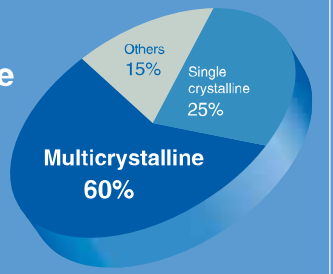


12 **Electric connection**



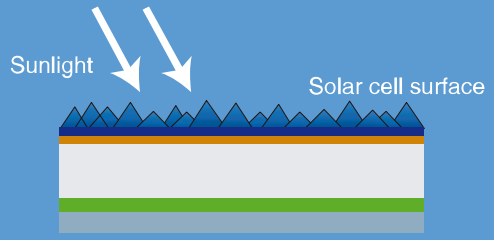
Worldwide cell production by technology type

The multicrystalline silicon modules, which Kyocera produces, are accounted for about 60% of solar cells produced in the world and have been highly competitive in the market (Source:Kyocera Corporation.)



High technology solar cell

Through technological developments in the casting process, impurities in multicrystalline silicon have been successfully reduced, and the quality of silicon wafers has been enhanced. Also, with the development of thin-wire, thick-film electrodes in cell processing, the light-sensitive surface area of cells has been increased, while resistance has been lessened through the use of three bus bars instead of two as previously used.
To improve generating efficiency by reducing energy loss from reflection, Kyocera has used plasma and reactive gas in reactive ion etching (RIE) to create micron-level roughness on the surface of d.Blue solar cells. The pleasing dark blue surface is less reflective and converts more sunlight into electricity.



Capacity

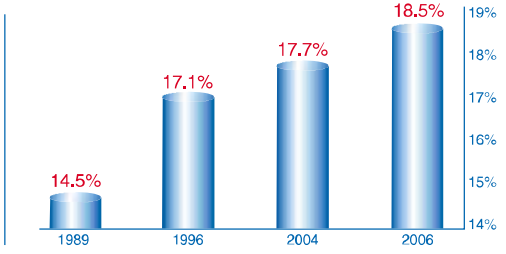
Solar cell production capacity 500MW

Kyocera's integrated production system
Kyocera operates a totally integrated production system that extends from the raw materials stage to the production of silicon wafers, the production of cells, and the assembly of modules.
This production system, which is entirely in-house, allows us to pursue high quality products.

Kyocera's World Record History

Efficiency rate development

Since 1975, Kyocera has demonstrated leadership in the technological development of solar energy.
With our dedication to cutting edge technology and visionary R & D, Kyocera has broken the multicrystalline solar cell efficiency world record several times over.



※Multicrystalline silicon solar cells (15cm square)

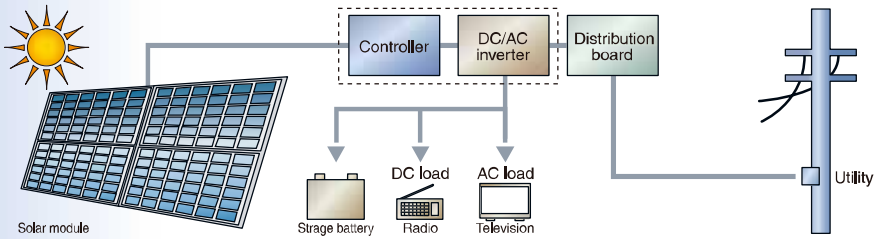
Technology

Grid Connected System

Utility connected photovoltaic generation systems

Grid connected solar systems enable us to enjoy cost effective and environmentally-friendly electricity. Solar electric systems have the potential to be one of the largest leading alternative energy sources on the planet.

Grid Connected System



- The wiring from a photovoltaic generating system is connected to the utility line
- Any surplus electricity generated during the day is sold to a utility company
- During the night, electricity required is purchased from the utility company

※Japan case

Available PV Mounting Format

BIPV
Building Integrated Photovoltaic, so called BIPV, enjoys harmonization with buildings. BIPV does not only generate electricity, but is also able to offer beautiful architectural design.

Metal roof
Not only flat surface, but also solar systems can be installed on a metal roof.

Flat roof
We are able to install solar systems on a flat ground or flat roof top with mounting structure.

Tilted roof
This installation is one of the most popular designs, especially among residential and commercial installations.

Stand Alone System

Stand-alone photovoltaic generation systems

Stand alone systems are able to supply electricity to areas where there is no electricity infrastructure. If you have enough sunshine, you can install stand alone systems almost anywhere you want.

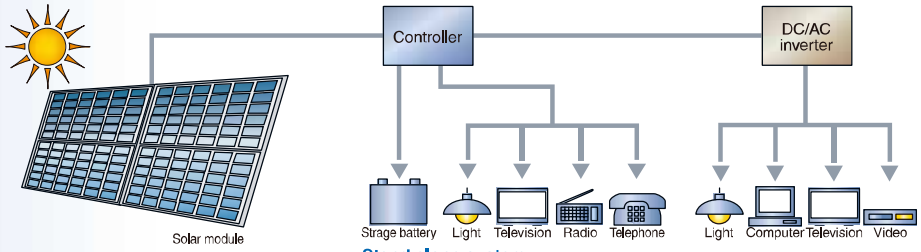
A Woman Engineer from Grameen founded by Prof. Yunus Demonstrating How to Use Solar Home System.

