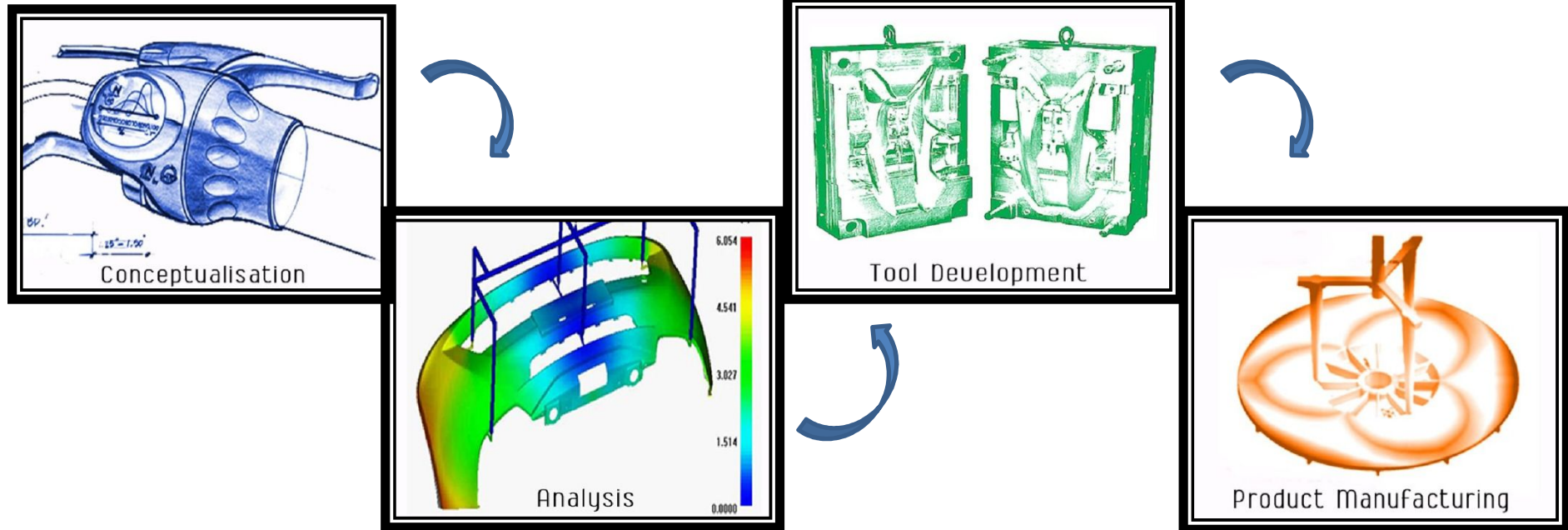


CREDENCE MANAGEMENT CORPORATION

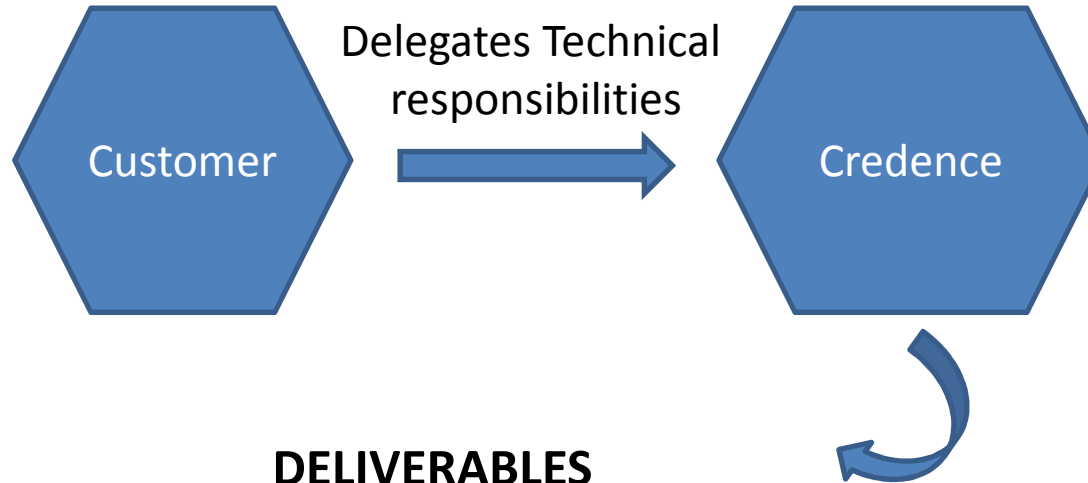
- FROM CONCEPTION TO COMPLETION



ENGINEERING & DEVELOPMENT SERVICES

PLASTICS MEDICAL DEVICES & HEALTHCARE PRODUCTS

CREDENCE MANAGEMENT CORPORATION



DELIVERABLES

- Desired Product quality at First time
- **Cost saving** by Increase in productivity
- Access to **Technical team** having experience of **whole development cycle** in Product development, Mold development, Molding
- **Consistent Quality Products**

