

Shaily Engineering Plastics Corporate Presentation



**Shaily Engineering
Plastics Limited**

Agenda

Introduction

- Overview
- Vision
- Infrastructure

Strengths & Capabilities

- Polymers
- Molding & Tooling
- Quality, Awards & Case studies

Markets & Products

- Market Segments
- Product Photos



Overview

- Established in 1987 at Halol, India with 2 molding machines
- Today – 5 Facilities with 87 Injection Molding Machines (35TON to 800TON)
- Certified to ISO 9001, TS-16949 (First Plastic Company in India), ISO 13485
- Market Segments → Home Furnishings, Appliances, Medical, Automotive, Consumer Goods, Electrical/Switchgears, and Engineering Applications



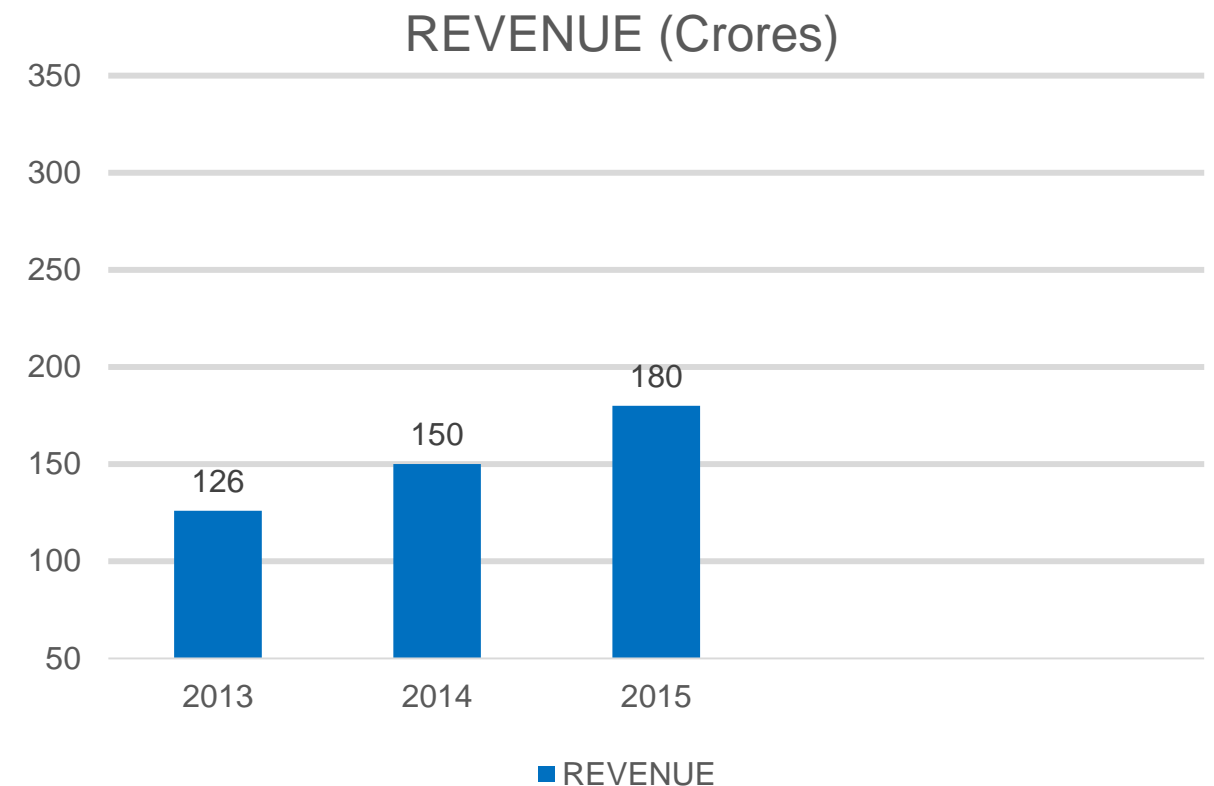
- Total Employees: 950
- Total Capability for Secondary Operations
 - Assemblies, Vacuum Metalizing, Hot Stamping, Ultrasonic Welding & Pad Printing



Vision - Future Projections

Growth Strategy

- Grow @ 30% CAGR on Top-line
- Growth Path:
 - Client Dedicated Facilities
 - Focus on Home Furnishings, Healthcare, Home & Personal Care, Appliances, and Engineering Plastics
 - Build concrete long-term partnerships



Infrastructure



Head Quarters



Office



Clean Room



Export Unit



Tool Room



Assembly

Shaily Engineering Plastics Limited



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Polymers Processed

Thermoplastics

- Polypropylene – PP
- HDPE, LDPE & LLDPE – PE
- Polystyrene – PS, HIPS
- Poly Phenylene Sulphide – PPS
- Styrene-acrylnitrile - SAN
- Poly Phenylene Oxide - PPO
- PolyOxy Methylene (Modified) - POM
- Polyamides - Nylon 6, 6/6, 6/12, 11, 12
- Polyesters - PBT, PET
- Polyetherimide - PEI
- Polyurethane - PU
- Polyether Sulphone - PES
- Acrylonitrile Butadiene Styrene - ABS
- LCP
- Poly ether ether ketone – PEEK
- Polyamide-imide - Torlon (1 of 2 in Asia)

Thermosets

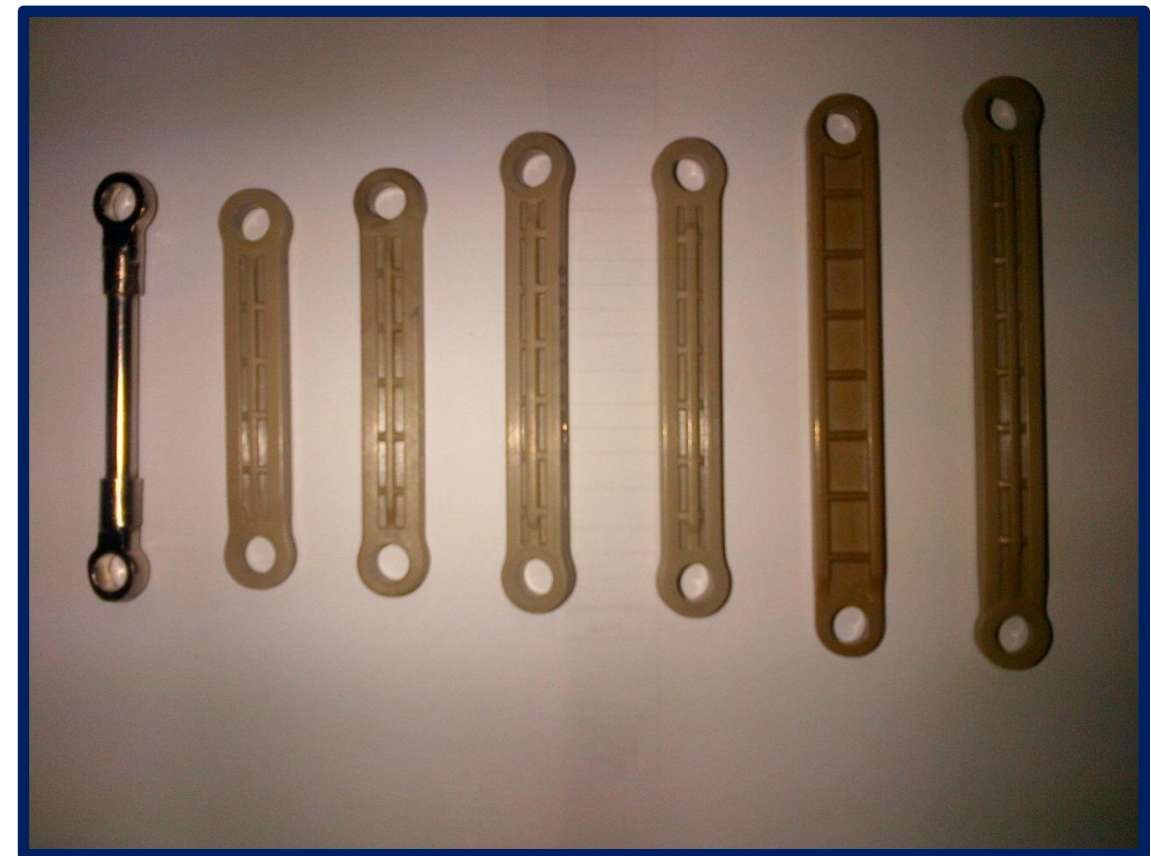
- DMC (Dough Moulded Compound)
- BMC (Bulk Moulded Compound)
- PF (Phenol Formaldehyde)
- DAP (Diallyphthallate)
- MPF (Melamine Polyester)

