#### TDVision Part 2. The "ImmersiON-VRelia GO"

TDVision, a pioneer in the development of 3D Virtual Reality technology, created a spinoff company, ImmersiON, to develop Virtual Reality Head Mounted Displays (HMD). ImmersiON partnered with a startup, Vrelia, that owns a great concept for turning a smartphone into a VR-HMD, and ImmersiON-VRelia was formed.

Due to the success of our previous collaboration on the TDVisor HMD, ImmersiON-VRelia engaged DiMonte Group to design and engineer a commercially viable version of this new device, the ImmersiON-VRelia GO.





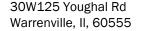
### The challenge.

With a tight deadline of 6 weeks to design, engineer, and deliver 25+ Pre-Production demonstration models for NASA's Ames Research Center 75th Anniversary Open House, DiMonte Group built upon knowledge from the TDVisor program to create an ergonomic HMD with precision mechanisms for optical adjustment.

We delivered a manufacturing-ready product, compatible with 7 of the leading smart phones on the market, on time and on budget.



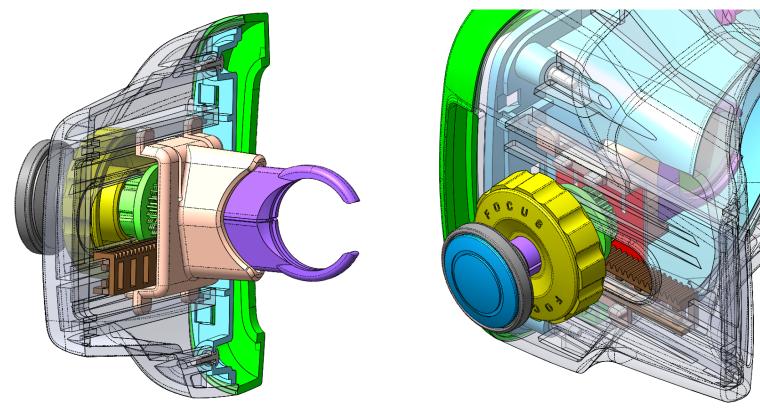




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## Mechanism design. Common components for left and right eye mechanisms eliminate redundant tooling costs.



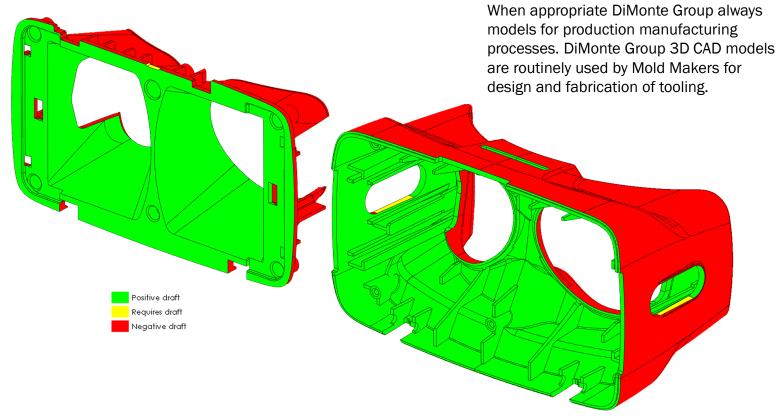


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## Production Tool Ready CAD for Manufacturing.



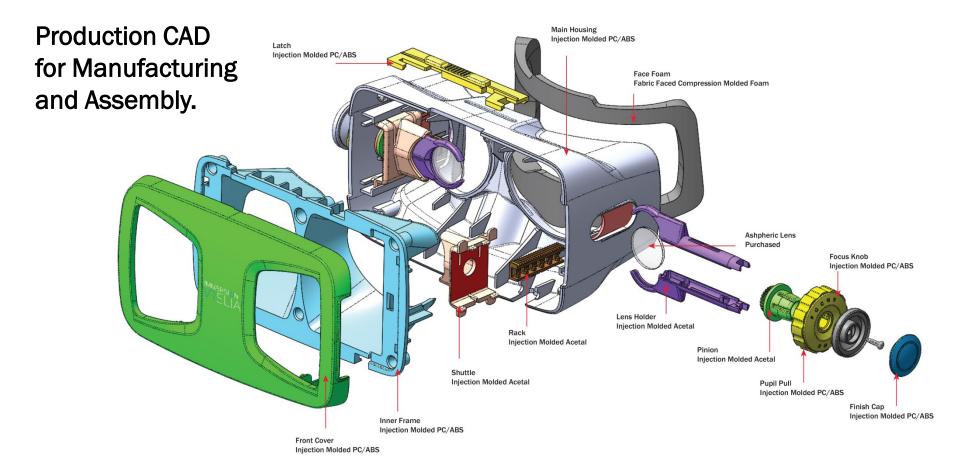


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#### Finite Element Analysis.

