SMK

COMPANY PROFILE

Corporate Outline (as of March 31, 2021)

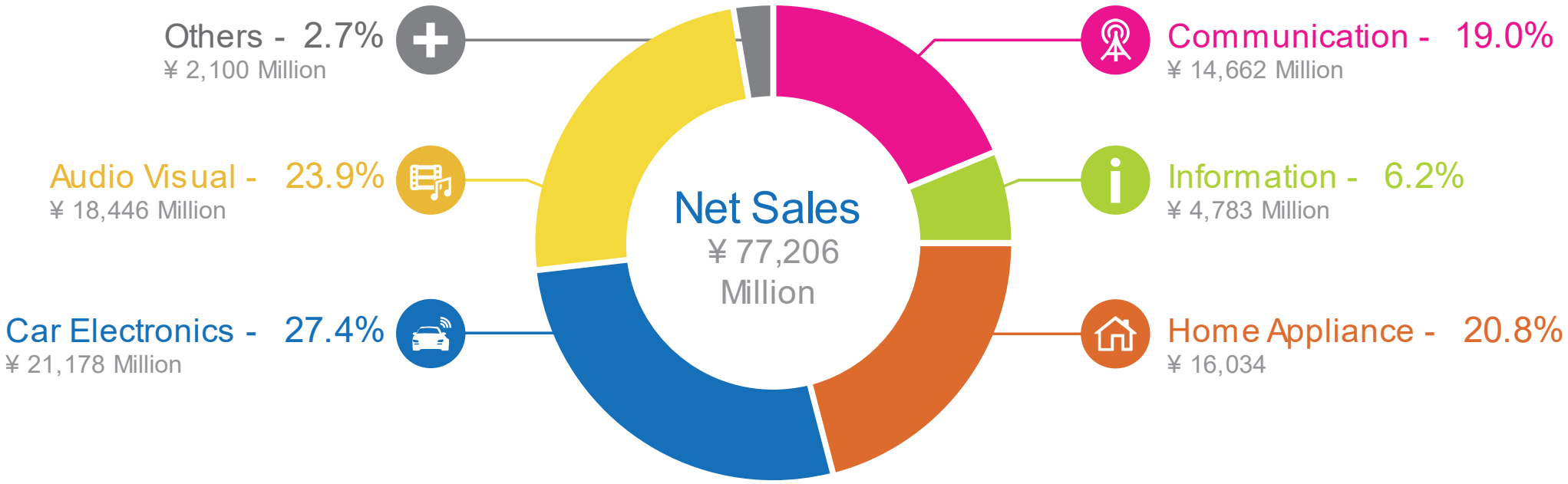
Name	SMK Corporation
Business	Consumer electronics
Date of establishment	April 1925 (94Y)
Capital	7,996 million yen ($73 MUSD)
Shares	Authorized shares 19,596,127 Issued shares 7,500,000
Settlement term	March 31st
Sales	54,161 million yen ($468M USD)
Number of employees	5,828 (in the Group)
Head Office	6-5-5 Togoshi, Shinagawa-ku, Tokyo 142-8511

Our Vision

"Challenge, Creativity and Solutions",.

Yasumitsu Ikeda
President, CEO and COO

SALES BY MARKET



Others: Markets of Medical Equipment , Rehabilitation Equipment , Industrial Robot , N C Machine, Electrical Measuring Equipment, etc.

