Vast burner experience ensures safety, availability and environmental compliance

Start burners you can rely on

- Quicker burn down prior to shut-down
- Avoids flame scanner disturbances from opposing burners
- Durable in tough conditions
- Quick sand bed heat up - right flame shape

Load burners optimized for low NOx

- Low NOx emissions
- Cooled, protective door prevents damage from furnace environment
- In-house technology for FGR, OFA, SNCR/SCR, DeSOx and particle filtration

NGC combustion for efficient odor control

- Burner models for NGC combustion in recovery boilers, BFB/CFB boilers and fine-tube boilers
- Stand-alone flares
- Low-NOx technology for NGC-incinerators
- Horizontal models available

Valve units and Burner Management Systems for safer combustion

- Improves combustion safety
- Reduces hazardous emissions
- Accurate and fast control of fuels and combustion air

Customized training and commissioning

- Maximizes burner performance
- Improves combustion quality
- Eliminates unwanted shut-downs and service needs
- Burners commissioned and simultaneous operator training provided
- Tailored spare parts and after-sales support

Burner systems

High availability in demanding combustion conditions

Our 11,000 professionals around the world work close to our customers and are committed to moving our customers’ performance forward – every day.

LinkedIn.com/company/valmet
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For more information, contact your local Valmet office: www.valmet.com
Specifications in this document are subject to change without notice.
Please review all documentation and all publications of Valmet prior to ordering.

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**Valmet burner systems** can be installed to operate exclusively and meet the extreme operating conditions of recovery boiler furnaces as well as CFB reactors. In other words, they provide unsurpassed reliability to ensure the highest availability.

### Front-running solutions

With a widespread understanding of demanding process conditions and in-depth experience of handling a wide variety of fuels, Valmet is a front-runner in combustion technology for sustainable energy generation and recovery solutions.

#### Start burners

Our start burners are installed in a downstream slope configuration to prevent smoke in recovery boilers and seed in the fluidized bed boilers from blocking flame outlets. This ensures quicker burn down prior to shutdown, and avoids flame scanner disturbances from opposing burners.

#### Load burners

Valmet’s load burners are optimized for low NOx emissions. In addition, our load burners can be equipped with a cool water protector to prevent damage from the flue gas environment. Valmet has its own integrated burner technology in DGB, DGA, SNC/SCG, DGB/DGA, and particle filtration to be combined for burner deliveries.

#### NCG combustion

Valmet has suitable burner models for NCG combustion in recovery boilers, CFB boilers, RDF incinerators, and lime kilns. Special low-NOx technology has also been developed for NOx in-cinerator models. The spare burner is typically a flare as a vertical incinerator. Horizontal models are also available.

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### Product offering

<table>
<thead>
<tr>
<th>Product Type</th>
<th>Overview Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lime-kiln burners</td>
<td>These are typically a flare as a vertical incinerator. Horizontal models are also available.</td>
</tr>
<tr>
<td>Biofuel products</td>
<td>Biofuel products such as gasification gas, pellet powder dust, and EU for instance can be used in addition to the conventional fuels.</td>
</tr>
<tr>
<td>Special lances</td>
<td>Special lances are recommended for burner deliveries.</td>
</tr>
<tr>
<td>Liquid fuel burners</td>
<td>Liquid fuel burners use natural gas, diesel, liquid or heavy fuel oil, natural gas, tall oil, biogas, gas, and biodiesel.</td>
</tr>
<tr>
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</tbody>
</table>

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### Training and commissioning

Valmet can train operators to maximize burner performance, improve the combustion quality in the boiler, and eliminate unwanted shutdowns and service needs. Valmet will typically commission the burners and simultaneously provide end-to-end training. The most suitable spare parts and additional program recommendations will be tailored to meet the customer’s specific needs.

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### Reliable, efficient and safe in tough conditions

Valmet has a proven selection of waste plant and process burners suitable for boilers, waste incinerators and process solutions. Valmet’s burner systems can be installed to operate exclusively and meet the extreme operating conditions of recovery boiler furnaces as well as CFB reactors. In other words, they provide unsurpassed reliability to ensure the highest availability.

### All-inclusive capabilities

Valmet has comprehensive expertise and vast experience in environmentally friendly combustion technology, in the manufacture of power and recovery boilers. This gives us full-scale and real condition capabilities when it comes to the manufacture of power and recovery boilers.

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### Providing for every need

Our product range covers all the burner needs of modern pulp and paper mills and utility power providers, from a single-burner unit to the burner needs of modern pulp and paper mills and utility power providers. Our offering includes combustion process, control systems, and valorization systems, from forest residues to biofuels. Each offering includes studies of customer needs from development and engineering to installations for power and recovery boilers. We have supplied more than 2,500 installations for power and recovery boilers since 1975.

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