

Case Study

ImageProVision Significantly Accelerates Drug Development Process for A Globally Renowned Pharmaceutical Company



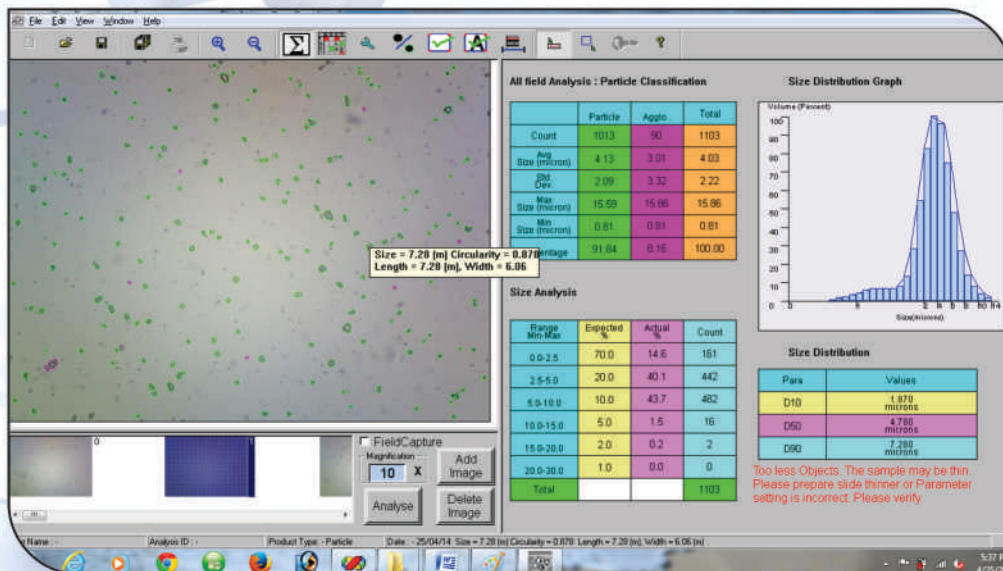
About The Client

The Client is a progressive contract development & manufacturing organization dedicated to topical semisolid formulations in Mumbai, India. They have the largest single site facility dedicated for topical formulations in Asia Pacific.

Challenge

Measurement of particle size distributions and the requisite knowledge of how they influence products and processes is pivotal to manufacturing businesses. The Client was in constant search for a high-quality customizable solution to achieve not only accurate but quick results for particle size analysis in their R&D and Production facilities.

Client's aggressive timeline was closing in for the introduction of their new drug. They employed Laser Diffraction Technology but it didn't prove useful as getting the accurate particle details in Gel was difficult. The results from Laser Diffraction were varying batch-to-batch & also results were not verifiable. Another challenge was the inconsistency of results at R&D and Production stages. In addition, there was virtually no service support of the existing software vendor. Development work kept delaying.



Solution

ImageProVision (IPV) experts with backgrounds steeped in the pharmaceutical industry were summoned by the Client to bring best-in-class thinking to tackle this unique challenge.

IPV experts analyzed the situation and worked very closely with Client's key resources for a period of six months and developed a completely new methodology to identify the particle sizes. IPV's Particle Size Analyser and Classifier (*ipvPClass*) with Z-Stack arrangement was used that provided dynamic visualizations which uniquely enabled identification of particles at different focal lengths.

Besides enabling the separation of isolated particles and agglomerations, the Z-Stack method also helped devise new particle classification algorithms. Import/export options were developed to avoid any kind of duplication of parameter setting at R&D and Production stages. ImageProVision, in alignment with the client requirements also developed customized reports and provided continuous on-line support and site visits to both facilities.

Business Benefits

- Rapid analysis of new drug sample leading to increased productivity
- Simplification of day-to-day batch clearance reports
- Improved Accuracy
- Standardisation of method and parameters in R&D and Production
- Additional statistics to improve processes by focused corrections
- Huge cutting of cost and time rapidly advanced the drug development project
- Incessant on-line support assisted with frequent on-site presence ensured smooth & quick execution ensuring negligible down-time
- Extremely easy to use software enabled quick training of researchers and analysts

