

# Did you know???



☐ Japan is known to be a country where most cosmetics/toiletries products in bottles also come in flexible pouches for re-fill.



□ Japanese converters are using Nishibe pouch making machines to produce re-fill pouches.

About 90% of re-fill pouches in Japan are made with Nishibe machines.



Typical shelf appearance in a supermarket



## Did you know???



☐ The current mechanical design of Nishibe pouch making machines is based on stringent process requirements to produce defect-free liquid re-fill pouches.



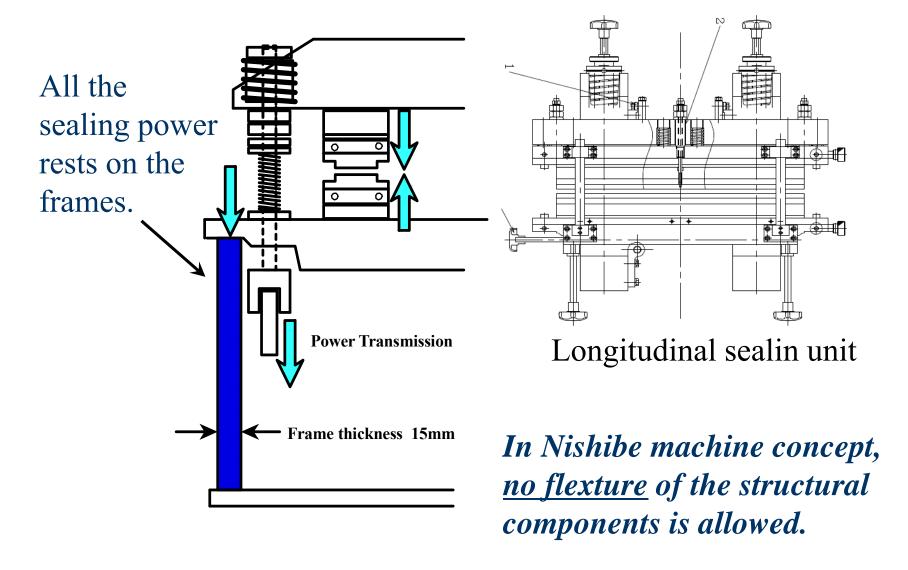
SA drive transmission mechanism for re-fill application



Thomson mechanism



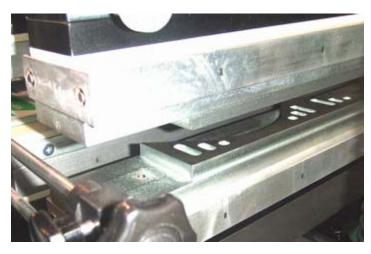






# penetration of energy





Stand-up pouch bottom area is the most critical of the seals especially for liquid re-fill application, for which the sealant layer is very thick.

#### Nishibe features;

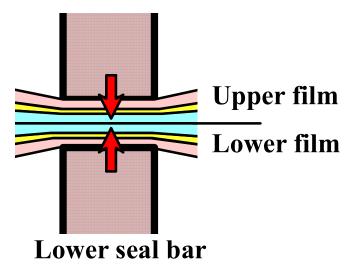
Sturdy design, cast-iron seal bars, high quality parts \

Retention of high sealing pressure and precise pressure distribution \$\display\$

Efficient engergy transmission ↓

Fast, Safe, and Stable production

#### Upper seal bar



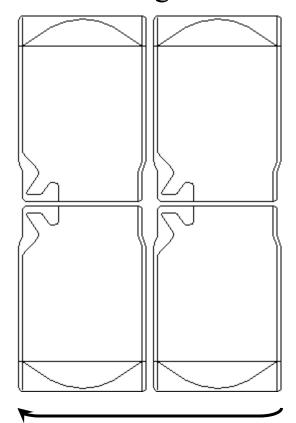


### Double step possibility



### **QUESTION**

Is it possible to increase the output without risking the sealing time?



4 pouches / cycle

#### **SOLUTION**

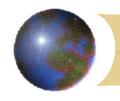
Why not consider **DOUBLE STEP**??

Legendary! 4 pouches each cycle

Speed 100 cycles / min.
= Output 400 ppm

(with Thomson, 80 cycles /min.)

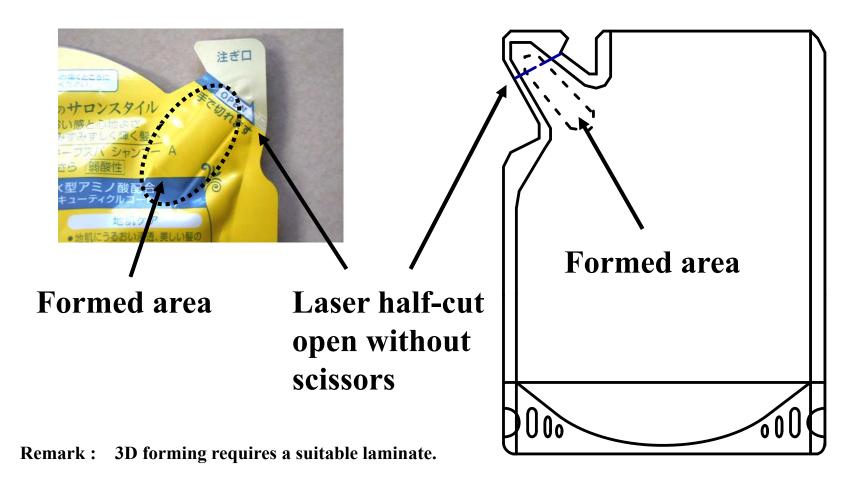
💥 double step can be applied only for relatively small pouches.

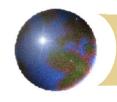


# 3D forming possibility



The nozzle area can be formed for better flow of liquid. (a value of consumer convenienc)





### How is that possible??



In a nut shell....

- ♦ Feature #1
  Sturdy structure → Sealing power retension
- Featrure #2
   High quality mechanical parts → long stable production at a high speed
- - minimise thermal bending effect  $\rightarrow$  homogenous heat and pressure distribution
  - → leak-free production