



Kettle Operations - Loading, Fire Prevention and Extinguishing

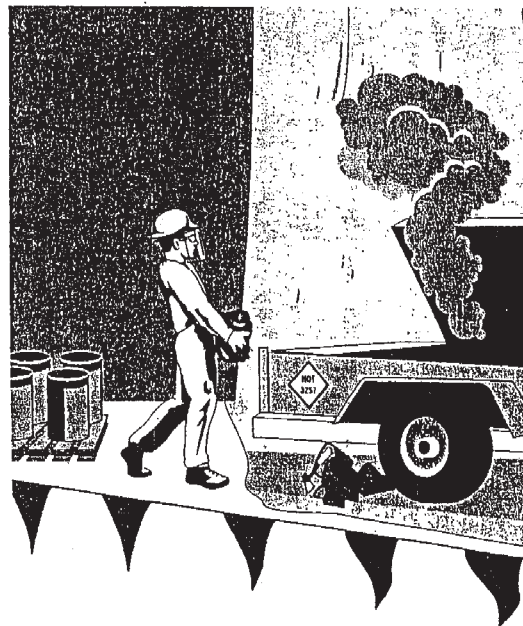
- ☛ Add bitumen and increase kettle temperatures slowly.
 - Chop the bitumen into small, manageable chunks and lower them into the kettle carefully.
 - Never allow the kettle tubes to be exposed; fires or explosions may result.
 - Increase the temperature slowly at the beginning of the shift so that the bitumen closest to the heating tubes doesn't overheat and spatter.
- ☛ Make sure the bitumen is kept within its equiviscous temperature (EVT) range at the point of application.
 - The best application will occur only when the bitumen is at it's EVT, which is found on the packaging.
 - If it gets too hot then there are two dangers. The material will actually become less effective as it degrades, and there is a good chance of fires as the temperature of the material approaches the flash-point.
 - Insulated pipes and hot luggers will help keep bitumen temperature near its EVT.
- ☛ Wear proper personal protective equipment (PPE) when operating a kettle.

Proper PPE includes:

- a face shield attached to a hard hat, over safety glasses or goggles;
- leather gloves with snug cuffs;
- a long-sleeved shirt buttoned over the cuffs of the gloves;
- heavy work boots; and
- long pants without cuffs that come over the tops of the boots.

- ☛ Know how to put out fires in case one occurs.

- Close the lid immediately and turn off the burners.
- If closing the lid is not enough then pour about an ounce of water into the vent hole and the steam it produces will douse the fire. **Do not** use more than this small amount of water or the kettle may boil over.
- If neither of the above methods work, then use one of the two ABC fire extinguishers that should be nearby.
- Know the phone number and be prepared to call the fire department.



Kettle Operations - Loading, Fire Prevention and Extinguishing Training Tips

- Hold the talk next to the kettle and demonstrate loading.
- Show the parts of the kettle, such as temperature gauges, heating tubes, and pressure vents.
- Emphasize that no more than an ounce of water (about the amount in a shot glass) should be used to douse a kettle fire. Too much water will result in damage and possibly severe burns.
- Ask the following questions:
 - Why is it better to place bitumen carefully into the kettle rather than dropping it in?
 - What's the advantage to chopping it into smaller pieces?