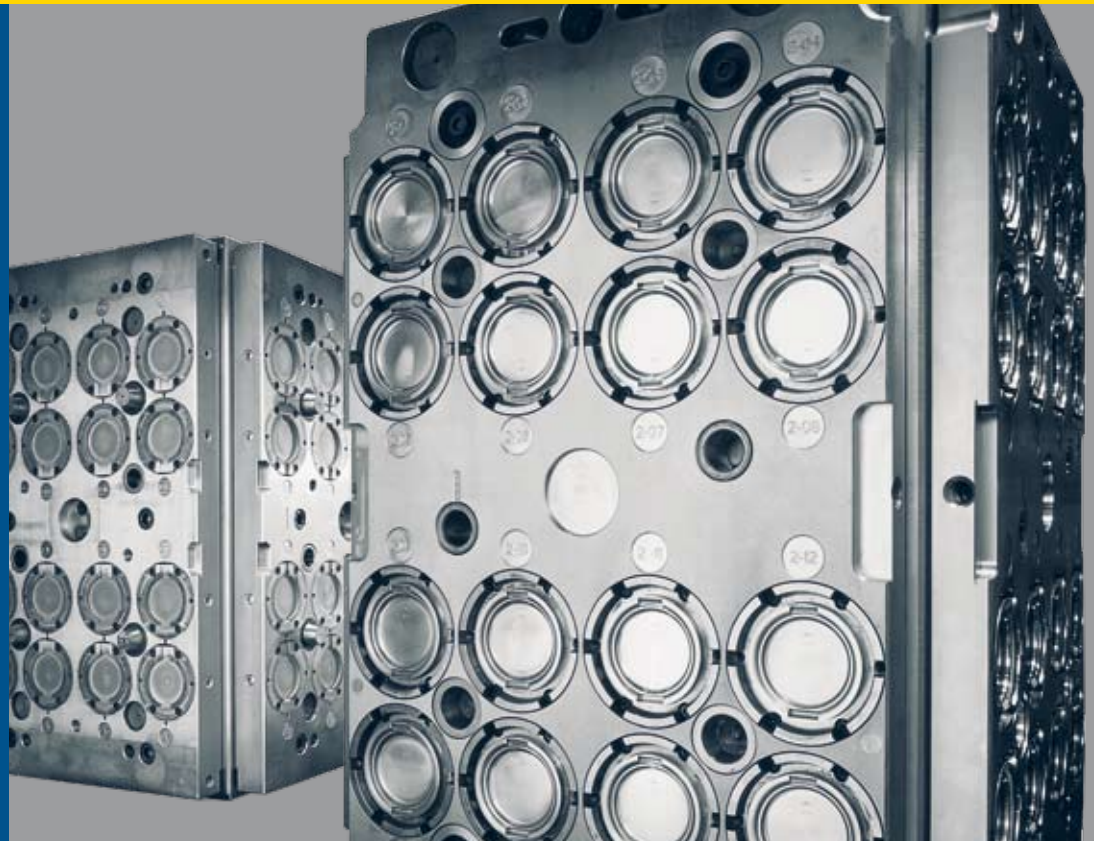
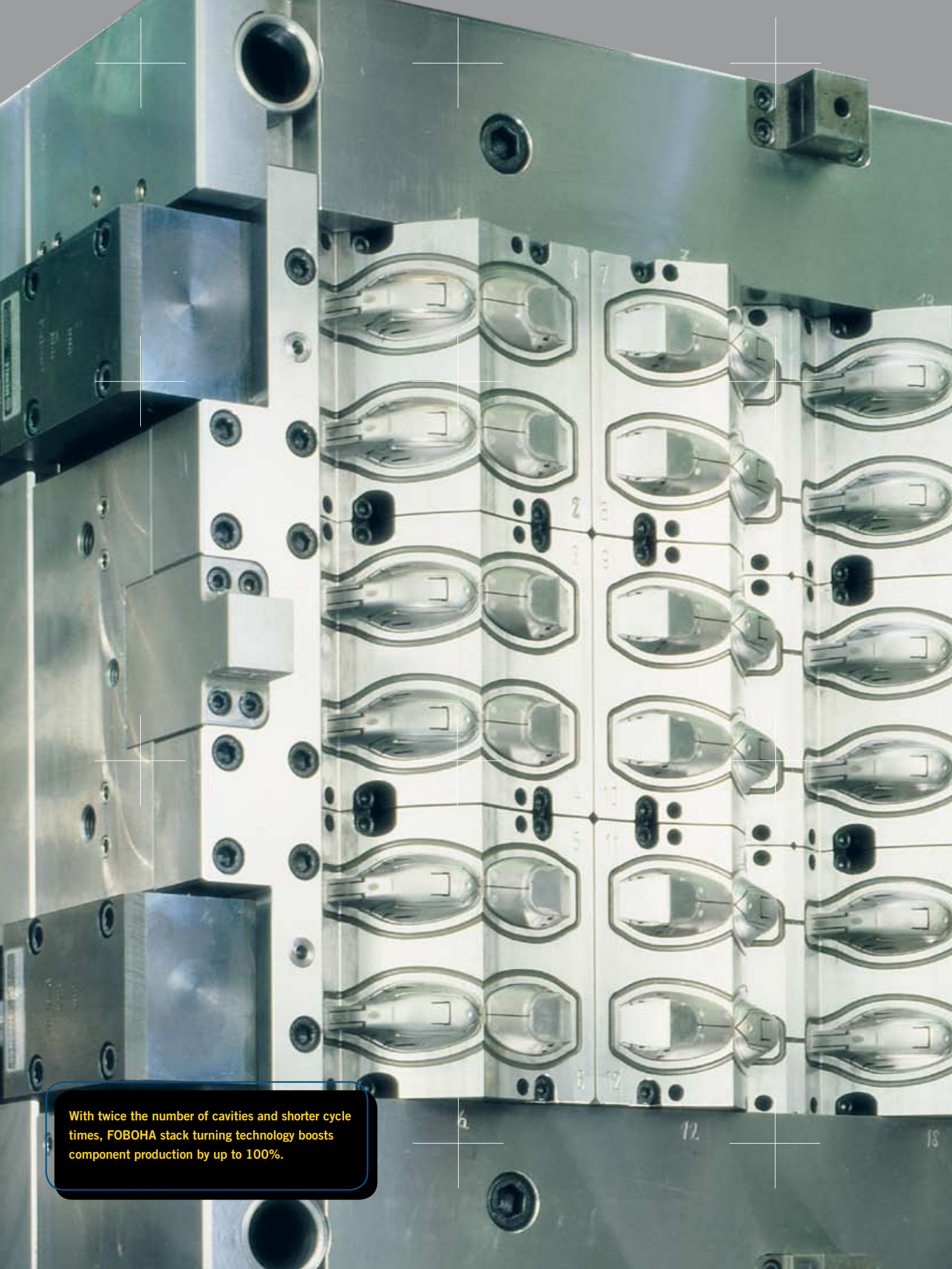