- Ability to process, diverse & difficult materials upto 400°C in temperature
- Process materials filled upto 50% with glass beads, glass fibers, minerals, flame retardants etc.



Metal to Plastic Case Study

- Honeywell previously used metal rods
 - 3 metal components to each rod
 - Each component machined & then welded
- Shaily Designed rods in plastic in PEEK
 - Single component injection molded rod
 - Passed 2 million cycles of testing
 - Productivity increased by 300X
 - Cost reduced by 40%
- Replaced metal rods on BMW
- Shaily is the only supplier globally to successfully accomplish this conversion



Injection Molding Capabilities

- Shaily has 87 injection molding machines:
 - Nissei – Japan (30)
 - LTM Demag – India/Germany (10)
 - Arburg – Germany (1)
 - Husky – Canada (2)
 - Hwa-Chin – Taiwan (28)
 - Engel – Austria (3)
 - Ferromatik Milacron / Winsor – India (13)
- Manufacturing team consisting of engineers & technicians = 45
- Special screw & barrel for processing Torlon & oven for curing Torlon parts
- Ability to manufacture components < 0.03grams (Medical Device)
- Injection Blow molding machine for pharma packaging (bottles)



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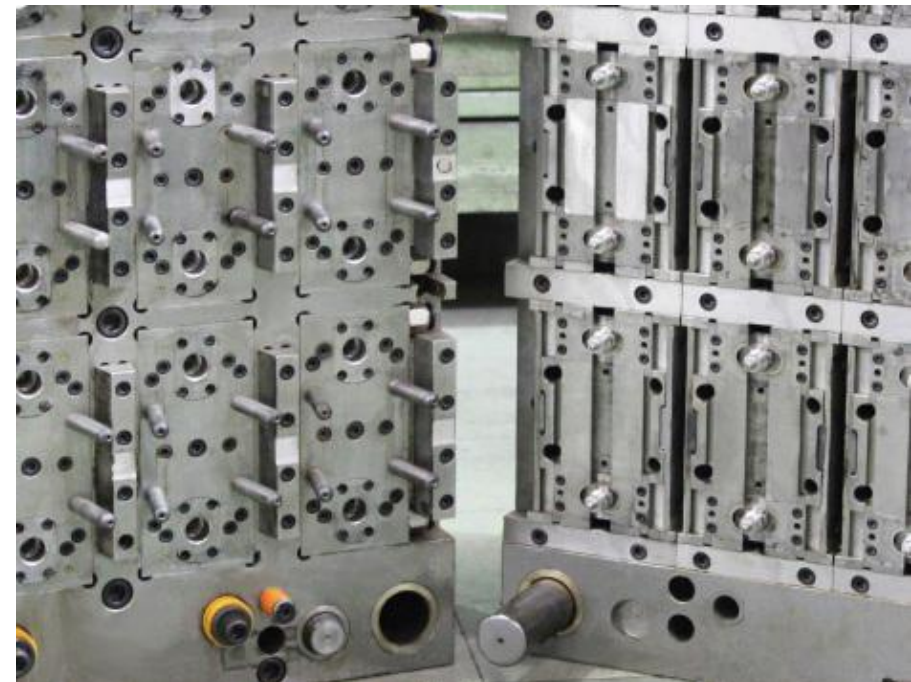
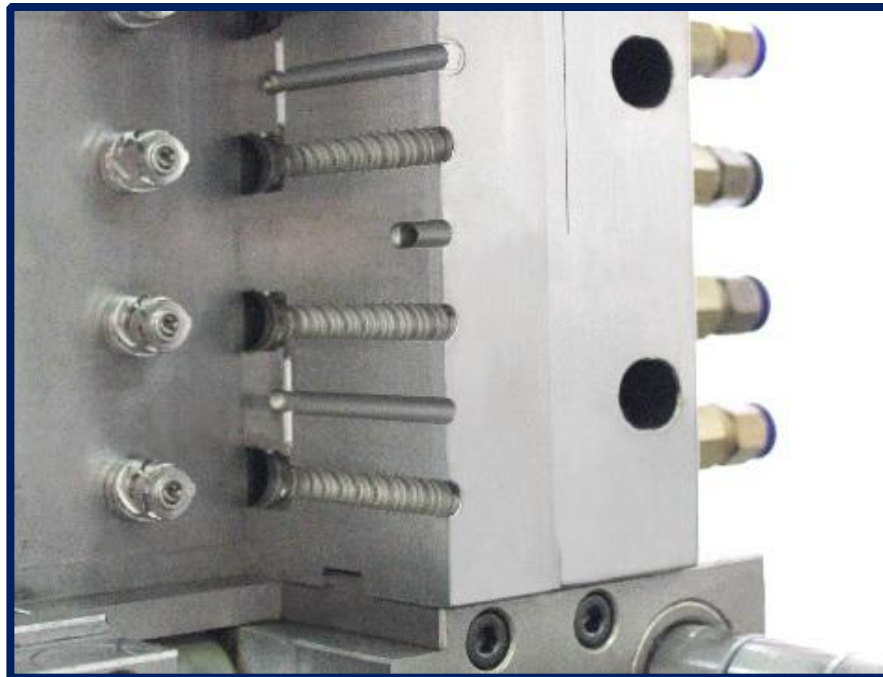
New Clean room Facility

- Pharmaceutical Packaging
 - Child Resistant Closures
 - 33mm, 38mm (3 Different Liners)
 - Pill Bottles
 - 40cc, 60cc, 100cc, 120cc
 - Medical Devices
 - Auto-Injectors, Pen injectors etc