This picture shows one example of field education activities on PV systems in Bangladesh. People are learning how a solar system works for their lifelines.
Thanks to PV lighting systems, children can satisfy their thirst for knowledge and adults can work at night for additional earnings.
At the same time, the PV system is a clean alternative energy source, therefore it can also contribute to environmental protection and energy security.
The PV system improves both their life and environment of the earth.
（Courtesy：Grameen Shakti）

This system, Qinghai-Tibet railway, is normally grid connected. For emergency, backed up by batteries.

Not Only Manufacturer, But Also Educator

We send our engineers to elementary school classes to enhance the awareness of PV, and also prepare an animation for encouraging school children to study PV systems and the current environment situation.
We believe that it is necessary for the next generation to understand the importance of saving our precious environment, and the effectiveness of using alternative energy.
It is one of our missions to work as a bridge to the next generation.



Stand alone system:
- Stores generated electricity to a battery
- Distributes electricity when necessary

Major Applications of Stand Alone Systems

Lighting — Lighting systems are used as various applications such as streets, parking lots and rural electrification.

Oil & Gas — In order to monitor pipelines, operate telemeter and protect cathode, solar systems provide electricity to pipeline applications.

Water pumping — Water pumping systems are able to deliver water to livestock, crop fields and communities.

Traffic — Traffic signaling is one of the most popular applications which are backed-up by stand alone systems in remote areas.

Emergency — Emergency systems can be alternative energy sources when normal power supply sources are shut down due to an accident or disaster.

Medical — Medical systems are used to keep vaccines in a fridge or provide necessary electricity for diagnosis.

Communication — Major applications of communication are microwave repeaters, base stations, VSATs and WLL telecommunication systems.

Railroad — The electricity supply to railroad signaling and other related applications is often backed up by a stand alone system.

KYOCERA Solar Group

KYOCERA

KYOCERA Corporation

①KYOCERA Corporation Headquarters
CORPORATE SOLAR ENERGY DIVISION
6 Takeda Tobadono-cho Fushimi-ku, Kyoto
612-8501, Japan
TEL: (81)75-604-3476 FAX: (81)75-604-3475
http://www.kyocera.com

Please contact our office for further information

②KYOCERA Solar, Inc.
7812 East Acoma Drive
Scottsdale, AZ 85260, USA
TEL: (1)480-948-8003 or (800)223-9580 FAX: (1)480-483-6431
http://www.kyocerasolar.com

③KYOCERA Solar do Brasil Ltda.
Av. Guignard 661, Loja A
Recreio dos Bandeirantes-Rio de Janeiro, 22790-200, Brazil
TEL: (55)21-2437-8525 FAX: (55)21-2437-2338
http://www.kyocerasolar.com.br

④KYOCERA Solar Pty Ltd.
Level 3, 6-10 Talavera Road, North Ryde
N.S.W. 2113, Australia
TEL: (61)2-9870-3946 FAX: (61)2-9888-9673
http://www.kyocerasolar.com.au

⑤KYOCERA Fineceramics GmbH
Fritz-Mueller-Strasse 107, 73730 Esslingen, Germany
TEL: (49)711-93934-999 FAX: (49)711-93934-950
http://www.kyocerasolar.eu

⑥KYOCERA Asia Pacific Pte. Ltd.
298 Tiong Bahru Road, #13-03/05
Central Plaza, 168730, Singapore
TEL: (65)6271-0500 FAX: (65)6271-0600
http://www.kyocera.com.sg

⑦KYOCERA Asia Pacific Ltd.
Room 801-802, Tower 1, South Sease Centre,
75 Mody Road, Tsimshatsui, Kowloon, Hong Kong
TEL: (852)2723-7183 FAX: (852)2724-4501

⑧KYOCERA Asia Pacific Ltd. Taipei Office
10 Fl., No.66, Nanking West Road, Taipei, Taiwan
TEL: (886)2-2555-3609 FAX: (886)2-2559-4131

⑨KYOCERA(Tianjin) Sales & Trading Corporation
Room 2107, Ruoy Chai Building, No.8
Yong An Dong Li, Jian Guo Men Wai Road,
Chao Yang District, Beijing 100022, China
TEL: (86)10-8528-8838 FAX: (86)10-8528-8839

⑩KYOCERA (Tianjin) Solar Energy Co., Ltd.
16 Xiang An Road (5th Avenue),
Tianjin Economic Technological Development Area,
300457, Tianjin, China
TEL: (86)22-2532-0953 FAX: (86)22-2532-2813

⑪KYOCERA Solar Europe s.r.o.
Královský Vrch 1977
43201 Kadaň, Czech Republic
TEL: (420)474-352-100 FAX: (420)474-352-101

⑫KYOCERA Mexicana, S.A. de C.V.
Blvd. Buena Vista Otay, No 2055
Mesa de Otay, C.P. 22390
Tijuana, Baja California, Mexico
TEL: (52)664-682-0111 FAX: (52)664-682-1370

CAT/010707S5SAGK-01