SERVICES WE PROVIDE

- **Product Design** and Development
- Evaluate Product Design for Manufacturability (**DFM**)
- Selection of type of Mold, **Mold layout**
- **Review of Mold Design** (Type of Gate used, Gate position, Cooling system, Ejection technique and other variables)
- Mold Management (**Monitor Mold Manufacturing** cycle)
- **Scientific Injection Molding**
- IQ,OQ,PQ
- Extended **Technical Team**

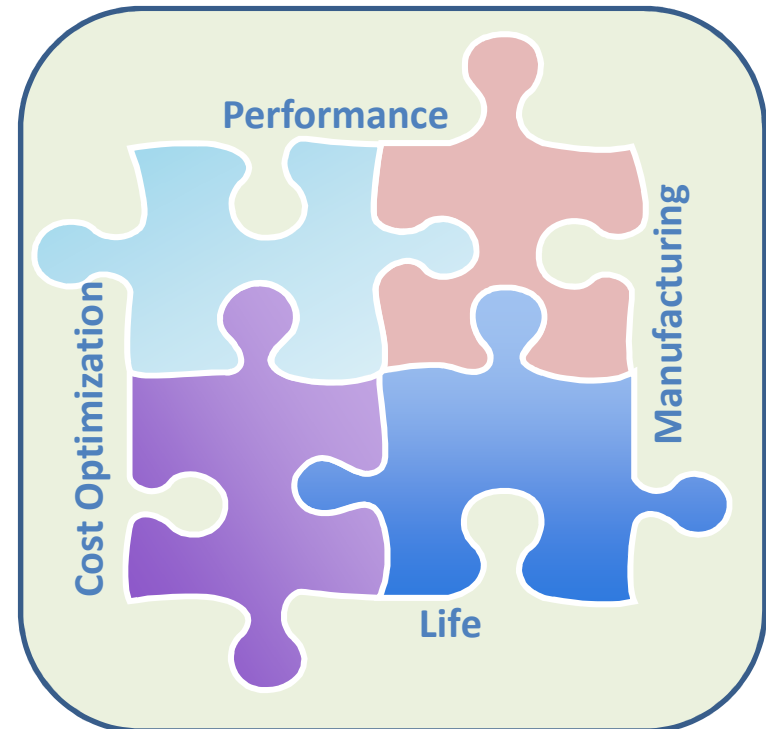
PRODUCT DESIGN AND DEVELOPMENT

We extend our Product development services to customer by following ways,

- Multiple Concept Creation
- Prototype Product (SLA's)
- Material Selection considering Product End-use-application and Manufacturing costs
- Creation of Engineering Drawings
- Tolerance Stack analysis
- We optimize the design to achieve
 - Full **functionality**,
 - **Cost** Optimization,
 - Ease of **Assembly**
 - Improved **Performance**
 - Increase **Aesthetics**
 - Intended **Product Life**

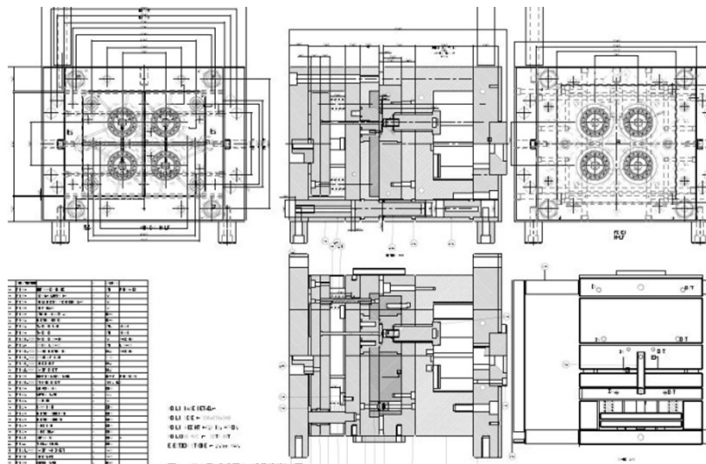
EVALUATE PRODUCT DESIGN FOR MANUFACTURABILITY