Tooling Capabilities

- Tool Room Equipment includes:
 - 4 Axis CNC EDM
 - 4 Axis CNC Milling (VMC)
 - CNC Surface Grinder
- In-house mold maintenance → Core and Cavity inserts
- Prototype tooling (1-2 cavities)
- Production tooling subcontracted
- Intensive fail safe maintenance program → 12x tool life (Shellpak Tools have surpassed 15 million shots)



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Product Design

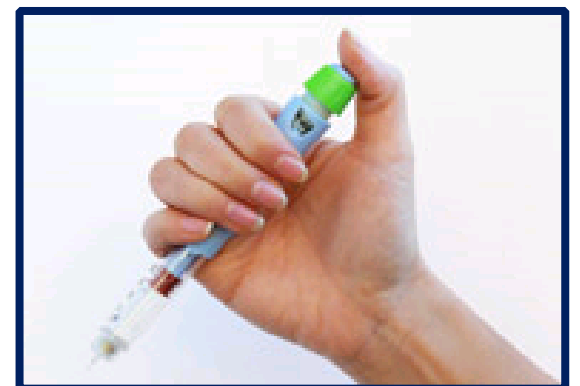


Shaily is one of the few companies in India that can take an idea from concept through engineering drawing, prototype, testing, tool design and manufacturing of final components and assemblies



Product Design Case Study

- Shaily & IDC engineered a mechanism that uses 100% plastic components; The World's First
- Patented the design and all IPR's transferred to Wockhardt on project completion
- 2008 IDEA Innovation award winner
- Pens are designed to meet UL & FDA approvals, & ISO 11608 1,2&3 certification.
- Shaily is 1 of 8 manufacturers of Insulin pens in the World today



Quality Certifications

TS 16949:2009

Certificate

Standard **ISO / TS 16949:2009**
(3rd edition, 2009-06-15)
Certificate Registr. No. 01 111 058753/01
IATF Certificate No. 0103305

TÜV Rheinland Cert GmbH certifies:
Certificate Holder: **Shaily Engineering Plastics Limited**
Site 1: Survey No. 364 & 366, Rania – 391 780,
Taluka Savli, Dist. Baroda, Gujarat, India

Scope: Manufacture of Plastic Moulded Components for Interiors,
Seating Systems, Lighting Systems, Radiator Tanks and
Guide Bush for the Automotive Industry
- without product design and development -

An audit was performed, Report No. 058753/01. Proof has
been furnished that the requirements according to ISO /TS
16949:2009 are fulfilled.
The due date for future audits is 07-04 (dd.mm).

Validity: The certificate is valid from 2010-05-18 until 2013-05-17.

Hong Kong, 2010-05-18

J. Lindh

TÜV Rheinland Cert GmbH *)
Am Grauen Stein · 51105 Köln
Deutschland



2-IAO-QMC 01003



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ISO 9001:2008

Certificate

Standard **ISO 9001:2008**
Certificate Registr. No. 01 100 058753

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Certificate Holder: **Shaily Engineering Plastics Limited**
Site 1: Survey No. 364 & 366, Rania - 391 780,
Taluka- Savli, Dist: - Baroda, Gujarat, India

including the locations according to annex

Scope: Design, Development and Manufacturing of Plastic Moulded
Components and Assemblies

An audit was performed, Report No. 058753. Proof has been
furnished that the requirements according to ISO 9001:2008
are fulfilled.
The due date for all future audits is 18-05 (dd.mm).

Validity: The certificate is valid from 2010-05-18 until 2013-05-17.
First certification 2007

Hong Kong, 2010-05-18

J. Lindh

TÜV Rheinland Cert GmbH *)
Am Grauen Stein · 51105 Köln



DGA-ZM-58-95-00



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ISO 13485:2003 + AC:2009



Certificate

The Certification Body of
TÜV Rheinland InterCert Kft.

hereby certifies that the company

Shaily Engineering Plastic Limited

**Survey No. 364 and 366, Rania, 391780,
Taluka – Savli, Dist. Baroda, Gujarat
India**

has established and maintains a quality management system
for medical devices for the following scope:

**Subcontract Manufacturing of Plastic Molded Components
and Assemblies used in Medical Devices**

Proof has been furnished that the requirements of

**EN ISO 13485:2003+AC:2009
(ISO 13485:2003)**

are fulfilled. The certification is subject to periodic surveillance.

Certificate Registration No.: **OX 69241840 0001**

Audit report No.: **28212612 001**

This certificate is valid: **from 23-04-2012 to 22-04-2015**

23-04-2012
Date of issue



Zoltán Ambrus MD.
Certifier

TÜV Rheinland InterCert Kft. – H-1132 Budapest, Váci út 48/A-B
Tel.: (+36/1) 461-1100, Fax: (+36/1) 461-1199, e-mail: medical@hu.tuv.com, http://www.tuv.com/hun/

