

<Company Profile>

Address	321 Shimada, Tatsuno-cho, Tatsuno-shi, Hyogo 679-4121
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URL	http://www.tatsuno-cork.co.jp/ (in Japanese only)
No. of employees	126
Capital	75 million yen
Established	November 5, 1958
Representative	Koji Kataoka, Representative Director

<Business Overview>

Manufacturing, process and sale of styrene foam, block molding, adoption of deaeration-type shape-retaining cushions for medical use. Development of operating tables for spine and spinal cord operations with head supports and devices for such operations.

<Technology>

Minimizes losses generated during the development process! Supporting the fabrication process of a molded product with a new die used for the first time

“e-Process” using styrene foam models for evaluation



Fig.1 3D NC machining



Cutting sample.1



Cutting sample.2

“A design defect in a mass-produced molded product was not detected until after the product had been formed”; “Evaluation results using a handmade model varied, so it took a long time until the specifications were determined”; “The physical property test values between a handmade model and a molded product vary widely, and therefore the product must be re-designed”; “It took a lot of time to adjust the volume production schedule due to correction of the mold”—these are examples of the variety of problems that occur frequently. Tatsuno Cork Kogyo Co., Ltd. provides the development supporting process “e-Process” to resolve these problems.

“e-Process” is a unique development supporting process performed before the fabrication of dies for mass production items. The process is as follows: first, fabricate a styrene foam model for evaluation based on an informal drawing. Using this model, into which molding expertise is incorporated, evaluate the shapes and physical properties, and fabricate the dies. In this way, design failure of dies will be detected earlier than ever before, and you will be able to cut wasteful costs and shorten the lead time for mold production. Moreover, since Tatsuno Cork Kogyo is equipped with the technology and facilities needed to form all expandable beads materials for users both inside and outside Japan, the company can respond to every need of styrene foam. The company achieved lower cost and improved productivity in a short period of time by using high numerical control cutting technology and ability based on 3D CAD data.

[Circumstances leading to the development of the product]

In launching the production of mass-produced molded products, Tatsuno Cork Kogyo Co., Ltd. launched its unique production system based on the following aspiration: to shorten the production lead time and reduce cost when starting fabrication of a mass-produced molded product with a new single cavity mold, and resolve issues to improve its customers’ production environment by creating a system from upstream of manufacturing. This was the process for which the company was most required to solve issues, because a significant loss in die fabrication time and cost may occur if design failure is discovered after die fabrication.

[Originality]

Tatsuno Cork Kogyo Co., Ltd. succeeded in reforming the drawing/design and styrene foam-cutting method using a 3D scanner, CAD and CAM. In this way, the company’s processing technique of complexly designed three-dimensional objects has improved, resulting in shortened production lead times. Moreover, the company meets various customer needs for styrene foam, since it is able to handle the entire process by itself, from the production of materials corresponding to every type of expandable beads materials to surface treatment after the molding process.

[Future developments]

By adopting a 3D scanner and a 3D measuring instrument that boast of overwhelmingly high accuracy, the scope of applications of the process has been spreading rapidly from small objects to large-sized molded objects. The company offers a staff dispatch service called a “Scanning Delivery Service.” With this service, a service staff member flexibly fabricates enlarged or reduced-sized items if an actual object is given. It is possible to fabricate monuments by providing urethane coating treatment that allows users to select the finishing hardness. Tatsuno Cork Kogyo will widen the potential uses of styrene foam.

<Topics>

Communicating product information “at a stroke” to people to whom we want to convey it!

The company has been exhibiting its product proactively in a variety of exhibitions.

Tatsuno Cork Kogyo participates in three exhibitions every year without fail, to proactively create opportunities to meet people of different industries from its own in order to exchange information. The company exhibits nursing care products at Barrier Free (INTEX Osaka) held in April, cushions at Interior Lifestyle Tokyo (Tokyo Big Sight) held in July, and industrial products at the International Industrial Fair Kobe (Kobe International Exhibition Hall) held in October, respectively. The company has constantly been considering entering into new markets and elaborating on new product ideas through communication with visitors and exhibitors to provide new added values.

Prevent stumbling by jiggling feet while doing something

The *Yura Yura* Board has gained great popularity!

With a brand-new idea to create something new that does not yet exist in this world—the *Yura Yura* Board is a product born based on such a concept. The product was inspired “knee jiggling,” a health control method that has been drawing attention in the medical field. This styrene foam product prevents people in their 60s or older from losing their motor function by jiggling their feet while remaining seated and doing something to strengthen their ankle joints and body trunk, so that they can walk on their own feet without developing any disease for as long as possible. The product became very popular as soon as it was introduced in newspapers, receiving orders for 3,000 units in one month. Tatsuno Cork Kogyo is working to expand sales of the product with a view to conducting direct marketing.

<History>

- 1958 Separates the styrene foam manufacturing section from Nisshin Cork Kogyo Co., Ltd. and establishes it as a new company
- 1969 Constructs a new plant at the site of the current headquarters
- 1979 Constructs a new factory for block molding
- 2002 Starts adoption of deaeration-type, shape-retaining cushions for medical use
- 2005 Develops operating tables for spine and spinal cord operations with head supports devices for such operations
A fastening device (e-CORE) is exhibited at a welfare equipment exhibition at Hyogo Prefectural General Rehabilitation Center.
Acquired License of Class III Medical Device Manufacturing and Sales (28B3X00039)
- 2007 The Cubeads CuCu Pillow is selected a nominee for the Good Design Hyogo award.
Develops cervical spine support medical pillows for preventing lumbar vertebra disease and post-operation

2008 Develops diagnostic imaging-assisting fastening devices for MRI

2017 Selected as a Driving Company for the Regional Future