**STACK TURNING TECHNOLOGY –  
STATE OF THE ART**





With twice the number of cavities and shorter cycle times, FOBOHA stack turning technology boosts component production by up to 100%.

Over a period of some 30 years FOBOHA has developed, designed and built almost 2000 multi-component injection molds. Patented FOBOHA developments in stack turning technology have made us a global leader in the field of highly complex injection molding forms for the plastics industry.

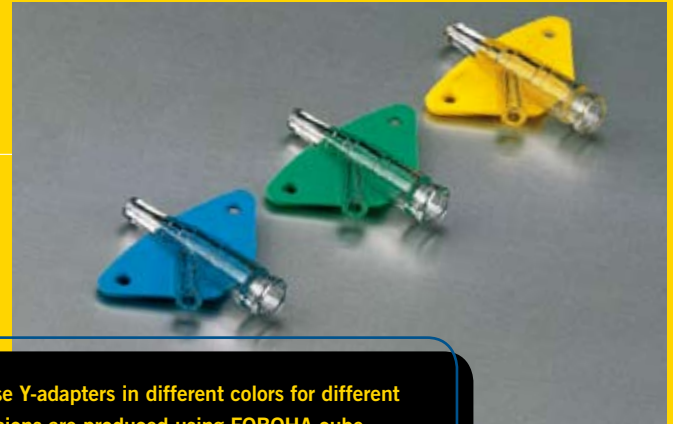
In contrast to conventional injection molding in multi-component technology, the injection molded parts produced using FOBOHA stack turning technology are processed at different levels within the turning system. Parts can therefore be molded at both levels in the same production stage, and the parts already finished ejected in the free station. The next rotation ( $2 \times 180^\circ$  or  $4 \times 90^\circ$ ) feeds the new pre-molding parts to the processing station that has been vacated.