Shaily was the first Plastics Company in India to Achieve TS

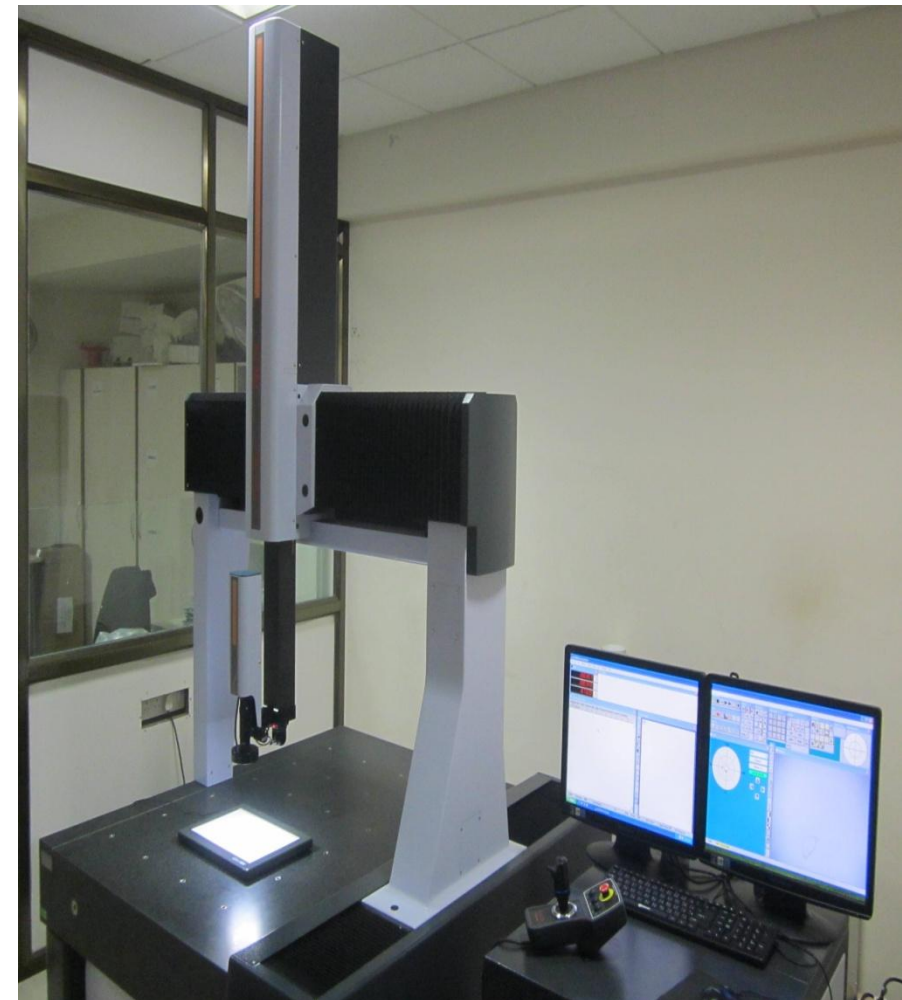
16949 certification

Shaily Engineering Plastics Limited



Quality Equipment & Testing

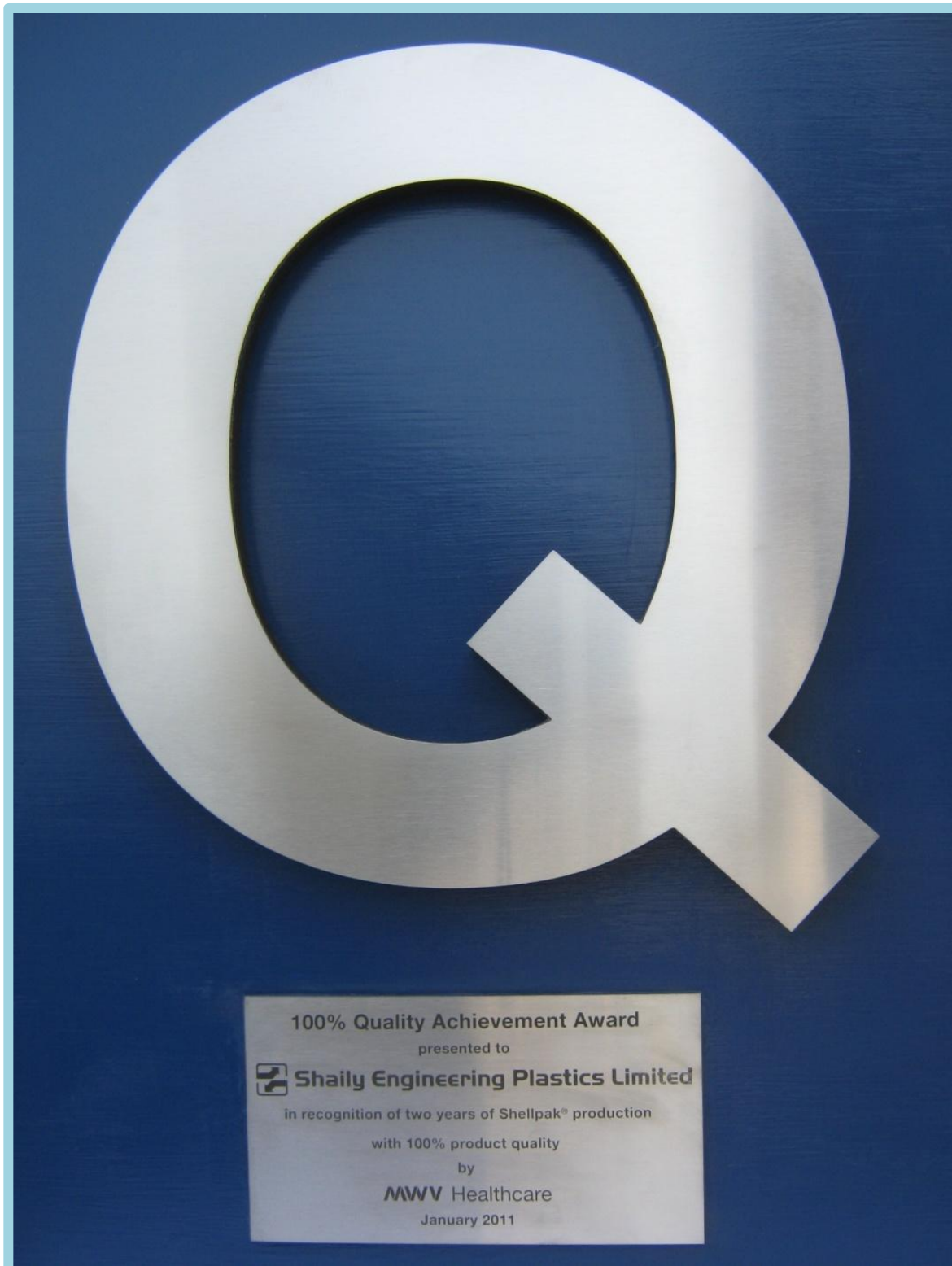
- QC Equipment includes:
 - CMM
 - Universal Testing machine – load/Stress tests
 - Zwick Roell Push Pull testing machine
 - Color matching cabinet
 - Spectrometer
 - Micrometer
 - Profile Projector
 - 400X microscope



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Quality Award



MWV has awarded Shaily for two years of supplying Shellpak with 100% product quality :

“ I would like to express my deepest appreciation to you and the Shaily team for over 2 years of quality production to MWV, shipping over 75 million units to MWV customers!!

It is therefore with pleasure that we present this quality recognition award to Shaily...”

-MWV Team

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Export House Awards



**Top Exporter of
Engineering Components
for Eight consecutive years;
2007, 2008, 2009, 2010,
2011, 2012, 2013**

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Project Management Case Study

- Business relationship with MWV started in March, 2008 with Project Shellpak
 - Facility construction to commercial Production in < 8 months
 - 2 Fully Automated – High Speed Lines Installed
 - OQ, PQ and IQ completed in record time
 - First Commercial Shipment on 18/12/2008



**Complete understanding
of the installation and
OQ procedures →
Successful
implementation**



Project Management Case Study

- Brushes : Go Ahead given by Home Furnishings Major end of September 2012
 - Facility Enhancement, Mold Manufacturing, Bristling Machine commissioning, & Commercial Production in < 5 months
 - 2 Brush models manufactured
 - First Commercial Shipment made in March 2013



