## Let's Build an Amplifier

At ATI, steel is ordered for the chassis and top cover. Once it is received we insert the PEM nuts into the chassis (in our opinion they allow the strongest chassis), send the metal out to be powder coated and then silk-screened.

The Aluminum face plate is also ordered, received and sent for silk-screening.

PCB's, which have already been designed by legendary amplifier designer Morris Kessler, are fabricated and shipped to our factory in Montebello, CA. Incidentally, the PCB's are plated with 24k gold to insure best possible adhesion of the soldered components.



With parts and chassis on hand, boards go to the insertion line where the components are inserted by hand.





These are power supply boards on the insertion line. Once all the parts are inserted, the boards go to the wave solder machine. We use a tinonly solder so all of our units are ROHS compliant.



After soldering, the boards are cleaned and inspected. Any rejects are sent to be re-worked.





More board inspections. While it is said "you cannot inspect quality into a unit", certainly failure to inspect allows errors to pass into later production stages where they are more costly and disruptive.



While the boards are underway, connectors are mounted directly to the chassis. This robust construction helps our legendary reliability.





AT3005's with rear panel connectors and Softstart modules installed.



Using our Audio
Precision equipment to
test amplifier modules.
Modules that pass all
tests are moved into the
production area. Units
that fail are sent to our
technicians for re-work.





Completed and tested modules waiting to be installed in a chassis.



Bi-filar transformer winding machine manufacturing a multi-channel toroidal transformer.





This transformer powers 4 amp channels. Note the space-age fiberglass dress on the leads and the plug-in power connectors.

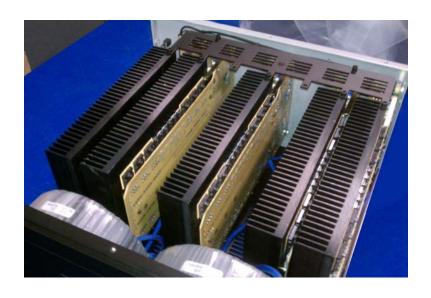


After the rear panel connectors and Softstart module are installed in the chassis, both transformers are bolted in. The next step is to install the completed and tested amplifier modules.





Once everything is loaded and secured, every amplifier is hooked up to an Audio Precision test station for final testing including safety, triggers, all inputs and outputs, power output and distortion. We even short each channel at full output to verify proper operation of the protection circuitry.



AT3005 fully tested, loaded and waiting for the top cover.
After the top cover is installed, the units are cleaned and boxed.





Completed amplifiers boxed and ready to ship.

