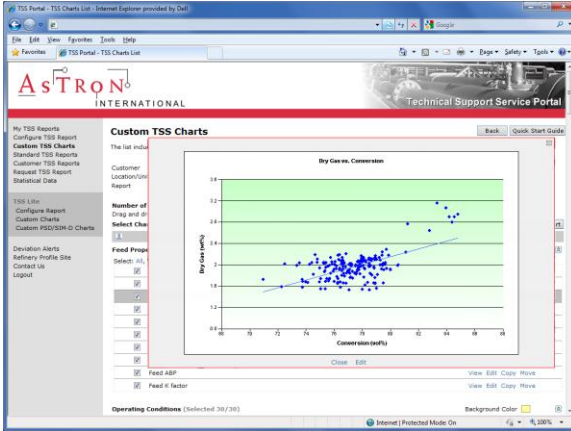


Technical Support Service

A Technical Service Solution for FCC



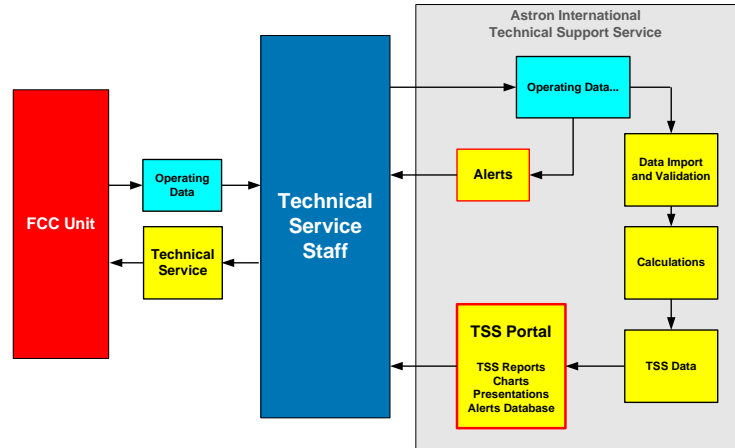
Technical service requires the analysis of complex operating data. Operating units generate an overwhelming amount of data and there are limited human resources to analyze the information generated. More often, data analyses are only conducted in response to operating problems and ongoing optimization opportunities are lost resulting in loss of revenue. Astron International offers Technical Support Service (TSS) to assist FCC catalyst suppliers deliver high value technical service to refiners regularly by providing standardized analysis of unit operating data.



Benefits of TSS

- Provide standard technical service reports to customers regularly
- Add value by identifying significant issues before the customer
- Consolidate all data (operating, catalyst, product analyses, etc.) into one report
- Save man-hours spent on tedious data related tasks
- Convert data into information and knowledge

In this service, FCC unit operating data are regularly validated and their quality analyzed with respect to mass balance, heat balance, and key operating variables. Good quality data are identified and used to generate technical service reports on a regular basis that highlight key operational points and issues.



About Astron International, Inc.

Founded by experienced chemical engineers, Astron International offers TSS as a unique blend of refining industry domain knowledge, business process expertise, and Web based technical service delivery skills. Astron International has over 17 years of experience in providing services to the refining and petrochemical industry.



Astron International, Inc.

P.O. Box 218275 Houston, Texas 77218 USA Tel: (281) 589 6600 Fax: (281) 589 7335 info.astroninc.com