- We do conduct comprehensive design reviews with our customers and external design agencies to ensure optimized Design for Manufacturability
- Review of product design from tooling point of view for,
 - Gate location
 - Gate type,
 - Ejection
 - Parting line
 - Required draft
 - Possible texturing, etc.
- Review of product design from plastics point of view for wall thickness, ribs, radius, draft and texture.
- Review co-part fitment features for plastics components assembly



SELECTION OF MOLD, MOLD LAYOUT

- We understand that highly featured, tight tolerance parts, with aggressive lead times, require **top quality mould**—from the first production run through the life of product.
- Our technical staff with expertise in moulding, mould development, product development, and materials, enhances success of mould development program with valuable inputs at design stage.



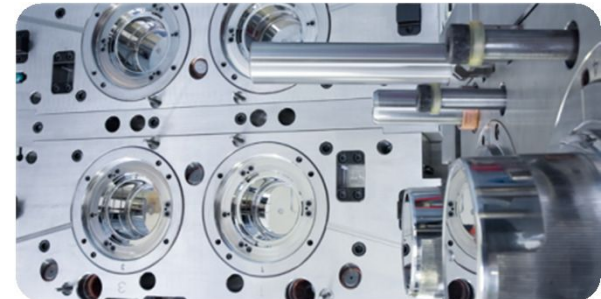
- We offer flexible options of outsourcing Moulds through our partnerships with quality tool shops both in the country and offshore. Our valued **tooling partners** have been building the most complex, precision molds since last 35 years.

MOLD DESIGN REVIEW

- Review of tool design from,
 - Consistent performance point of view for adherence to tool design standards
 - Use of standard components
 - Correct product design to tooling equations
 - Suggest for improved tool performance
- Review tool design for,
 - Correct gating
 - Ejection parting line construction
 - Cooling system
 - All details related to tool construction and function

SELECTION OF MOLD, MOLD LAYOUT

- The range of tooling we offer includes,
 - Proto Molds
 - Single and Multi cavity production Molds
 - Expandable and Interchangeable Molds
 - Stripper and Floating Cavity Plate Molds
 - Hot Runner System Molds, Conventional and Insulated Runner Molds
 - Shuttle and Insert Molds, Cartridge Molds, Unscrewing Molds
 - Mechanical and Hydraulic Core pull Molds
 - Stack Molds, Over molding Molds
 - Using different material like but not limited to,
 - Aluminum (proto molds)
 - Variety of Soft Steel and Pre-Hard Steel Materials
 - Variety of Hardened Tool Steels, Beryllium Inserts
 - Including finishing operations like,
 - Specialized Tool Coatings
 - Surface texturing, Mirror like Polishing



MOLD MANAGEMENT

- Mold Management comprises of Monitoring of overall mold manufacturing cycle,
 - Review of stage by stage activities of tool construction
 - Updating on progress
 - Review, suggest and approve manufacturing methods
 - Monitoring and control of all manufacturing stages
 - Tool trials and submission of first trial samples