Manufacturing products

- 8 Worldwide factories
- ★ 9 Engineering and design centers
- 32 Wordwide sales offices

Békéscsaba, Hungary
Remote Controls
Control Panels
Switches

Dongguan, China
Connectors
Switches
Remote Controls
Control Pannels
Optical TP

Shenzhen, China
Connectors

SMKA HQ
San Diego

SMK HQ
Tokyo

UK

Korea

San Diego,CA

Tijuana, Mexico
Remote Controls
Control Panels
Switches
Cradles

Mexico

Shenzen

Malaysia

Hitachi, Japan

Selangor, Malaysia
Fuse Holders
Connectors
Remote Controls
Control Panels

Pampanga, Philippines
Touch Panels
Battery connectors
Remote Controls

Toyama, Japan

- ★ Japan: Ibaraki, Toyama, Yamato
- ★ Asia: Korea, Malaysia, Shenzen
- ★ America: San Diego USA, Tijuana Mexico
- ★ Europe: United Kingdom

STANDARD CERTIFICATIONS

COUNTRY	DIVISION		ISO 9001	ISO 14001	ISO/IATF 16949
Japan	Product Division	CS Division	✓	–	–
		FC Division	✓	–	–
		TP Division	✓	–	–
	Office and Works	Head Office	–	✓	–
		Toyama Works	–	✓	–
		Hitachi Works	–	✓	–
USA and Mexico	SMK America Group		✓	✓	✓
UK	SMK Electronics (Europe) Limited, U.K. Branch		✓	✓	–
Malaysia	SMK Electronics (Malaysia) Sdn. Bhd.		✓	✓	–
China	SMK Electronics (Dongguan) Co., Ltd.		✓	✓	–
	SMK Electronics (Shenzhen) Co., Ltd.		✓	✓	✓
	SMK Electronics Technology Development (Shenzhen) Co., Ltd.		✓	–	–
Philippines	SMK Electronics (Phils) Corporation		✓	✓	✓

SMK Outline, June 2022

Name
SMK Electronica S.A. de C.V.

Business
Consumer Electronics

Scope
Sales, Design, R&D
Manufacturing

Markets
Home ICT
Automotive Industry

Annual Sales
$50 Million USD

Location
Tijuana, B.C, Since 1988

Area
15,000 m2 (160,000 ft2)

Head Office
Tokyo, Japan. Since 1925

Employees
800 Employees

PROCESS, EQUIPMENT AND CAPACITIES

Example

MANUFACTURING
CAPABILITIES

MOLDING

6 MILLION molded parts per month

33 INJECTION MOLDING MACHINES		
5 Small	65-100 tons	Conventional Injection
23 Medium	100-200 tons	
5 Large	230 tons	Double shot

BRANDS

Toshiba
Sodic
Fanuc
Nissei
Sumitomo

LASER SURFACE TEXTURING

ADVANTAGES

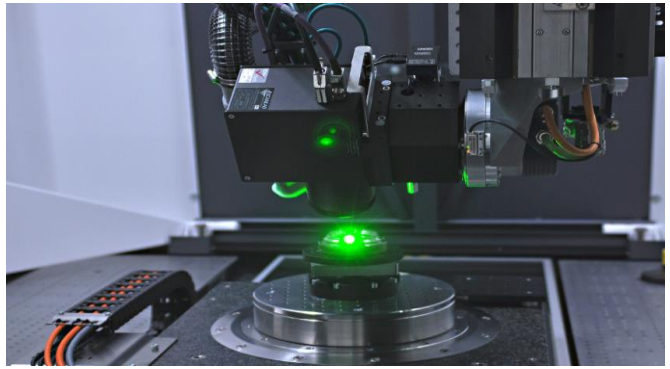
•Cost-efficiency due to a reduction in labor and production time compared to other traditional marking methods.

•The ability to mark difficult to reach spaces on products.

•An increased marking precision compared to methods such as acid etching, since the chemicals involved in that process can create depth variances resulting in a less uniform product.

