**REVIEW OF THE HP Z620 WORKSTATION DEMONSTRATION CARRIED OUT BY STANLEE OHIKHUARE REPRESENTING MIGHTY JOT STUDIOS.**

We carried out a RENDER test using 3D STUDIO MAX, first rendering a single frame at 720 x 576 pixels and the render time was about 26 seconds. Then we proceeded to increase the iterations on the Mesh’s Polygon – thereby increasing the polygonal count.

At an iteration of “2”, the render took approximately 35 seconds. At an Iteration of “4” it took approximately 50 seconds.

Then, we increased the pixel ration in the render settings to match the frame size and frame rate for HDTV (1920 x 1080) pixels – which is the standard for most High Definition Movies, still at an Iteration of “4” and the H.P Z620 Workstation churned out the render in about 2 minutes.

It is noteworthy that each time the iteration is increased, polygonal count increases adversely due to the subdivision that takes place hence, from an iteration of “1” to an iteration of “4” it is possible to have a polygonal count that jumps right from maybe 960 polygons to up to 5,800 polygons based on the LOD (level of details) on the 3d model.

Also crucial is the consideration that the render was of a fully textured 3d character in a fully textures 3d scene with bump, opacity, diffuse, specula, and reflective maps used. The average MAP size for each map being about 2000 x 2000 pixels.

There was no motion blur however, to further push the limits and in the render parameters, Global Illumination was turned on but Final gather was left unchecked.

Every other setting in the render dialogue was left at the medium range.

**T**he second test was that of actual work in progress within the 3d environment, where a mesh smooth of 1 iteration was placed on a character that was being animated (meaning that the character has been completely modeled, rigged, skinned and ready – with morph targets).

Playback of the animated character within max was almost in real-time and the manipulation of the bone structure – which in our tested character was 3D Studio Max’s Biped, happened almost in real-time with a slightly visible lag in fluidity.

Zooming and Panning was possible even at an iteration of 2 – when fine details needed to be cross checked for accuracy.

In all, the z620 showed a lot of promise with the possibility of further upgrade to match individual requirement of memory and storage based on unique project requirements of production houses and individuals in the Film / effects / concept and Architectural visualization industries.

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