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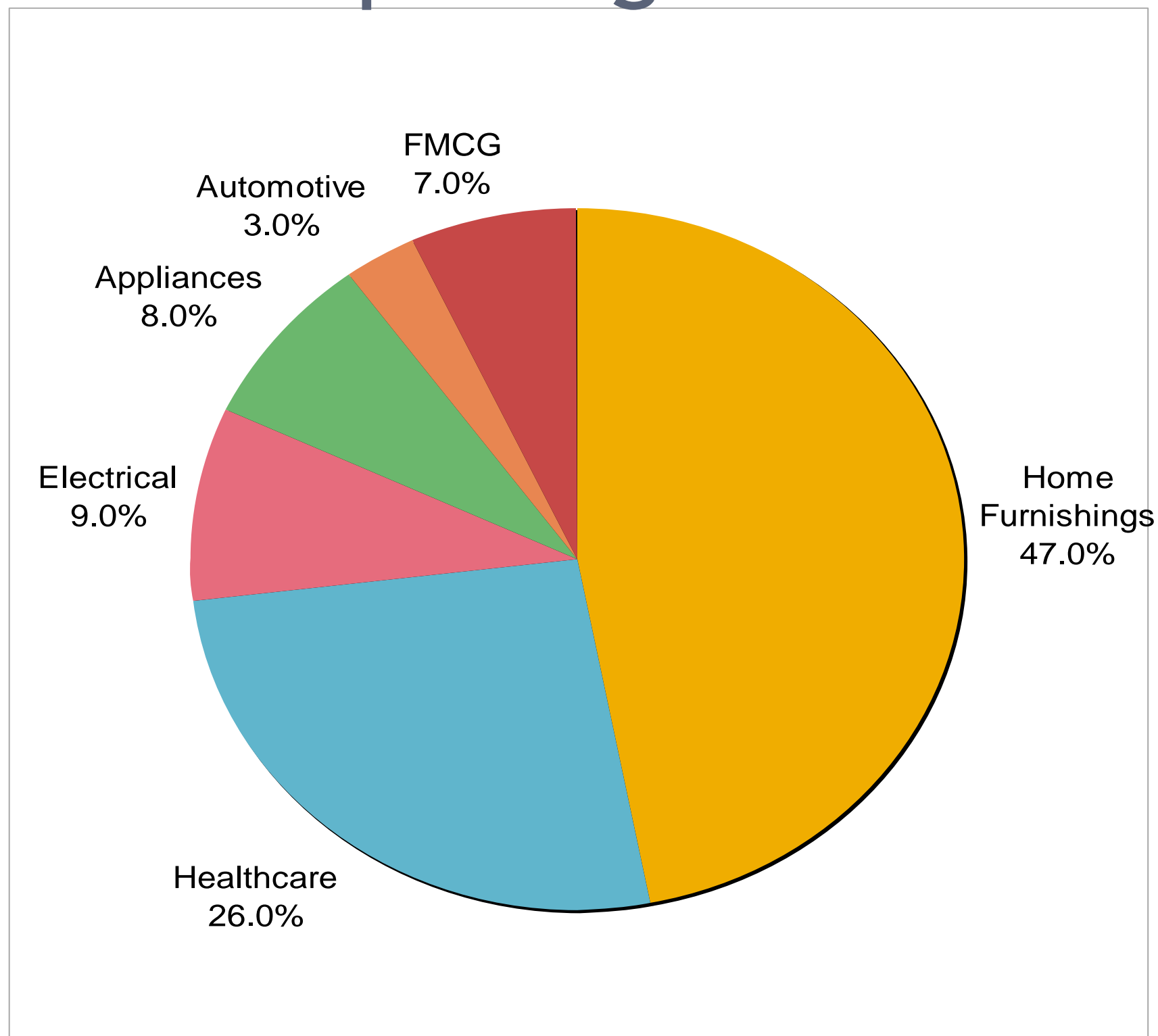


Market Segments

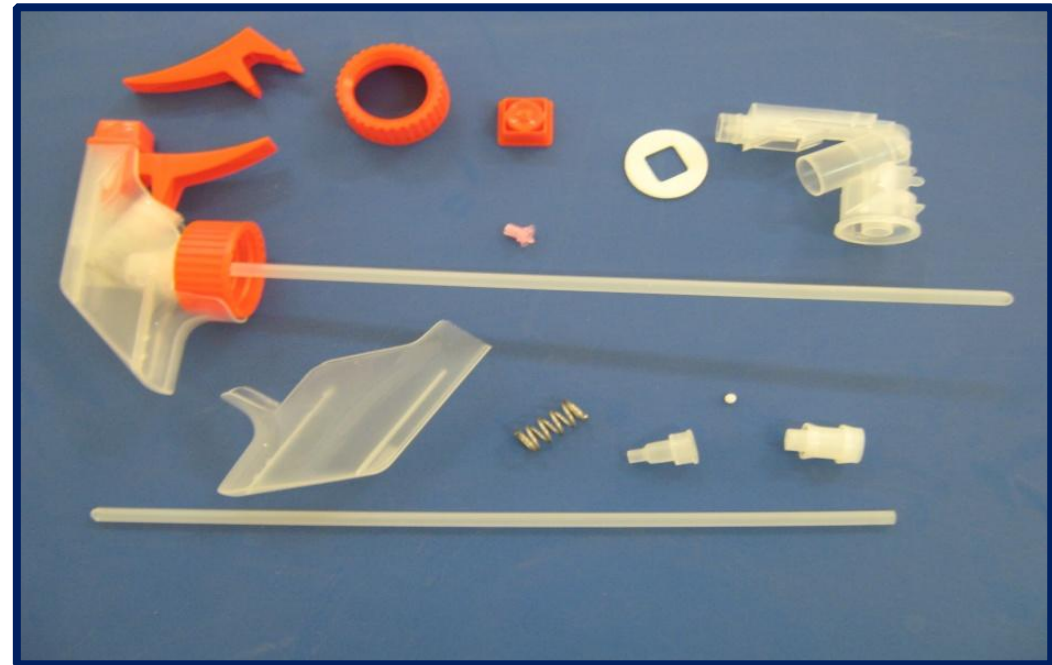
- Medical
 - Sanofi
 - Clearspec
 - MWV
 - Sun Pharma
 - Wockhardt
 - GE healthcare
 - Lupin
 - Dr. Reddys
 - Zydus Cadila
- Appliances
 - GE
 - Electrolux
 - MABE
- Switchgears
 - Siemens
 - Schneider
 - ABB
 - L&T
 - Lucy
- Consumer
 - Home Furnishings Major
 - Unilever
 - P&G
 - MWV-Calmar
- Automotive
 - GE Lighting
 - Honeywell
 - Amvian
 - FAG
 - Turbo Energy
- Engineering
 - Emerson
 - KPT
 - Phoenix Mecano
 - IHC
 - Photoquip



