## Textbook Applications, Innovative Solutions

Actuator & SmartMotor™

## **CNC SURFBOARD SHAPER**



**P**RECISION SHAPES NORTHWEST SEATTLE, WA

Taking an innovative design approach to the traditionally large, heavy and expensive surfboard shaping machines previously available, Precision Shapes Northwest, а U.S. surfboard design studio was

inspired to develop and build compact, rugged and low maintenance surfboard shaping machines that provide a faster returnoninvestment for its customers.

utilizing the By Close-up view of the HLD60-H3 HLD60-H3 linear actuator from the

OEM Dynamics division of Animatics, the unique harmonic principle and internal gear reduction of this linear motion system eliminated the need for a gearhead, making the concept of a compact shaping machine design a reality. This new design allows machine operators the ability to use less

shop space while providing greater throughput with quality surfboard shapes.

The JenCNCs<sup>™</sup> software was also utilized, combining both a CAD/CAM and motion control software package into a unique graphical user interface to control multiple SmartMotor™ servos on the linear motion

> systems in true 3-D coordinated motion. This allowed the machine builder to design, construct, and get the machine to market in record time. The machine

is marketed as

a surfboard shaper's personal assistant, aiding throughput for both small and medium board production. The full Animatics solution provides for a userfriendly machine that delivers an unrivaled advantage over the competition in terms of accuracy, ease of affordability. use. flexibility maintenance and

costs.

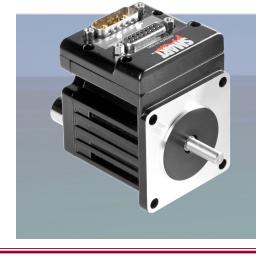
The fully integrated Animatics solutionalsoeliminatedadditional parts such as a separate motion controller. drive amplifier. and cables, thereby reducing

purchase costs, assembly time and shipping costs. Animations' solution and allowed for а



drastic reduction in overall sell price compared to the existing competition, helping achieve faster market penetration and higher profits for Precision Shapes Northwest.





## **Benefits Summary:**

- Reduced system costs through part elimination
- Faster time-to-market through shorter product development cycle
- Greater reliability and less maintenance
- Elimination of costly field service
- Greater machine simplicity and ease-of use
- More compact, lighter, yet rugged design
- Greater customer ROI