



Godrej Tooling

Selecting 3DQuickPress as the tool design platform for the next decade

A World of Engineering Precision One Stop Shop To All Your Tooling Needs

Godrej Tooling, Plant 7

Godrej & Boyce Mfg. Co. Ltd., Tooling Division, Plant - 07, Pirojsha Nagar, Vikhroli, Mumbai, - 400079 - India

▶ Godrej Group in India

The Godrej Group was established in 1897 as Godrej & Boyce Mfg. Co. Ltd. by the Godrej brothers, Ardeshir and Pirojsha. The company manufactured locks with levers and later diversified into other products like personal care, appliances, air care, furniture, and construction. Godrej Group is one of the largest industrial conglomerates in India headquartered at Pirojshanagar in Vikhroli, Mumbai. The group is worth US\$ 1.875 billion in 2008.

▶ Leading tooling company in India

The Godrej Tooling is one of the largest and most sophisticated tool rooms in India. Established in 1935, the company has grown to one of the most organized and professionally managed tool room facilities capable of handling any challenge in design, manufacture, and testing of any kind of tool. Impressive client list from India and abroad contains Toyota, Honda, Maruti Suzuki, Mahindra & Mahindra, etc. Types of press tools made by Godrej includes lamination dies, transfer tools, fine blanking tools, progressive tools, automobile panel tools, and flexible punching tools.

In the recent decades, Godrej Tooling has been the pioneer in applying innovative tooling technologies to India like CNC machines, workstation CAD/CAM, parametric design technologies, etc.

▶ Searching for the best-in-class tool design solution

Within their sheet metal design group, they had been using 6 seats of Pro-E and 12 seats of AutoCAD. They planned to replace AutoCAD in a period of 2 years with new tool design software which would satisfy their needs for progressive die design as well as other varieties of tools. Godrej was expanding their business of large progressive dies for the export market in parallel to the expansion of new design facilities.



An email arrived at 3D QuickTools Ltd. on Feb. 3rd, 2005 from Godrej stated, "We are large Tool Room in the business of design & manufacturing of sheet metal stamping dies (all varieties). We are looking for a CAD solution for designing progressive / stage dies. Please send us the contact details of a representative in INDIA," After some discussion, 3DQuickPress was found to be the latest contender in their evaluation process. Godrej finished their benchmarking exercise with the progressive die solutions from vendors like TopSolid and VISI.

- ▶ Support of SolidWorks Asia Pacific and Mumbai SolidWorks reseller

With a very short time frame and no representative in India, 3D QuickTools Ltd. could not deliver on-site demonstration to Godrej. Through the help of SolidWorks Asia Pacific and Addonix, SolidWorks reseller in Mumbai, a complete customer profile was revealed to 3D QuickTools. To better serve Godrej in the tooling context, Godrej would negotiate the deal directly with 3D QuickTools with strong emphasis in training and support.

- ▶ Internet : Enabling technologies for 3D QuickTools

Being a subscriber of Webex since 2004, 3D QuickTools worked out a smooth web meeting with Godrej Tooling. In 2005, 3D QuickTools was among the early birds to use Webex webmeeting to conduct business discussion and technical demonstration over internet. After we fixed some minor setup issues of computer speakers, microphone, and internet phone, a formal webmeeting was conducted on March 2. We demonstrated the full functions of 3DQuickPress over a distance of 4,306 kilometer and a time difference of 3.5 hours. By the time, Godrej had installed a big bandwidth to cater for their international business which was exceptional in India by that time. Godrej was satisfied with the first demonstration. It gave the basic understanding to Godrej's tool designers the workflow of 3DQuickPress. Godrej started to conduct an X-ray on 3DQuickPress.