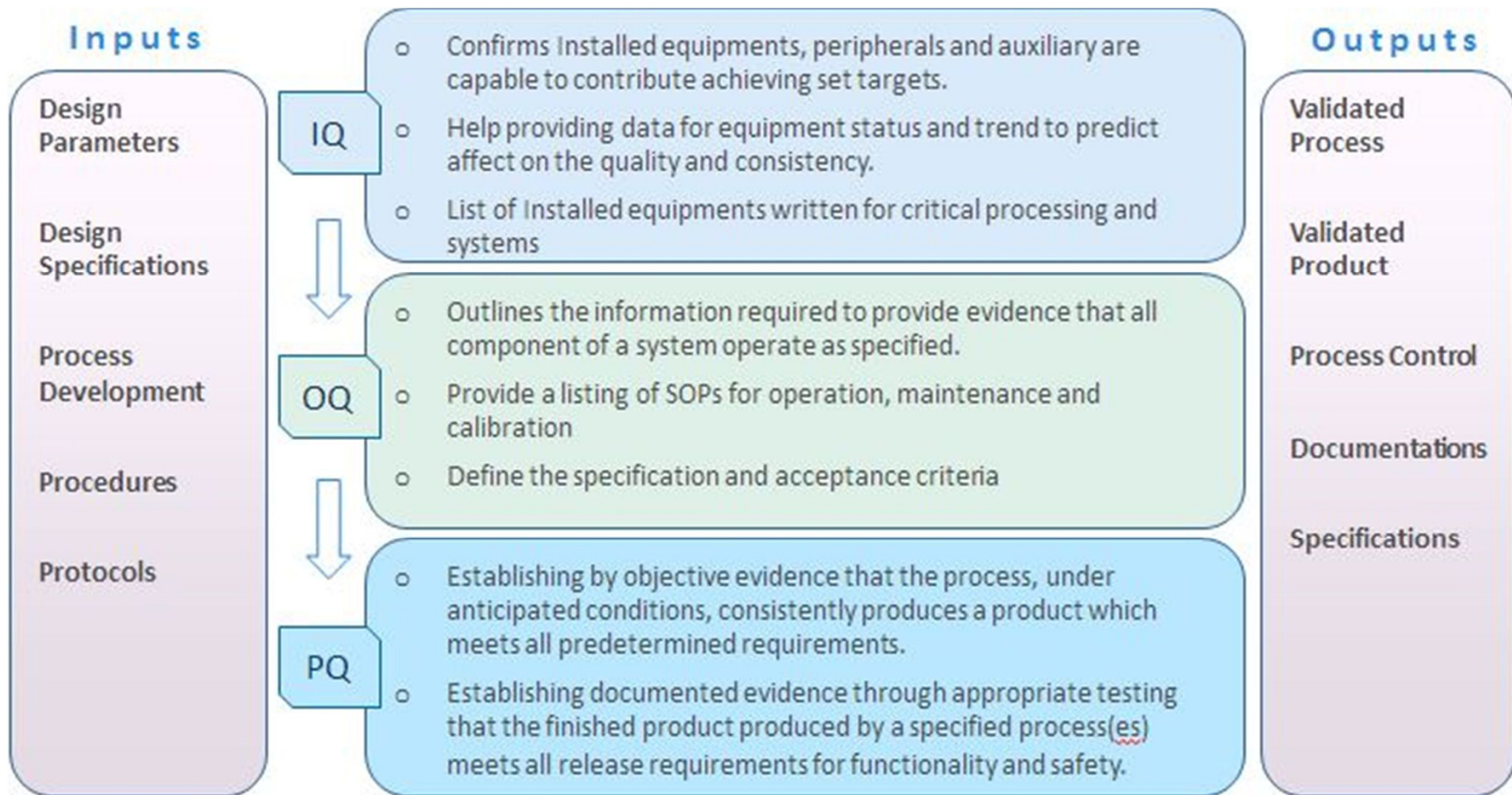
To be more productive we at Credence have developed work strategies that allow our engineers to get work done efficiently.

- Weekly team review telephonic meetings
- Assign & agree roles and responsibilities well in advance.
- Update and share the project network on a regular basis.
- Record the Mould testing learnings , to ensure all issues are addressed in time.
- Create and maintain a database of all the project relevant data.
- Circulate minutes and track action status on a weekly basis.
- Review mould changes and establish a standard approval procedure.
- Compile , maintain and monitor the Resin and MB inventory.
- Track part measurements and ensure the Cpk targets are met.

SCIENTIFIC INJECTION MOLDING

- We offer flexible options of outsourcing precision plastics components through our partnership programs with cGMP compliance moulding shops for medical products.
- A mould-processing window is set during qualification to assure the quality of parts before they are actually manufactured and supplied to the customer.
- We provide a complete qualification report with the mold manual outlining process and installation parameters. Main steps of process validation are,
 - Process stability test
 - Mould viscosity test
 - Balance of fill Analysis
 - Gate seal test
 - Multi cavity analysis
 - Process capability study (SPC)
 - Process centring

IQ, OQ, PQ



EXTENDED TECHNICAL TEAM

- Having team with experience in overall product development cycle, we enact as bridge between your existing Product Development Team, Mold Makers and converter to bridge technical gap.
- We become your extended technical team at demand, and provide equitable assistance for development of Plastics Products
- We act as your representative for the project to provide inputs, evaluate data and offer solutions for the product design, Mould Mfg. and Operational Process within given time frame with application of knowledge, skills, tools and advanced techniques.
- We do take responsibility of accomplishing continual and efficient output of the project by providing uninterrupted service throughout the product/project life cycle.

CONTACT US

Corporate Office:

311, Atlantis, Sarabhai Campus, Vadodara-390007 , Gujarat, India

You can reach us through,

Email: nshah@credencemgt.com

Phone: +91-265-2334880

Mobile: +91-8511115138

