

Accelerating New Product Development

Industrias del Recambio India – Global leader in suspension products adopts NX for competitive advantage.

Industrias del Recambio India (IR India), a pioneering export group, established its world-class production facilities in India as a Spanish company in 2001. Exporting to 75 countries worldwide, IR India is the global leader in the manufacture of control arms and silent blocks for the light vehicles aftermarket. The ISO/TS 16949 quality certified company operates from Oragadam in Chennai, one of the most vibrant automotive hubs of South Asia in the state of Tamil Nadu.

Business challenges:

- Long product development cycle
- Costly and time-consuming tooling management
- Lack of latest 3D design technology

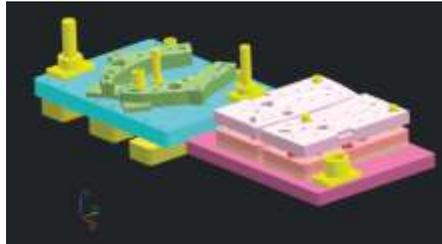
Keys to success

- Use latest 3D design software to accelerate production
- Improve processes with step-by-step tooling design automation
- Reduce new product development time

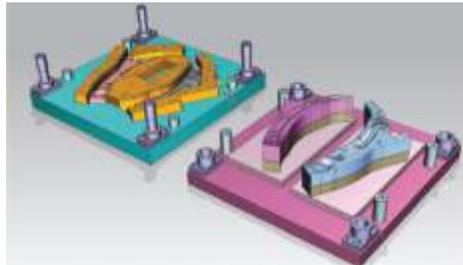
Results

- Faster product development, improved competitive advantage
- On-time delivery with 70 per cent time reduction
- Productivity increased by 60 per cent
- Cost savings of 85 per cent

IR India takes pride in evolving with the rapidly changing automotive industry. Part of the IR Group, which has rapidly gone global, IR India is also a leader in metal sheet manufacturing, supplying to original Automotive and transportation



equipment manufacturers (OEMs) and the global aftermarket. IR India offers a breadth of manufacturing and production services to the automotive industry, including design and reverse engineering, tool development, stamping, robot welding and assembly.



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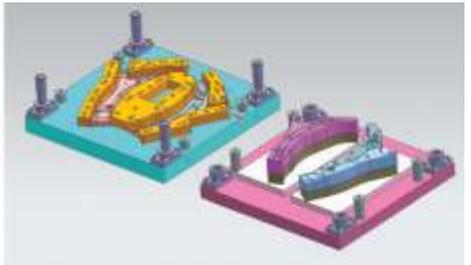
Making new products for the new market

IR India stands out from competition for its unswerving focus on introducing new products. The company launches more than 100 new products every year, and has created the largest catalog of its kind in the world. IR India has reached this position through innovation to stay ahead of emerging market requirements, and with a highly automated production management system. The result is meticulous attention to every single

product that rolls out, pre-tested in the company's own labs before shipment. The company also must maintain strict measures to benchmark itself against global standards for quality, processes and services.

Switch to new design platforms

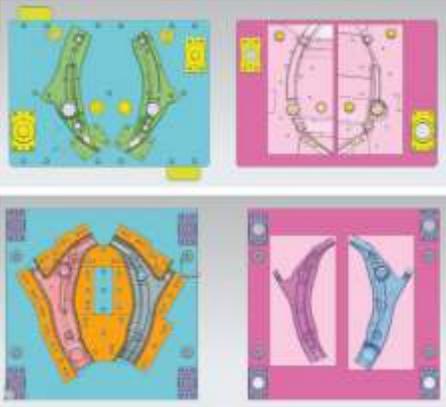
Introducing new products requires an intense focus on optimal development and production with efficient handling of production resources, cost optimisation and competitive pricing. With IR India producing over 2 million suspension arms



and 5 million silent blocks every year, it is driven by a constant evolution of all tooling and production processes, backed by new research and technology.

To continue maintaining its leadership position in the world, IR India needed an overhaul of its older design processes. The company identified two broad areas to upgrade: new product development and tooling management.

