



BLENDING & MOVEMENT | BLEND

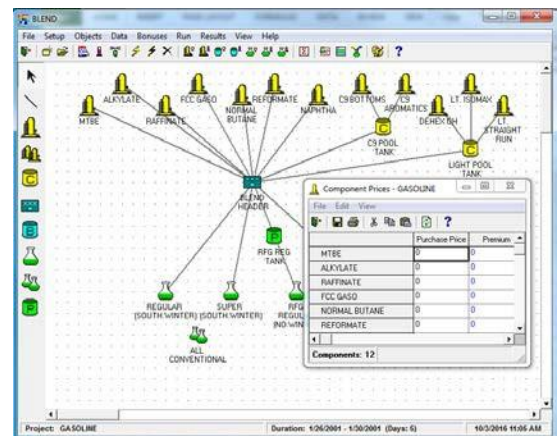
PRODUCT INFORMATION NOTE

Honeywell's Movement Management - BLEND is a multi-period, multi-blend optimization software for petroleum products. It uses state-of-the-art technology to produce the optimum blending recipes for each batch in a short- or long-term blend campaign and generate an order or target for an online blending system. This helps refiners maximize profits by minimizing product waste and suggests the optimum product mix and sequence while meeting commitments on product demand.

Key Capabilities

BLEND is part of Honeywell's Blending Suite within the Blending and Movement Solution. BLEND provides the following key capabilities:

- Support of nonlinear blending methods
- Summary and results reporting
- Specification and target blending
- Reformulated gasoline blending
- Dynamic Gantt chart for blend schedule adjustments



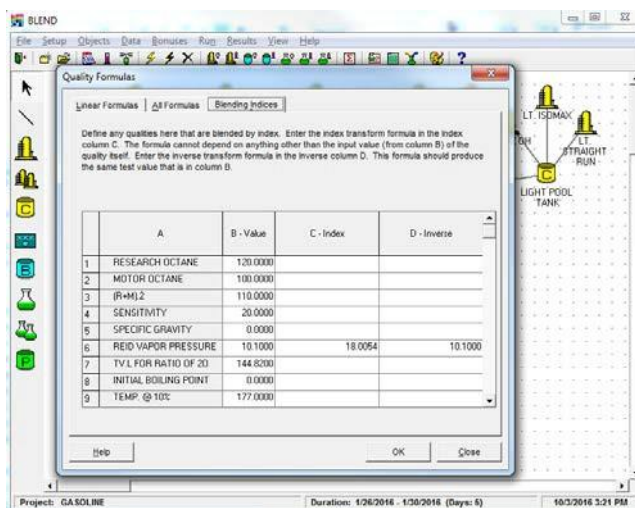
BLEND provides a rich set of tools and a flexible modeling platform for you to build models uniquely representative of your specific or potential operations

Benefits

- Take advantage of immediate market opportunities while adhering to your operating plan and physical constraints
- Optimize plant profitability by helping you meet product delivery schedules
- Address product specification requirements for environmental compliance
- Economic analysis and planning

Operational Advantages

BLEND delivers cost savings in the range of 15 to 45 cents per barrel in gasoline production. The major sources of savings are reduced giveaway from better utilization of inventory, reduction in re-blending, and the capability to anticipate changes in market demand, prices, product specifications and component qualities.



BLEND with configurable blending formulas

Meeting Product Delivery Schedules

BLEND has an unparalleled ability to perform all the calculations required to meet specific product delivery schedules. It simultaneously maximizes profitability and frees you from performing these time-consuming calculations. This allows you to concentrate on other critical aspects of blending, such as coordinating with operations, tracking component and blend qualities, communicating with transportation and shipping suppliers, and continuous improvement of the overall blending operation.

Addressing Environmental Specifications

BLEND easily handles the changing and more complex product specification requirements mandated by environmental legislation, as well as the plant-specific tankage and other operational limitations to produce optimal blend recipes.

Ease of Use

You can specify blending operations such that they go directly to sales or finished inventory without the use of an intermediate blending tank.

