



# COMMERCIAL AND DOMESTIC APPLIANCE

ORANGE SQUEEZER



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### INDUSTRY

COMMERCIAL AND  
DOMESTIC APPLIANCE

### APPLICATION

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### PRODUCT

MEGASYNC™ SILVER3 5M

### SITUATION/APPLICATION

Juicers (also known as a juicing machines or juice extractors) are kitchen appliances used to extract juice from fruits and vegetables. They crush, grind, and/or squeeze juice out of the pulp making it easy for users to enjoy fresh, all-natural juices at home.

Juicers require very compact but powerful, relatively high torque drives as they process everything from soft to very hard and dense fruits and vegetables. They must operate smoothly at high speed with a minimum level of noise and vibration within a small dimensional space.

### THE PROBLEM

Because of the space constraints imposed by the very small available drive space, a manufacturer of home appliances contacted Megadyne Application Engineering with a request to re-design a drive for a new juicer that was in the development stage. Their tests with standard rubber 5M pitch synchronous belts from a competitor delivered unsatisfactory results. The client wanted to further minimize the drive space and reduce the noise generated by their high speed appliance.

## MEGADYNE SOLUTION:

## MEGASYNC™ SILVER3 5M

Developed to provide a more powerful alternative to standard synchronous 5M pitch belts, Megadyne MEGASYNC SILVER3 5M belt was supplied for testing. With greater power capability and the RPC (reinforced parabolic profile) tooth profile, the belt easily upgrade and improve existing drives.

Drive calculations performed by Megadyne application engineers confirmed that the belt, thanks to its improved chloroprene rubber compound and extra strong glass fiber tensile cords, allowed the use a narrower belt width.

### THE RESULT

- Reduced belt width
- Smaller driver dimensions required
- RPC tooth profile and narrower belt width reducing drive noise
- Narrower pulleys needed reducing overall drive weight and costs.



Contact our experts  
to find out more