Sr.No.	Our Requirements
1	Heel Creation on Punch.
2	Feature Tree.
3	Saving of Model in Different Versions.
4	Press Tool Standard Libraries.
5	Standard Sub-Assembly Libraries.
6	Part Creation.
7	Hole Table.
8	Associativity
9	Redefining Features for Modification.
10	Working Environment Is Similar To.
11	Assembly & Details.
12	Depends Upon Layers.
13	Grouping of Components.
14	Exporting To Step Required.
15	Die In Open Condition.
16	Dimensioning Technique.
17	Generation of Bill OF Material.
18	Creating Templates.
19	Creating Start Part With All Required Std.
20	Plotting with Line Thickness.
21	Tool Path is Directly Generated.
22	Any Time Modification.
23	Skill Of Modeling.
24	When Punches Are Made, Are The Cavities in Different Plates Created With Required Clearances, In a Single Command.
25	Optimisation Of Strip.
26	Procedure for modifying Dimensions.
27	Does the References Remain the same.
28	Punch Creation.
29	Generation Strip Layout With Nos., Name & Load of Each Stage.
30	Calculation of Press Centre.
31	Procedure to Create a Cut in a Feature.
32	Clearances Added To holes.
33	Spring Calculation & Suggestions.

Godrej's First Technical Check List

Another more specific demo was requested by Godrej to answer a list of technical specifics. The second live demo was scheduled on April 4th. It took almost 5 hours which happened to be the longest live demo of 3D QuickTools. During the demo, further clarification was made on standard libraries, customization tools, Godrej specific standards, hole charts in drawing, specific drawing views, BOM customization, library driven punch clearances, and dimensioning practices in tooling industries. On the next day, the respond from Vinay J. Gandhi , General Manager & Head Engineering stated, "Our impression regarding the software is good." After another round of questions and answers in deeper level on the features of 3DQuickPress, Godrej determined to install 4 seats of 3DQuickPress. A visit was invited to their plant on June 29th to discuss on the implementation of 3DQuickPress, number of initial seats, and training. Contract was officially completed on July 28th and one week training was conducted in early September.

The contribution of internet was significant, especially in the areas of after-sales support. The technical support team in 3D QuickTools was able to understand the problems of Godrej regarding the usage of 3DQuickPress through email, ftp, and webmeeting. The support frequency was diminishing while Godrej's tooling

engineers became competence in using 3DQuickPress. Godrej planned to have the initial period of the 3DQuickPress deployment focused on customization and automation workflow to their tooling environment. Substantial custom libraries were initially built to path their future 3D efficiency.

- ▶ Within 2 years, Godrej expanded to 8 seats of 3DQuickPress

By mid of 2007, Godrej Tooling expanded their usage of 4 seats of 3DQuickPress to 8 seats. Being the largest Indian tooling company using many SolidWorks and 3DQuickPress seats, the export business of automotive parts was increased steadily. Apart from this production design environment of 3DQuickPress/SolidWorks, Godrej maintains various CAD systems like 2 seats of Catia, & 6 seats of Pro/E. This facilitates Godrej to take jobs in different CAD formats.

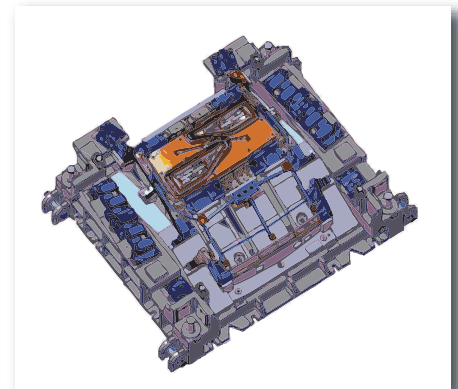
Today Godrej's 8 seats of 3DQuickPress and SolidWorks Professional are used in 2 shifts a day each with 16 tool designers. They work round-the-clock to catch the tight tooling schedule most manufacturers want. Godrej also invested the top-of-the-line workstations with lots of memory and best graphics for their tool designers. This is the reason why top world brands are delighted to be the customers of Godrej Tooling.

For more information.....

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 Godrej Tooling: www.godrej.com
 3D QuickTools Limited: www.3dquicktools.com



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