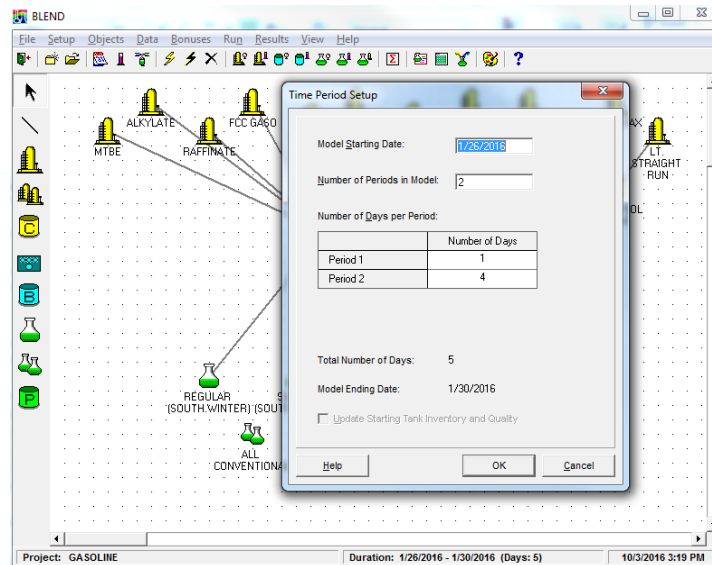
It allows changing tank service over time, the modeling of an actual blend header and even the modeling of online certified blenders.

Unlike typical blend packages, it does not require a rigid representation of component, blend and product tanks, each of which must remain in a unique service over the course of the blend schedule.

Functional Highlights

BLEND is user-friendly and easily adapts to your individual operating environment. It also delivers advanced functionality that distinguishes it from competitive systems, including:

- Integration of the optimized blending solution with a blend scheduler
- Ability to review and modify recipes in Excel and examine the effects of the changes on meeting product quality specifications and tank inventory constraints using spreadsheets
- Pre-blending of component tanks receiving multi- component streams
- Optimization of component tank and product tank inventories over multiple time periods



BLEND time period setup

Key Capabilities

BLEND key capabilities are described below:

Support of Non-Linear Blending Methods

BLEND supports three commercial nonlinear blending methods:

- Ethyl Corporation's RT-205 equation
- Exxon Mobil Corporation's transformation method
- DuPont's interaction coefficient method

Summary and Results Reporting

BLEND offers extensive summary and detailed results data presented in spreadsheet and formatted report form to thoroughly analyze the impact of the results on existing blending operations.

Specification and Target Blending

BLEND supports specification as well as target-blending objectives. Correlations are incorporated that use laboratory data to compute blending values, as well as to predict important properties such as octane for gasoline blending.

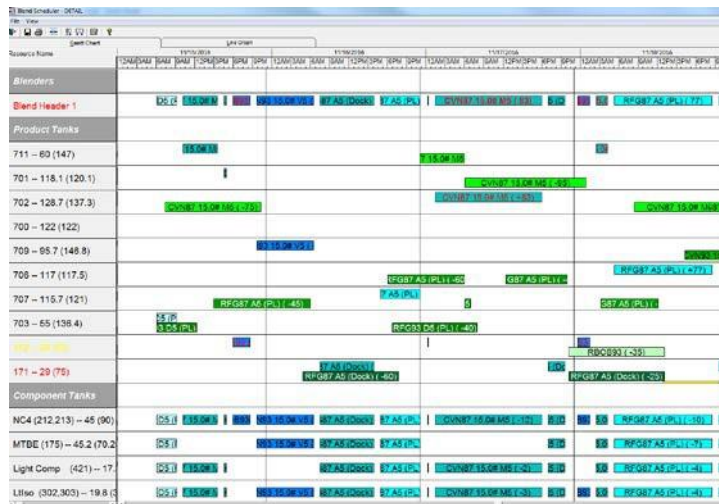
Reformulated Gasoline Blending

Formulas for RFG qualities such as toxicity, NOx and VOCs can be generated in such a way that they accurately predict these qualities in the blend.

Additionally, groups of products can be defined as a pool so quality specifications can be set not only on each product, but also on the quality of the pool.

Dynamic Gantt Chart for Blend Schedule Adjustments

BLEND allows you to view the entire blend schedule solution from the LP in a dynamic Gantt chart that sequences the blending operations by time of day. You can change the day and hour to start a blending operation, the volume to blend or the sequence of blending operations. All changes to the schedule trigger a recalculation of tank inventory effects to determine whether sufficient inventory is available to support the modified blending schedule.



BLEND Scheduler

Support Services

This product comes with worldwide, premium support services through our Benefits Guardianship Program (BGP). BGP is designed to help our customers improve and extend the usage of their applications and the benefits they deliver, ultimately maintaining and safeguarding their advanced applications.

Honeywell provides a complete portfolio of service offerings to extend the life of your plant and provide a cost-effective path forward to the latest application technology. Honeywell services include:

- Software installation services
- On-site engineering services
- Migration services
- Scope expansion services
- Assessment services
- Performance baseline and tuning services
- Customized training

For More Information

Learn more about how Honeywell's BLEND solution can optimize your blending recipes, visit www.honeywellprocess.com/software or contact your Honeywell Account Manager.

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