

## Trend Setters in Automotive Systems



*Your safety and comfort are our concern*

## Milestones

- 1989: IFB Automotive Seating & Systems, Bangalore established
- 1989: launched SEAT RECLINER
- 1995: Launched SEAT SLIDER
- 1995: Launched WINDOW REGULATOR
- 1999: Launched BLOWER MOTOR
- 2000: Launched RADIATOR & CONDENSER MOTOR
- 2003: Launched DOOR & OTHER LATCHES
- 2003: R & D Centre, Bangalore established.
- 2004: Launched ANTI PINCH REGULATOR
- 2004: Launched DOOR MODULE
- 2005: Launched HIGH STRENGTH RECLINER & SLIDER



## Vision

To be the vehicle manufacturer's first choice for safety and comfort related products through innovation and quality excellence.

## Mission

Our mission is to create and deliver high quality and innovative products that will contribute to our customer's success and deliver value to our shareholders. We shall provide complete solutions through our system capabilities in design, analysis, development, testing and validation.

We are committed to environmental preservation and social responsibility.

## The company

IFB Automotive Pvt. Ltd. Is a pioneer in design and manufacture of seating systems, door systems and automotive motors. The company has built a reputation as a leading technology provider for safety critical and comfort related products in the automotive sector. To meet the growing needs of the auto industry, IFB Automotive has spread it's manufacturing base in different parts of India to ensure just in time supplies to all our customers.

The state of art Research and Development centre of IFB Automotive has the capability to develop new products responding to the diverse needs of its domestic and international customers.

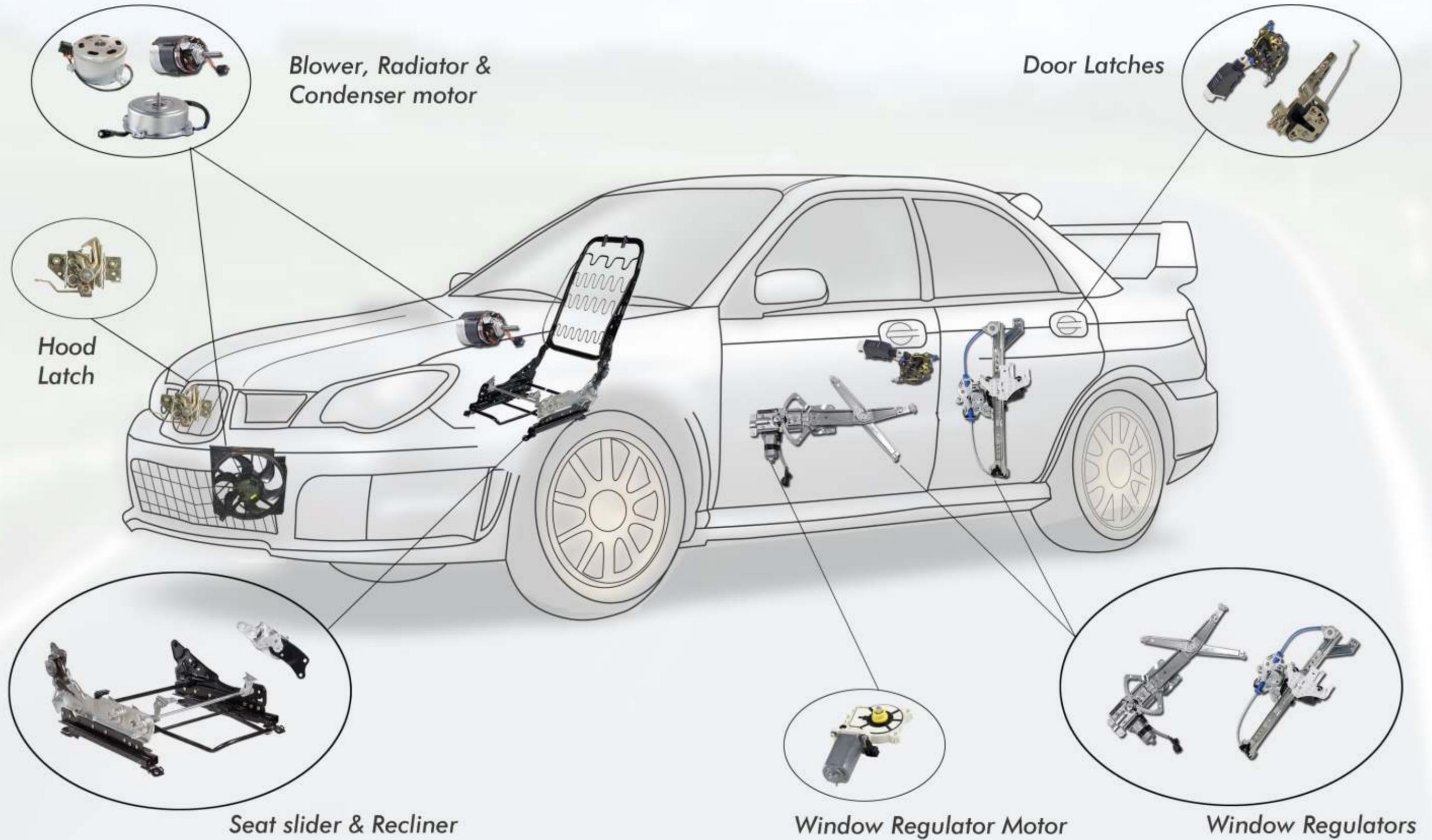
Operating in the backdrop of tough global competition, IFB Automotive strives to meet the highest quality demands of national and international regulatory bodies as well as stringent customer specific requirements.