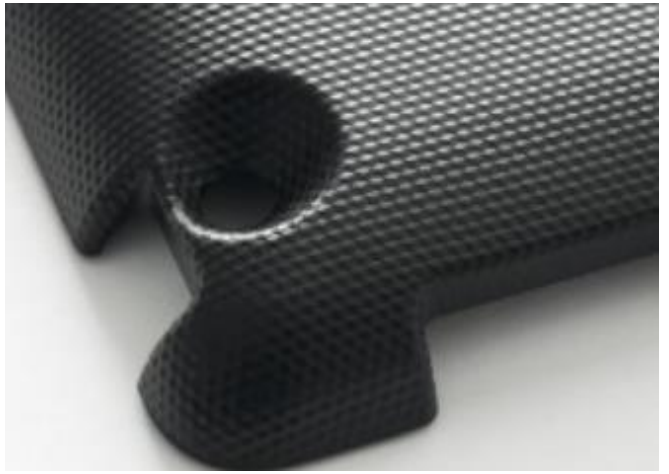
•A high level of control over surface microstructures which in turn helps to reduce the environmental impact of the process in comparison to other methods.

•A significant reduction in waste, as well as the lack of need for any chemical reagents.



APPLICATIONS

- Magnetic storage drives and assorted devices
- Thrust bearings
- MEMS devices
- Hydraulics equipment
- Seals
- Nano materials
- Metallic and dielectric films
- Engines
- Superconducting materials
- Solar cells
- Implants for bone and dental appliances

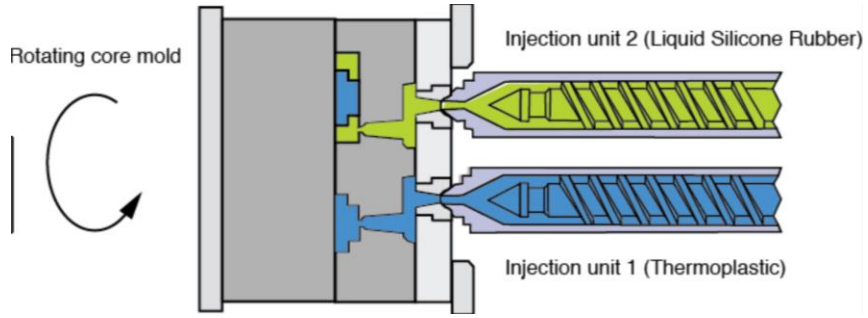


DOUBLE MOLDING

Manufacturing process used to produce complicated molded parts from two different materials by molding plastic around a preformed metal or plastic insert.

The process is relatively simple; one material is injected into a mold in order to make the initial piece of the product, followed by a second injection of another material that is compatible with the initial injection molded piece.

The two plastic resins then form a molecular bond and the multi-resin molded part is cooled and ejected



OVER MOLDING

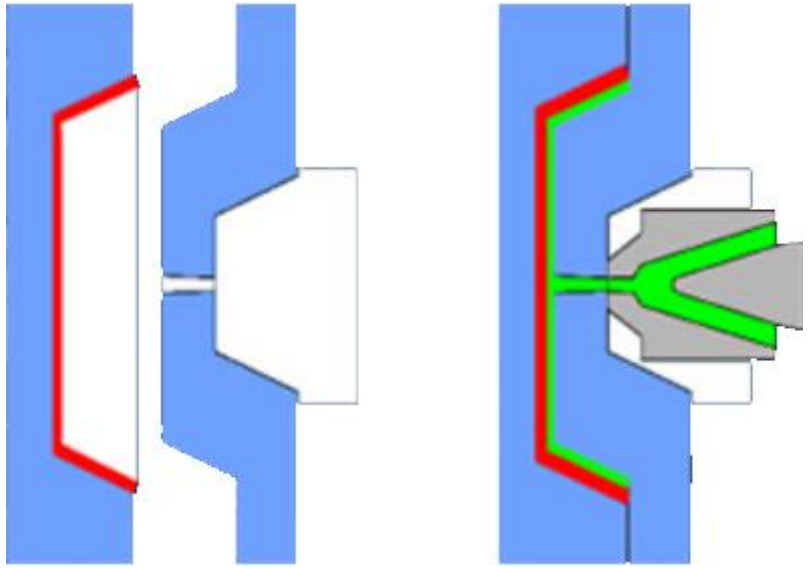
Most common materials to over is TPE, mainly for soft feeling, this is over mold over materials as:

