Nolume 1

The redesigned LM4 hit 2 million cycles!!

RWS

Jssue 1

RACO



On February 12, 2007 testing began on the redesigned LM4. After 8 months of uninterrupted motion, the redesigned LM4 hit 2 million cycles. At this point of the test we dismantled the LM4 and found that it was in almost perfect shape.

The objective of the redesign of the LM4 Drive Housing, was to separate the gearbox side load constraint from the belt tension requirements of the LM4 unit. By providing two outboard bearings in a machined housing, which will act as well as the mounting surface of the gearbox or motor, the requirements on the gearbox are now only driven by torque and speed and not the deflection on the shaft. In most cases a smaller and therefore more cost effective gearbox can be selected. The second most important design factor was to have the capability to assemble, tension the belt and test the LM4 unit in the controlled factory environment completely without waiting for a customers supplied gearbox, or rely on sometimes insufficient gearbox manufactures overhung load specifications and capabilities.

The new drive housing design allows for easy assembly of motors and gearboxes and is now a robust and proven design.

After testing was completed we put together this video for you to see the results yourself.