Sales Breakup - Segment



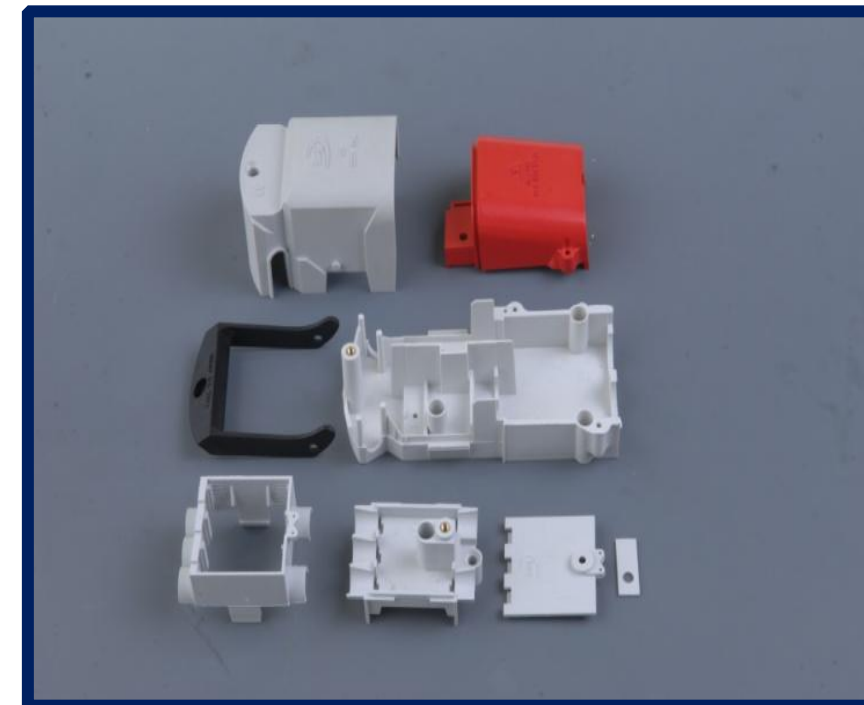
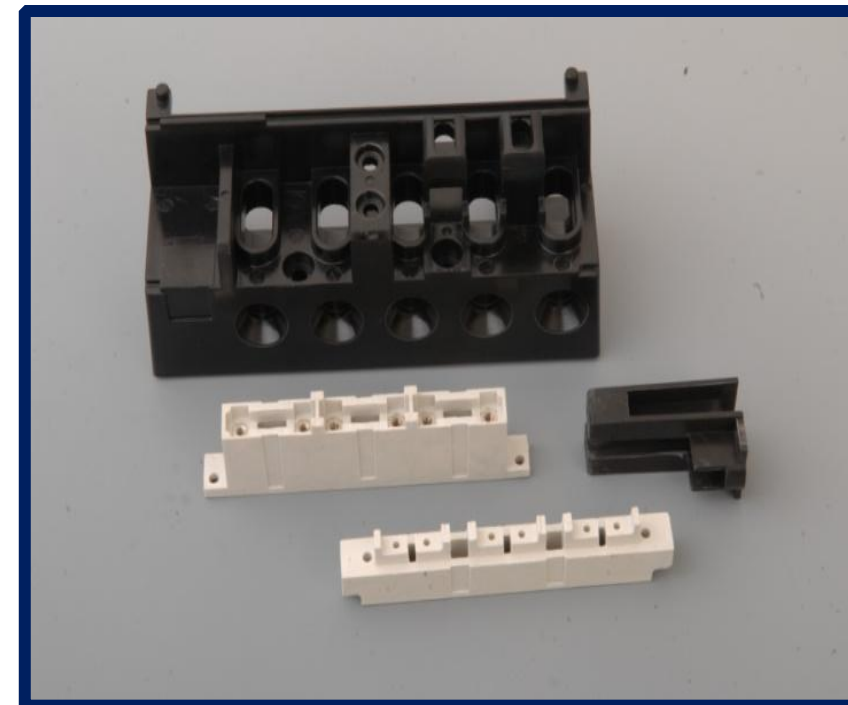
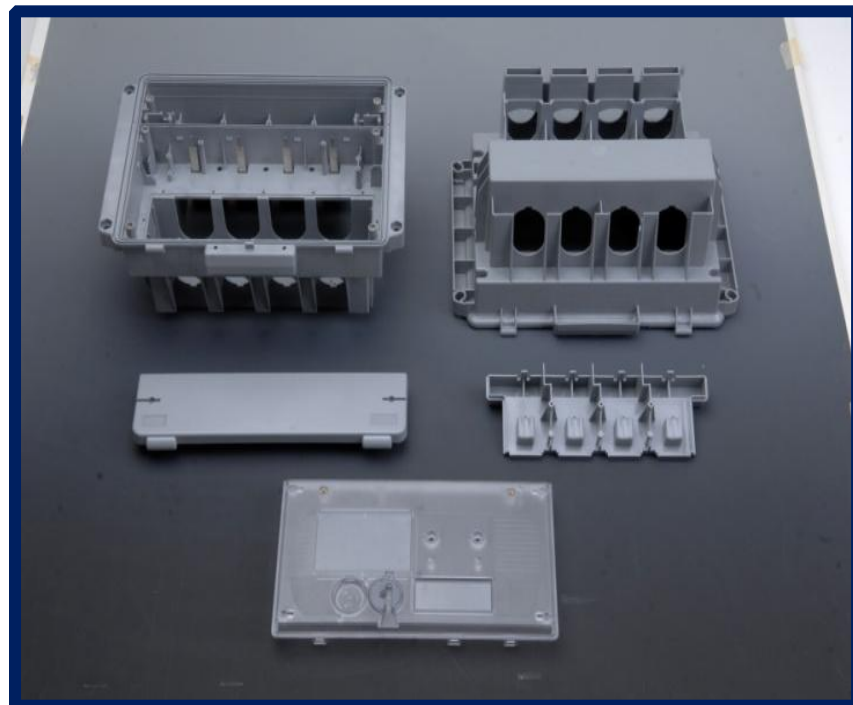
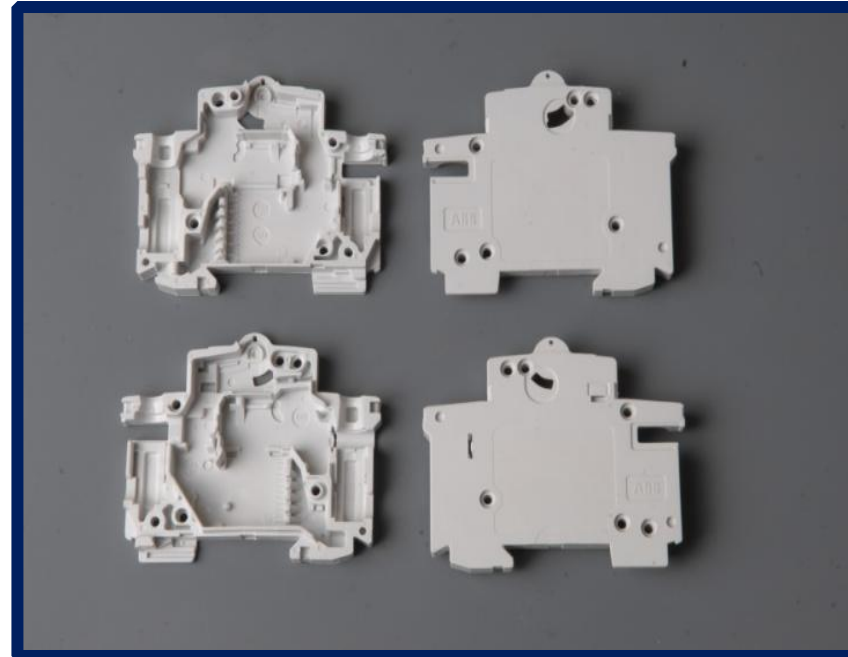
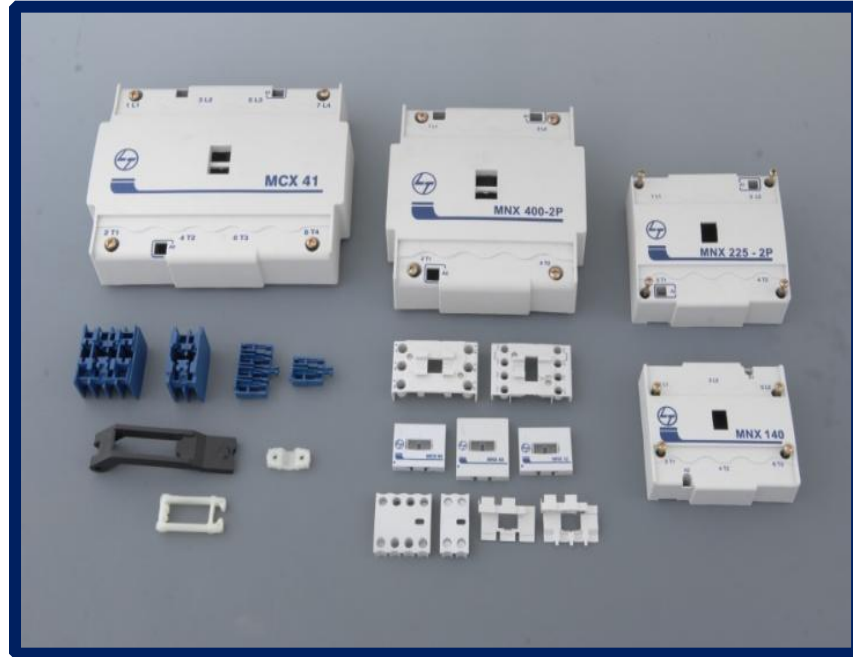
Consumer & Personal