- Polycarbonate (PC)
- Acrylonitrile Butadiene Styrene (ABS)
- PC/ABS
- Standard and Modified* Nylon 6, Nylon 6/6, Nylon 6,6,6
- Polystyrene (PS)
- High Impact Polystyrene (HIPS)
- PC/PETG • Acetal (POM)

IMD (TR or S) & IML PLASTIC INJECTION MOLDING

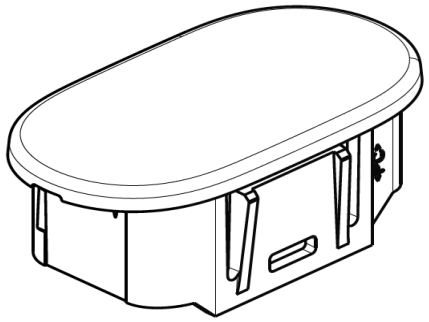
IMD and IML systems drive it's technology to reproduce the products with unique touch, feel, and texture beyond mere decoration. The film, onto which the desired design has been printed, is inserted into the mold. Resin is introduced to the mold and the design transfers onto the component

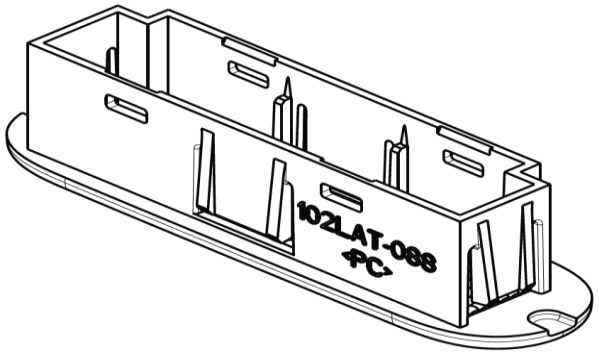
In-mold decorating eliminates a post-processing operation by allowing parts to be decorated during the molding cycle. Benefits are said to include enhanced manufacturing productivity

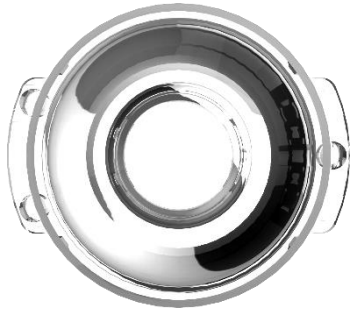


OPTICAL MOLDING

Beltlines, vanity mirror guide light interior door panels, and carpeted map **pockets**, cargo etc.





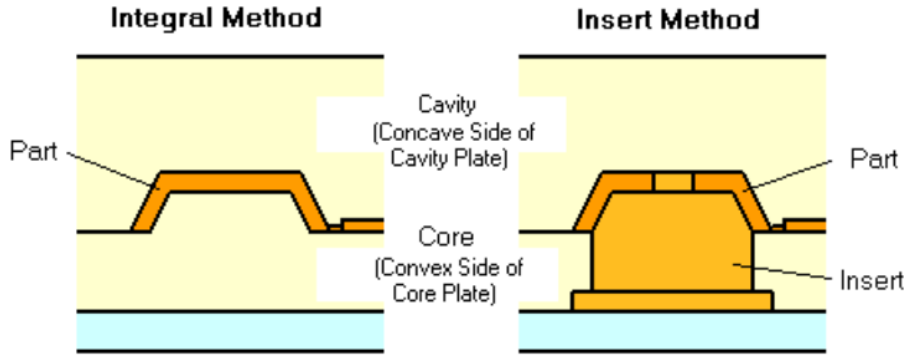


INSERT MOLDING

Insert injection molding involves encapsulating a previously fabricated component in molten resin to produce a finished part.

The inserted component is most commonly a simple object, such as a knife blade or surgical tube, but in some cases, inserts can be as complex as a battery or motor.

Plastic insert molding is ideal for improving the strength and reliability of a component and can help save on cost and production time by eliminating the need for secondary operations such as soldering, connectors and adhesives.