URES (mm) 1.929e+000 To keep the user's expensive smartphone safe, we applied our knowledge and analysis tools 1.768e+000 to insure the latch would not open if the HMD was dropped. 1.607e+000 1.446e+000 1.286e+000 1.125e+000 9.643e-001 8.036e-001 6.428e-001 4.821e-001 3.214e-001 1.607e-001 1.000e-030







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# Short run production.

Soft-tooled components for shows and sales samples















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## Realistic Rendering.









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## NASA AMES Research Center 75<sup>th</sup> Anniversary Open House: Oct.17, 2014. <u>Tigerdirect.com Tiger Tech Bash. November 7, 2104</u>





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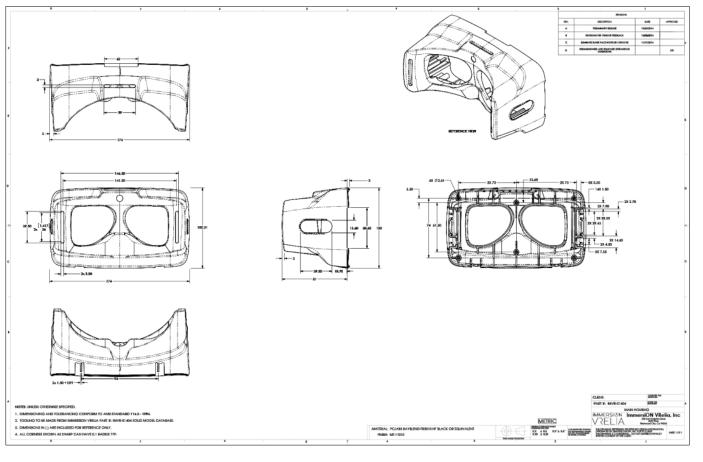
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# Production documentation.

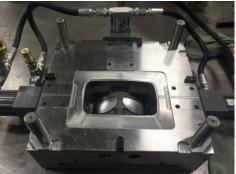
Necessary to communicate "Critical To Function" dimensions and other information for 1st Article Quality Assurance.



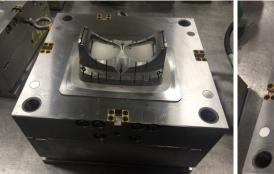


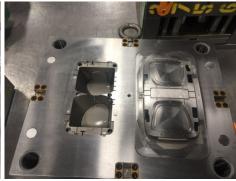
## Production release and support.

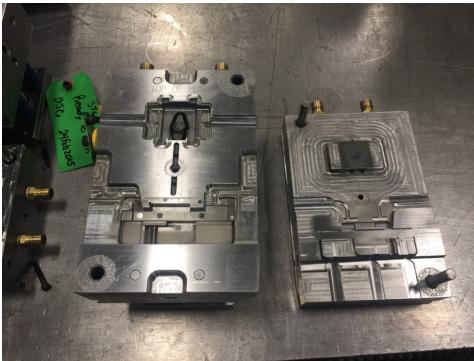
DiMonte Group expedited tooling quotes, 1<sup>st</sup> article QA, and production engineering support for the 1<sup>st</sup> production efforts of the GO.













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## First article quality assurance.







For further information about the DiMonte Group, please visit our website at <a href="https://www.dimontegroup.com">www.dimontegroup.com</a>.

Or, if you have specific questions about how the DiMonte Group might be of benefit to your organization, feel free to contact us directly by calling Mark Peters at 630-624-9554 or email to <a href="mailto:mpeters@dimontegroup.com">mpeters@dimontegroup.com</a>.

We are always happy to discuss how we can help out. It's what we do.