The advantages of this technology are obvious:

- highly complex parts can be manufactured on a single machine
- the clamping force of the machine can be halved
- the number of cavities can be doubled
- production cycles are significantly shorter

#### Stack cube technology - higher production performance with significantly shorter cycle times

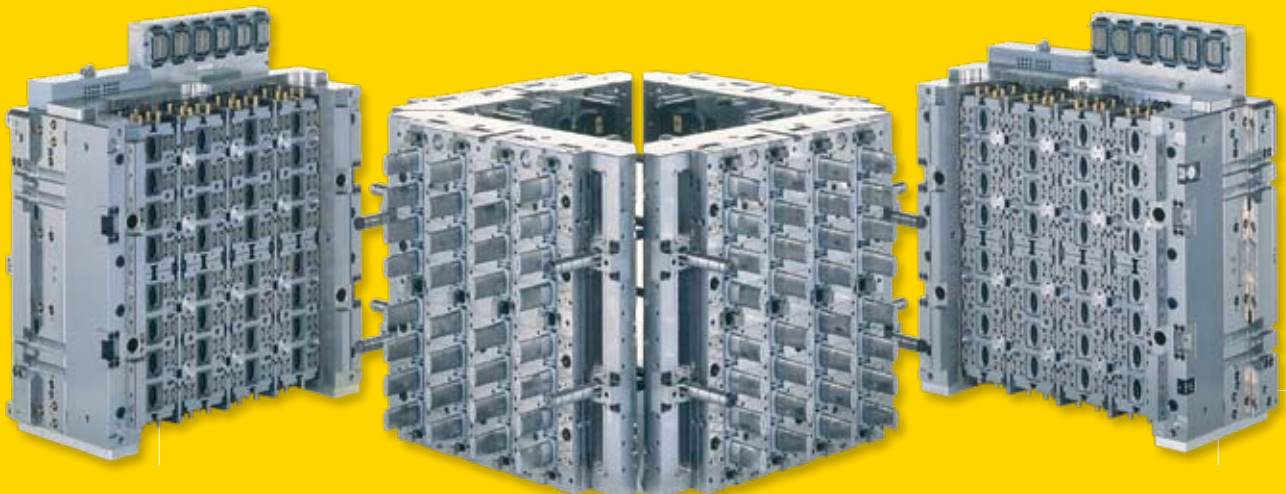
The next stage in stack turning technology is the use of a cube system. The mold core rotating in  $90^\circ$  steps enables several production steps to be performed simultaneously. The extreme flexibility of this process results in higher production performance with significantly shorter cycle times.



These Y-adapters in different colors for different infusions are produced using FOBOHA cube technology.

A special version of stack cube technology is In-Mold-Assembling (IMA). In this process the four stations of the cube are utilized in a specific sequence.

Two different parts are molded simultaneously in Station #1. Very high-precision assembly, both inside and outside the system, can be performed in Station #2. The parts are overmolded in Station #3, and removed or ejected at Station #4.

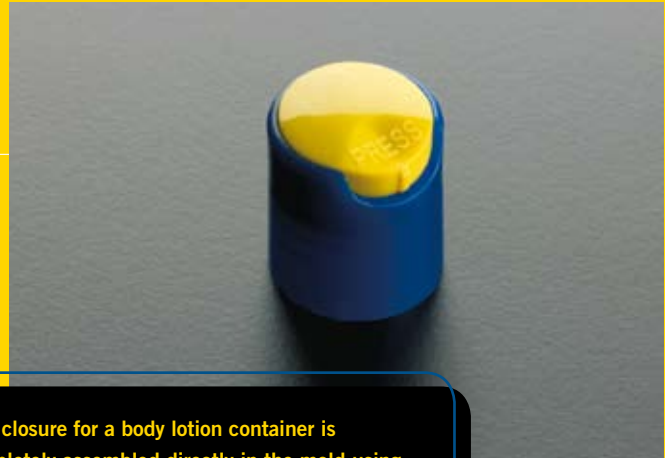


## The twin cube system – a revolution in moldmaking

The ingenious FOBOHA twin cube system features the synchronized combination of two counter-rotating cubes between the two mold halves. In principle, two separate molds are operating together in a single unit. Operations are performed simultaneously at three closing levels in 90° steps. A specially developed drive and coordination mechanism enables both cubes to be opened and closed in a very small space. As a further option, a second injection molding unit can be used with the closing unit. Flexible unit adapters on the product removal side increase the possible production options.

The FOBOHA twin cube system offers a level of efficiency in multi-component injection molding that is unequalled to date and makes a range of new production processes possible:

1. Simultaneous molding processes in the cavities at two closing levels
2. Reduced cycle times
3. Simultaneous options, such as inserting labels, assembling the various molded components, removing and ejecting the finished parts



This closure for a body lotion container is completely assembled directly in the mold using the FOBOHA twin cube.