PROCESS, EQUIPMENT AND CAPACITIES

MANUFACTURING
CAPABILITIES

TOOLING

HAAS CNC
Machine
VF-1

- Mold Repair
- Preventive Maintenance

PROCESS, EQUIPMENT AND CAPACITIES

MANUFACTURING CAPABILITIES

PAD PRINTING

17 PAD PRINTING MACHINES

- 6 Pad Print
- 5 Trans Tech
- 6 Printex

- 5 Million Printed parts / Month
- Features: Multicolor print
- Ink Type: Solvent Base

Example

Printing Colors

Pantone
Pantone 2028 C
Pantone 2287 C
Pantone 2192 C
Pantone 7547 C

MANUFACTURING CAPABILITIES

PAINTING

- 2 Automated Painting Lines
- 2.4 Million Painted parts / month
- Paint type: Solvent base & Soft touch

Example

PROCESS, EQUIPMENT AND CAPACITIES

MANUFACTURING CAPABILITIES

SURFACE MOUNT TECHNOLOGY

12 SMT High Speed Lines

- Shoot capacity 100 Millions / Month

CONTROLLED ENVIRONMENT

EQUIPMENT & BRANDS

CHIP SHOOTER (HT) & REFLOW OVEN

SURFACE MOUNT TECHNOLOGY

CHIP Shooter (HT) "Mounter"

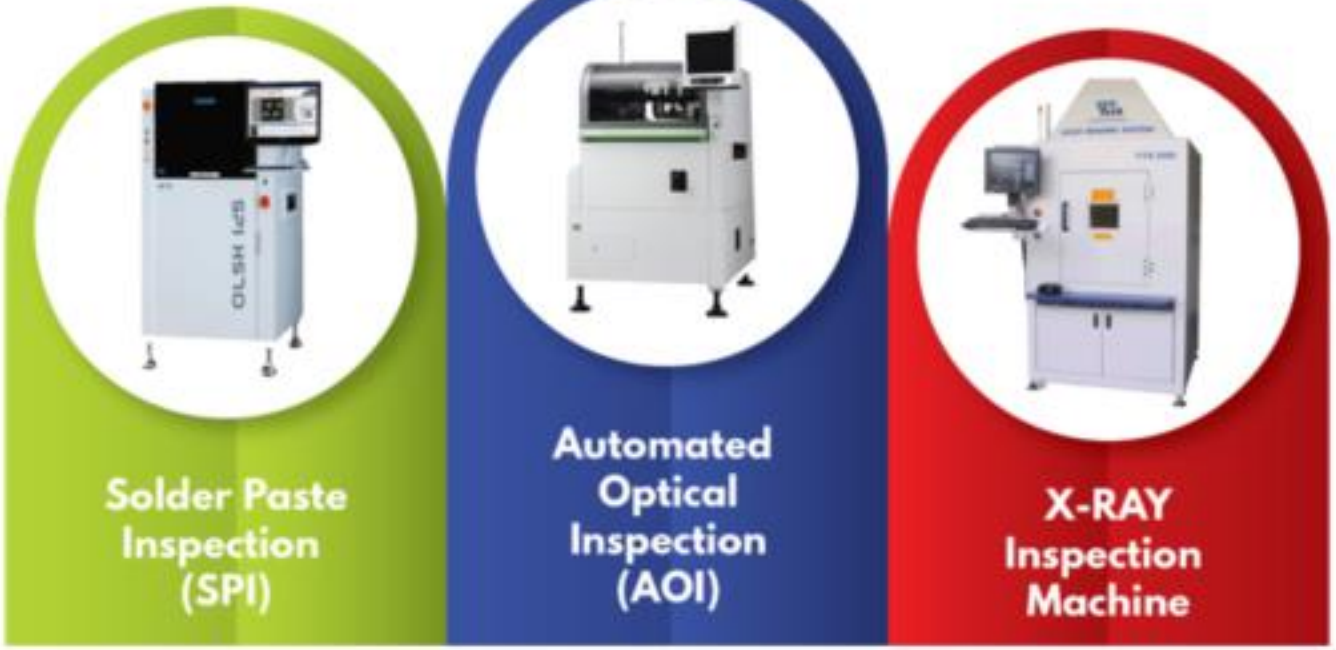
- High speed chip shooter: 50,000 CPH
- 18 Head / 6 Nozzle by head.
- Placement accuracy: 50um.
- Recognition vision system.
- Laser sensor unit for stand up chip.