In the past, the company invested prolonged periods of time developing new products using a 2D computer-aided design (CAD) platform. First, a pattern or prototype of the model was created to check feasibility, followed by designing patterns in two dimensions. The product was then sent to manufacturing and



fabrication, followed by testing, correcting errors and repeating the process until finalisation. With this conventional method, it took two to three months to develop a suspension system.

IR India is a world leader in the manufacture of control arms for light vehicles and sheet metal manufacturing. The company maintains the largest catalog of innovative auto products of its kind in the world.

IR India upgraded its design platform by adopting NX™ software for product development. With helpful 2D-to-3D transitioning tools out-of-the box, NX proved effective from the start with the company using it for designing steering, suspension, stampings, tools and dies and new product development.

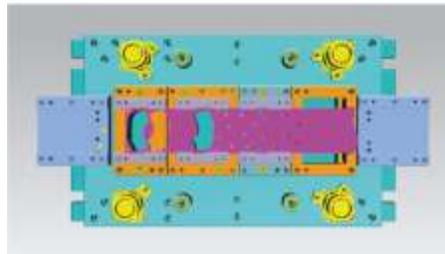
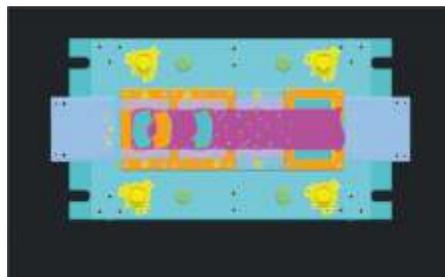
With its completely digital 3D suite and CAD sharing features, NX reduced the development time of suspension systems from two to three months to just seven days. All products can now be directly designed in 3D, allowing for a quick check on feasibility. Using NX, neutral CAD files can be readily shared with clients, and older 2D data retrieved and edited easily.

NX also provided a synchronous modelling method for editing models in the STEP and IGES formats.

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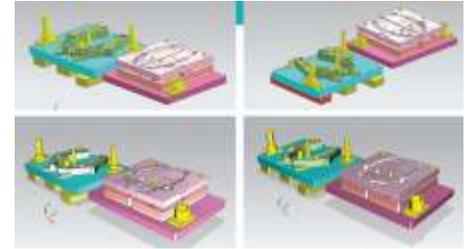
as NX, we can handle multi-CAD systems and meet all specific customer requirements without any delays,” says K Emmanuel Johnson, plant head, IR India. “NX has been instrumental in helping us maintain our global leadership position in new product development.”

With NX, the company can create more formed components with the one-step formability tool and achieve faster flat pattern development. NX makes design easier with its step-by-step tools, and



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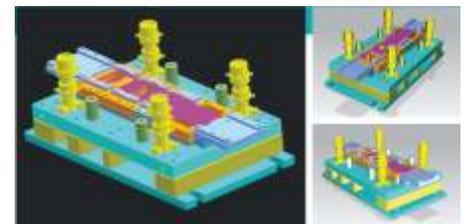
also automates the handling of standard parts. As a world benchmark in 3D design, NX also offers another great advantage: it allows the design team to share CAD files with clients to obtain their feedback and helps meet their expectations. The net result from the use of NX has been a drastic reduction in time invested in developing new products, cost savings of up to 85 per cent, capture of industry knowledge and on-time delivery of products.



“NX now forms the backbone of our design system,” says V Kathavarayan, NPD and tool room manager, IR India. “Some of its core benefits are ease of use, availability of standard parts data, ability to handle multi-CAD systems, and having a single solution that can handle all aspects of new product development.”

NX enabled IR India to switch from time-consuming and costly 2D design platforms to the cutting-edge world of 3D design and collaborative processes. With NX, the company can create more formed components and achieve flat pattern development quickly.

Customer’s primary business Industrias del Recambio India is a global leader in the supply of automotive components, focusing on production of control arms, sheet metal manufacturing, stamping parts, and tools and dies. The ISO/TS 16949 certified company operates from the automotive manufacturing hub of Oragadam in Chennai.



With NX, IR India has bolstered its leadership in innovation, world-class design and production processes, and achieved dramatic improvements in cycle time reduction **IA**

(Pune-based DesignTech Systems Ltd partnered with Siemens PLM Software as to implement the NX software platform at IR India)