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Switchgears



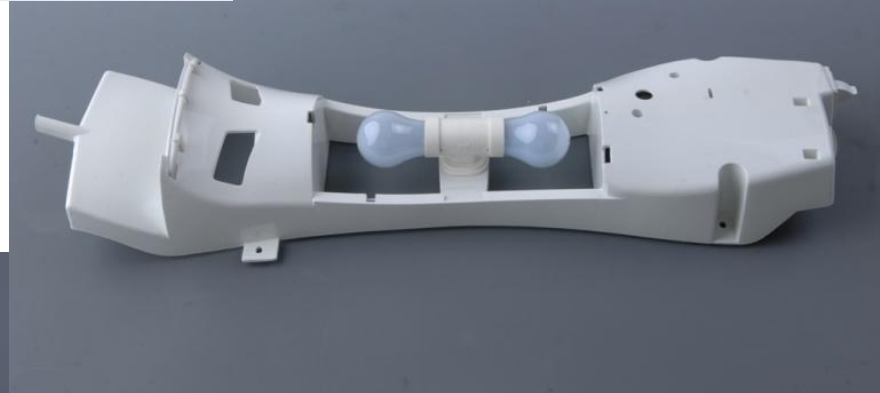
Appliances



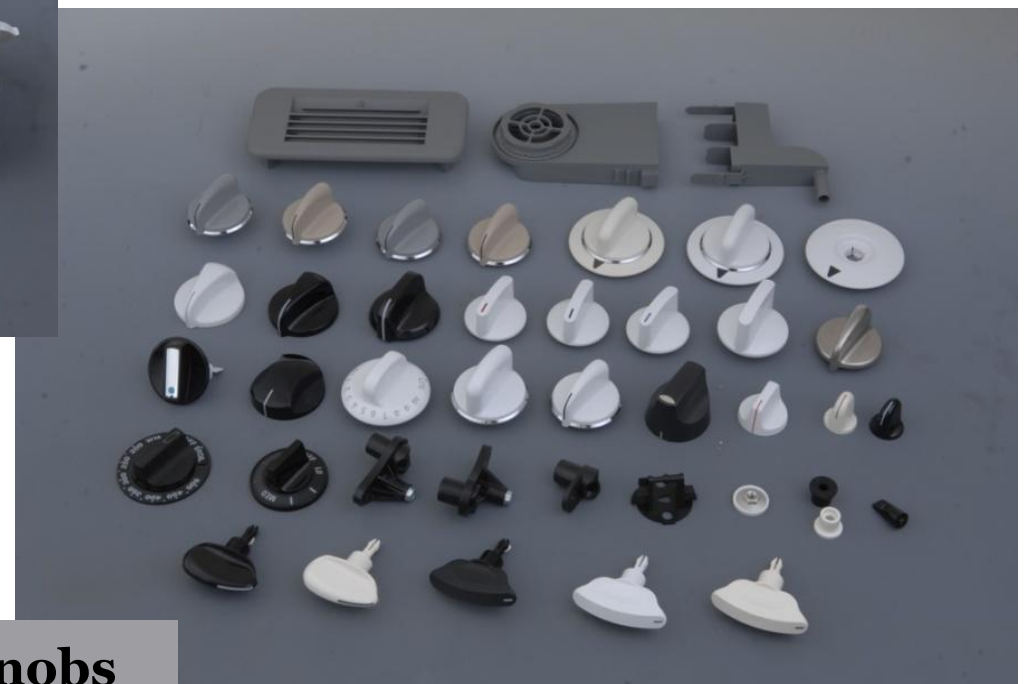
Power Tools



Lighting



**Refrigerator
Control
Panel**

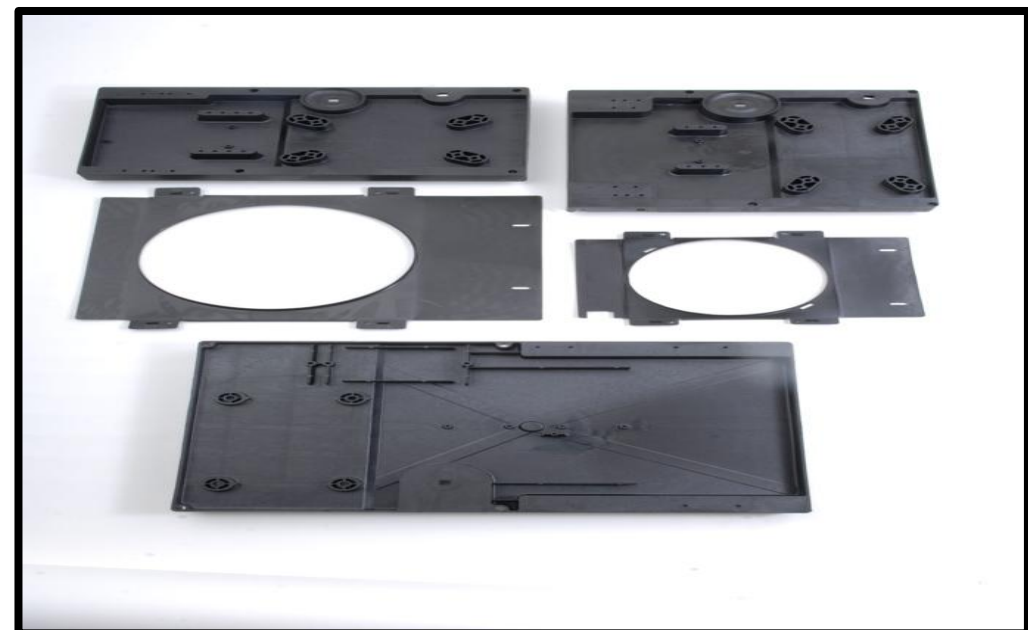
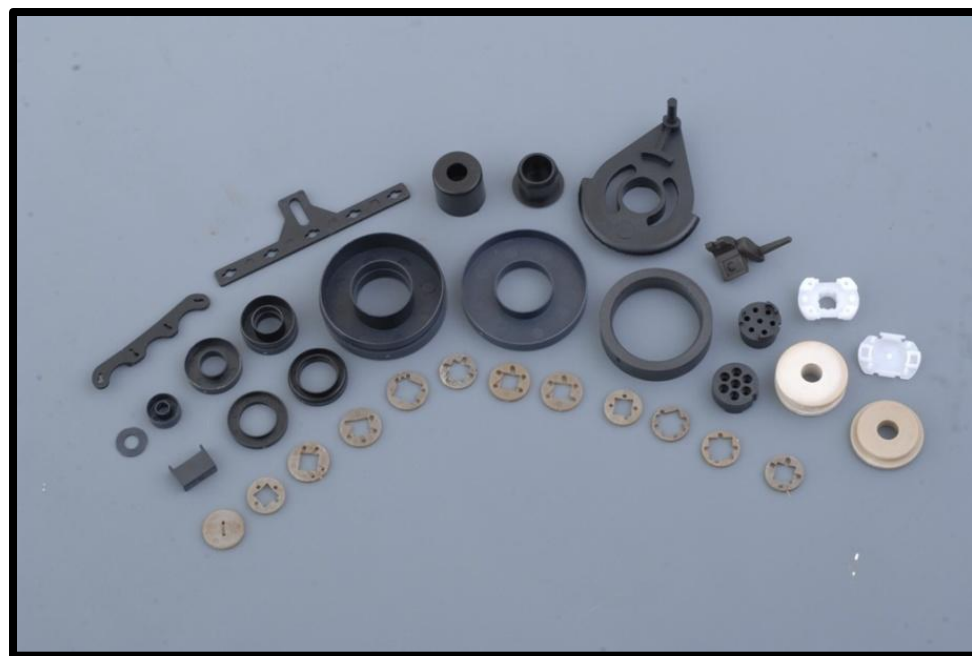
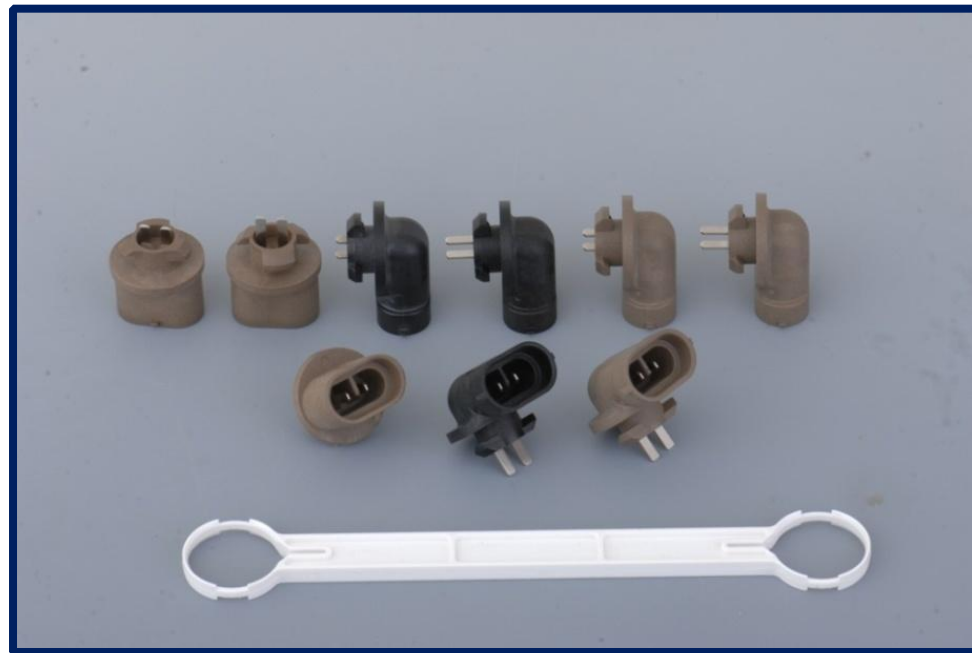


Knobs

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Automotive & Engineering



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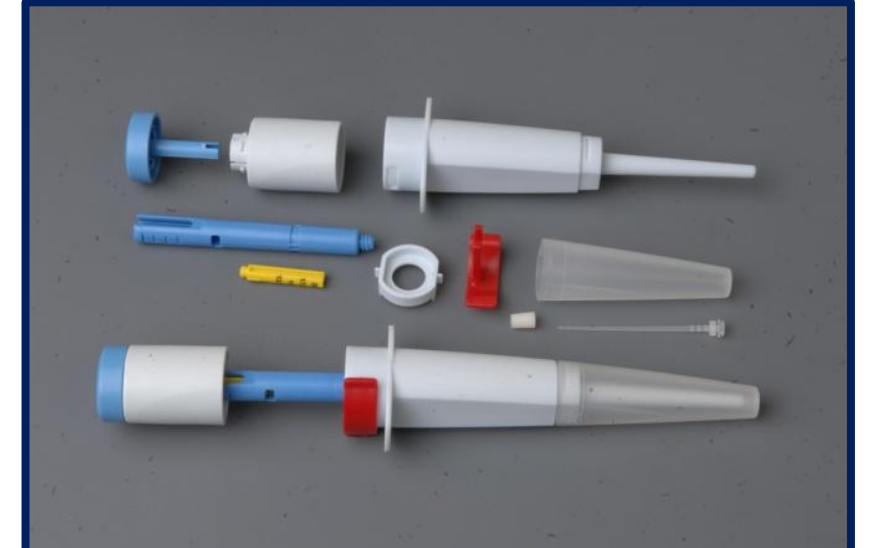
Medical



Clearspec



Shellpak



Medical Applicator



Wockhardt



Sanofi Aventis



Zydus Cadila

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Disclaimer

“The information contained herein has been prepared to assist prospective investors in making their own evaluation of the Company and does not purport to be all-inclusive or to contain all of the information a prospective or existing investor may desire.

This Information may include certain statements and estimates provided by the Company with respect to the projected future performance of the Company. Such statements, estimates and projections reflect various assumptions by management concerning possible anticipated results, which assumptions may or may not be correct.

Prospective investors will be expected to have conducted their own due diligence investigation regarding these and all other matters pertinent to investment in the Company.

This presentation may contain statements that are “forward looking statements.” The company’s actual future results may differ materially from those suggested by such statements, depending on various factors for which the company and its management does not take any responsibility. “



Contacts

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