## Quality Credentials:

- 1998: ISO 9000
- 2000: QS 9000
- 2003: ISO 14001
- 2003: TS 16949
- 2004: 100 PPM

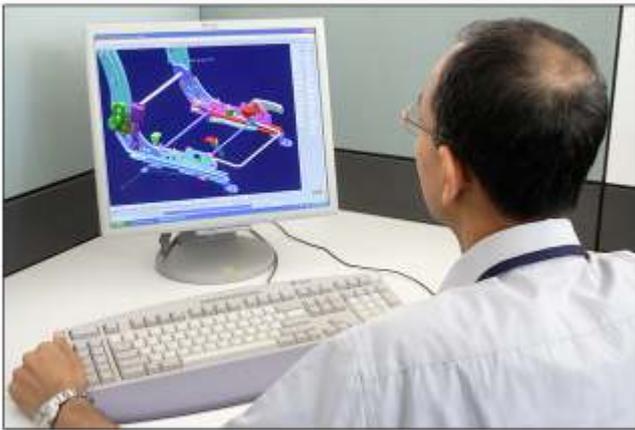


IFB products: at the core of safety and comfort





# Innovation...Our Focus



The engineers at the IFB Automotive's R & D Centre specialize in:

- ❖ Conceptualisation
- ❖ 3D modelling
- ❖ Finite Element Analysis (FEA)
- ❖ Kinematic analysis
- ❖ Crash analysis
- ❖ Geometric dimensions and tolerance (GD & T)
- ❖ Prototype making
- ❖ Tools design and manufacture
- ❖ Jigs and fixtures design and development.

The R & D Centre has the latest high-end workstations with high speed servers used for modeling and analysis. Design software such as Catia V4, Catia V5, UniGraphics, LS-DYNA, Solid Works, IronCAD and AutoCAD are used. Analysis is done on software such as ADAMS, I-DEAS, ABAQUS, LS-DYNA, HYPER MESH and ANSYS. The centre follows the process of Advanced Product Quality Planning (APQP) as per ISO/TS 16949.

Evolving technologies in the auto industry worldwide force the component manufacturers to offer high level of technical skills. The R & D Centre constantly strives to produce new technologies and new products, staying in close contact with developments in the auto industry. The R&D centre is accredited by the department of science & technology, Govt of India.

IFB Automotive's product development and design team consists of some of the most experienced and visionary professionals in the country to meet the rapidly growing demands from automobile manufacturers as well as end users for greater safety, reliability and higher cost-effectiveness. IFB Automotive's state of the art R & D centre in Bangalore is fully equipped to undertake turnkey assignments ranging from developing new designs to conducting testing and validation to meet the exacting demands of its global customers.





# Testing and Validation

The state of the art product validation and testing facilities include:

- ◆ Performance and endurance testing systems for seat sliders, seat recliners, door regulators, automotive motors and latches
- ◆ Door slam test rig for latches and window regulators
- ◆ Combined vibration and environmental chamber to test products at temperatures ranging between 65 and +180 degrees Celsius, along with vibrations measuring 1000 kgf in humidity range of 10 - 95%
- ◆ Seat anchorage test
- ◆ Crash test.