Reflow Oven "SOLDER PASTE CURING"

- 9 Zone force convection heater
- Lead free ready
- Top & Bottom reflow air circulation.
- One - step profiling

SOLDER PASTE INSPECTION (SPI) & AUTOMATED OPTICAL INSPECTION (AOI)

SURFACE MOUNT TECHNOLOGY



MANUFACTURING

CAPABILITIES

WAVE SOLDERING SYSTEM

BRAND	MODEL	PURPOSE
Speedline	Vectras 2	To weld through hole component by wave solder.

- 1 Million PCB soldered per month

PROCESS, EQUIPMENT AND CAPACITIES

Example

MANUFACTURING
CAPABILITIES

LASER ETCHING

- Marking, Engraving, Etching
- 2D & 3D Laser Markers
- Indexed Marking
- Manual marking stations

- **2 Laser Machines**
- **Capacity:**
  150,000 pieces monthly each one

PROCESS, EQUIPMENT AND CAPACITIES

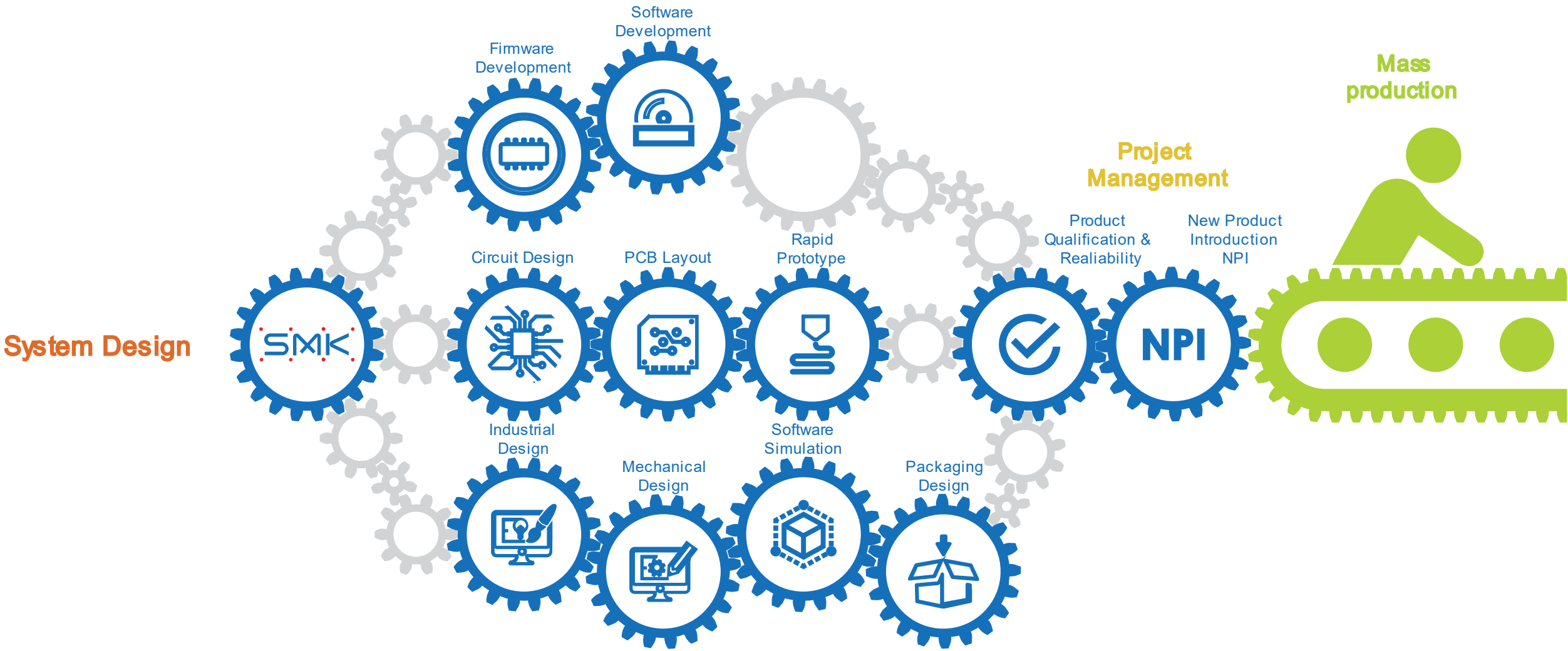
Example

FINAL ASSEMBLY AREA

- Capacity for 60 Flexible cells
- 2'500,000 Units per month

- Manual Sodering
- Assembly
- Functional Test
- Visual Inspection
- Final Packing
- Quality Control

ENGINEERING DESIGN CAPABILITIES



LM STEERING WHEEL.

Materials: ABS resin + TEIJIN Panlite<PC> Overmold

