

Intec Machines 5 Axis "State of the Art" Downhill Ski molds

Intec has been working on the latest in downhill ski tooling. We have recently had the opportunity to make some aluminum ski molds for K2 Sports. The molds are highly complex with over 1 million lines of CNC code required to machine some exotic and subtle surfaces in the latest generation of designs. Without giving away any secrets, the new generation of skis are a parabolic design tapered at the waist and flare out at both ends. Some of the models contain a Pizeo "shock absorber" suspension built into the ski body to counteract the flexing of the tip in high vibration conditions without having to over stiffen the ski under normal high-speed use. We are eager to apply our 5 axis technology to other parts and tooling, if you have any composite or aluminum 5 axis work please call for more details and a quote.



Precise and Economical Fixturing Designed at Intec



Miscellaneous Test Fixtures



Large Notch Compression Test Fixture

Intec's diverse testing capabilities have required us to build a large variety of test fixturing. Purchasing standard test fixtures from traditional sources usually requires a substantial investment, and Intec has historically avoided paying the going rate by machining our own fixturing. With our expanded machining capabilities, we are offering these services to our clients at rates far below industry standard pricing. Intec has manufactured fixtures for standard tests including: Compression ASTM D695, D3410, SACMA 1 and 6, Iosipescu ASTM D5379, CAI and Impact NASA 1090, BSS 7260, Flexure ASTM D790, C393, Rail

Shear ASTM D4255, and numerous others. We have also designed and machined mechanical and hydraulic grip wedges and custom fixturing for unique testing requirements ranging from fastener pull through fatigue to compressive and tensile creep. Recently Intec designed and manufactured a fixture for the testing of large notch compression specimens up to 32" in length (shown bottom left). This fixture improved specimen turn-around time by nearly 800% over the more traditional fixture previously used. We will soon be posting a list of fixtures that we supply on our website.



“Hire Education” Co-op Students at Intec

Intec has been employing engineering co-op students from the University of British Columbia since the spring of '97. This has been beneficial for Intec as well as the students who are bright, enthusiastic, energetic, and interested in learning the technical challenges continually present in the engineering field. Following the UBC Co-op office slogan “Hire Education”, Intec has hired 3 students to date who have all been Metals and Materials Engineering majors fulfilling an 8 month work term requirement. Engineering students who sign up for the coop program take a minimum of 5 years to receive their degree as they are required to participate in three work terms of 4 months each, and one 8 month work term. While the students earn additional money to help fund their education, they find their work terms very educational in terms of “what an engineer really does”, this in turn is helpful for them in defining their career goals. Engineering students recognize the importance of the co-op experience as 50% of all first year engineering students at UBC apply for the Co-op program.



HAAS VF4 50” x 20” 4 Axis Machining Center

Intec Expands Machining Center

Intec has undergone a 5,000 sq. ft. expansion of its machining center including the addition of new precision CNC milling and 5 axis routing equipment. The new facility dedicates space for our rapid prototype group while supporting other long-term fabrication projects. The machining department produces composite and aluminum fabrication tooling, trims, drills and shaped composite parts for our fabrication department and provides “job shop” offload to other machine shops and manufacturers. Some unique technologies include the shaping of titanium core for high temperature sandwich structures, the routing of thin face sheet satellite structures, and high speed milling of Ti and Al air frame parts.

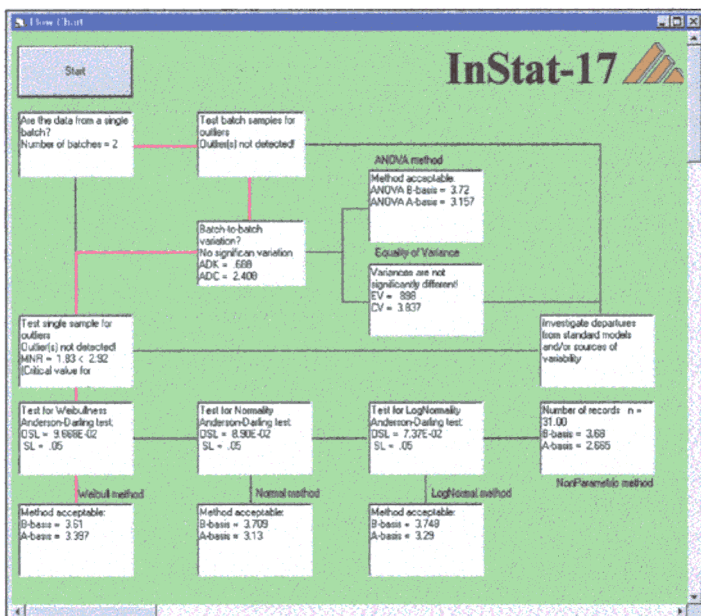
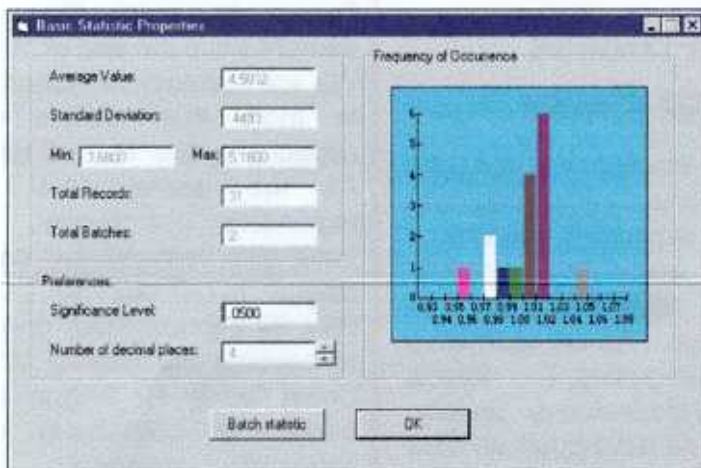


5 Axis Complex Trim
Detail

Intec Has New Website!

You can now check out Intec online! Find out general or detailed information on our engineering, fabrication and testing capabilities. We also have examples of major programs we've conducted and an employment opportunity section. Stay tuned for new pages, such as an Intec personnel page and answers to our most frequently asked questions. Come join us at:

www.in-tec.com



Intec Releases Beta Version of InStat-17

Intec has developed a windows based software tool to perform statistical data reduction according to the MIL-HDBK-17-1E protocol (Calculation of Statistically-Based Material Properties). The product has been developed around a relational database (Access® Jet engine) and can directly import data from ASCII, Excel® or Access® tables as well as through the clip board. A flow chart (bottom left) describes the statistical path taken for determination of both A and B basis allowables. Outliers can either be automatically or manually excluded. Reports in both tabular and chart forms are available. A time limited beta version will soon be available to clients through our web site (www.in-tec.com). A questionnaire is also included for comments and suggestions about upgrading the product. The final product is scheduled to ship in late August.