# Seating Systems

IFB Automotive design and manufacture multi functional seating systems which are configurable to meet the individual specifications of the auto manufacturers. The company has comprehensive expertise in mechanical, electrical and electronic components to produce the following:

- ◆ Seat recliners lever and rotary type
- ◆ Seat sliders
- ◆ Two-position adjusters
- ◆ Seat recliner cum latches
- ◆ Seat height adjuster
- ◆ Seat floor latches
- ◆ Rear seat back latches
- ◆ Lumbar supports
- ◆ Power recliners
- ◆ Power sliders.



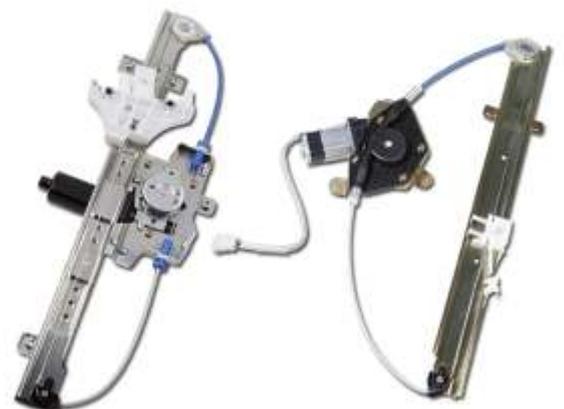
Seating systems division provides the complete solution in seating mechanisms. It has the capability to supply both manual and power seating mechanisms which are compatible in nature. The mechanism is designed to adjust basic functions such as angle of seat backrest and liner movements of an entire seat and adjustment in seat heights to supplement the comfort systems of a car. It enables the auto makers to offer their end-users a safe & comfort seating experience.

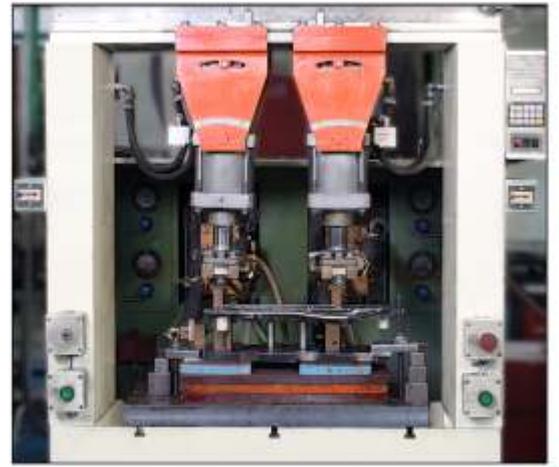


# Door Systems

Doors are the second most complex system in a vehicle because they must combine aesthetics with high safety, reliability and functionality by accommodating many intricate mechanisms in a small space.

IFB Automotive is the only automotive full service system supplier in India, with design and manufacturing capability for window regulators, latches and Door Modules. Over the decade, the company has acquired knowledge & skills in developing, unique, reliable & cost effective products for door systems. The company is proudly associated with all the major OEMs and has been supplying Window regulators, Door latches, Hood & trunk lid latches





Our state-of-art manufacturing facilities supplement our Research & Development efforts. All our assembly modules are equipped with mistake proofing and on line functional checks to deliver consistent quality products.

We have a dedicated manufacturing systems engineering team that develops:

- ◆ Assembly modules with appropriate level of automation
- ◆ Special purpose machines and on line testing Machines
- ◆ Jigs, Fixtures, tools etc with suitable mistake proofing.



# Automotive Motors

The Motor Division was started in 1999 to produce HVAC Blower motors & Condenser motors for Air conditioning, Engine Cooling Fan motors for various passenger car applications in India. At present, we manufacture three Lakhs motors annually with a planned capacity of 1 million motors.

The division has entered into a strategic license agreement with SiemensVDO to manufacture automotive motors including power window regulator motor in India.

Our product range includes:

- ◆HVAC Blower Motors 12V/24V
- ◆Power rating upto 360W
- ◆Condenser Motors 12V/24V
- ◆Power rating upto 220W
- ◆Engine Cooling Fan Motors 12V/24V
- ◆Power rating upto 400W
- ◆Power Window Motors 12V
- ◆Torque upto 16 Nm





Training session in progress

## Human Resources

IFB Automotive reckons its human resources as its most treasured asset and main resource of strength for the organization. The company believes that product success and customer trust can only be achieved through the enthusiastic and dedicated effort and innovative ideas given willingly by its people.

The company provides working environment where every employee can make most effective use of his knowledge with enthusiasm. To develop and improve the knowledge base and skills of its employees, IFB Automotive team members are sent for different training programs and professional courses.

## Our customers





## **IFB Automotive Pvt. Ltd.**

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