Electronic specifications:

Capacitive sensing touch

Backlight

4 BUTTON KEYFOB.

Materials: ABS resin + TPE Overmold, Aluminum

Electronic specifications:

RF

Bluetooth

Waterproof

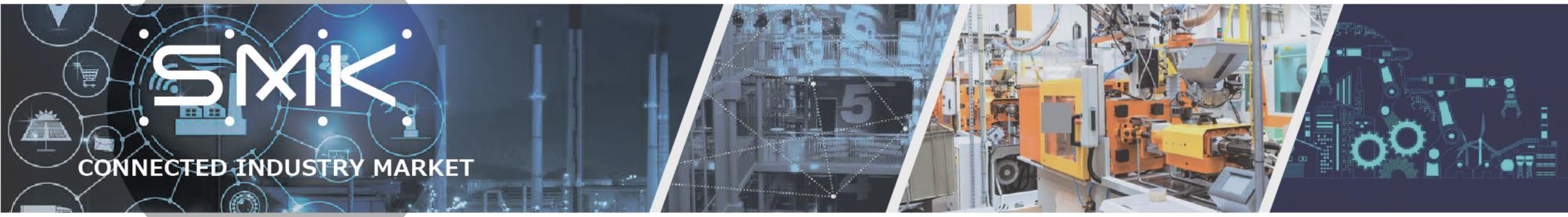
FRONT DOME LIGHT.

Materials: ABS resin + In Mold Decoration / Tarflon Polycarbonate

Electronic specifications:

Capacitive sensing touch

LED illumination + Projection Lens Design



RV DASH A/C CONTROL PANEL
Materials: ABS resin + TPV Overmold / Polycarbonate

Electronic specifications:

Backlight

MOTOR PVG3 PIR 23MM
Materials: ABS resin + Polycarbonate

Electronic specifications:
Operating Voltage : +12V ~ +18V (through DC Cable Assy)

MAIN CUSTOMERS

WG-01 SMART HOME

HunterDouglas
dish
BOSE
Totalplay
izzi
Claro video
une
nielsen
LA-Z-BOY
somfy

WG-02 SMART MOBILITY

TESLA MOTORS
JOYSON SAFETY SYSTEMS
LUCID
RIVIAN
faurecia

WG-03 MOBILE & WEARABLE

WG-04 CONNECTED INDUSTRY

DENSO
HunterDouglas
CRESTRON

CUSTOMER WE ARE GLAD TO ATTEND IN AMERICA

THANK YOU

GRACIAS

ありがとうございました