Faster firing and lower costs:

Canada Brick gets fired up over Swindell Dressler’s Silver Cloud™ System®
Process starts in the lab
Swindell Dressler first analyzed Canada Brick’s raw material and products then created a computer model of the kilns that would achieve the company’s goals.

Raw material preparation
Crushing, grinding, screening, conveying, storing — the entire system was engineered by and under the construction management of Swindell Dressler.

Programmed automatic controls
Once the ware is set, automatic controls take over. All drying, firing and car movements from the setter to dehacker occur automatically.

Automatic car movement
Kiln car emerging from the dryer is picked up by a transfer car (rear) and moved to kiln entrance. An automatic tracker in the control room also shows where every car is at any given time.
Under pressure
A column of green clay exits from the extruder. Surface textures are also created at this point.

Adding color and texture
A thin veil of colored sand dusts the wet clay column as it moves to the cutter.

Only 19.8 hours
It takes only 19.8 hours to fire nine-inch brick in these low profile (8 courses high) kilns. Fuel consumption: less than 750 gross BTU's per pound of fired ware. Output: 97,280 brick per day per kiln.

Automatic dehacker
Dehacker unloads one-quarter of a kiln car with each lift.
A new car design concept
The unique car design of Swindell Dressler's Silver Cloud system eliminates heavy refractory material. The results: faster firing, less fuel consumption, lower operating costs.

Automatic setting
An entire kiln car load is placed into position with only eight lifts of the automatic setter.

Strapping
Bricks are arranged into packages for easier handling.

Ready for delivery
Fork lift takes brick to storage prior to delivery to construction sites throughout Canada and the United States.
Increase productivity in less space

Canada Brick did both when Swindell Dressler went to work on the new Burlington, Ontario plant. Here’s what did it: a combination of our brand-new Silver Cloud technology plus the teamwork of our engineer/constructors and Canada Brick people. And here’s what it meant:

- shorter firing time
- greater output
- less operating costs
- lower capital costs
- shorter design-to-completion time

The Silver Cloud System is a new technology whose time has come. It takes its name from Swindell Dressler’s totally new kiln car. Simply stated, the Silver Cloud system is a new, integrated manufacturing concept that combines refractory fiber insulation materials with the latest technologies in construction, process combustion and automated controls.

Faster production

Canada Brick now fires its brick in 19.8 hours with the Silver Cloud System, down from as much as 36 hours in its older tunnel kilns. And less time has created immediate benefits. Among them: Kilns and dryers are smaller and overall building space is less.

All this lowers initial capital costs and construction time. Faster firing also reduces levels of work-in-progress. Improved heat flow around and through the ware produces a more uniform product and, at the same time, more efficient firing. This results in lower fuel costs and better products.

Better control

Computer controlled firing system and kiln car movement through the plant lets Canada Brick program changes in schedules, firing temperatures and curves to minimize production disruptions when there are product changeovers.

These automatic controls are also programmed to make firing changes for differences in product size, surface texture and color of ware. And once the ware is set, fired and unloaded, empty cars can be kept near working stations. Because there is very little heat retention in Silver Cloud cars, people can work near them without discomfort.
Project management — another reason why ceramic people get fired up over Swindell Dressler.

Canada Brick’s new plant was on stream within just 12 months from the project start. That’s fast. It’s also typical of Swindell Dressler’s no-nonsense way of managing projects. This new 227,000 square-foot facility (including clay preparation and production areas) in Burlington, Ontario is the largest brick plant in the Western Hemisphere. But in terms of efficiency, it may have the smallest number of square feet of floor space per thousand brick produced — only 1.5 square feet/thousand.

Swindell Dressler handled construction management for this entire project — as well as turnkey responsibility for the kilns and dryers.

Want more information on our Silver Cloud technology? Want to learn how our project management can pay off for you — as it did for Canada Brick? Call us at (412) 788-7100.

We believe you’ll get fired up over Swindell Dressler, too.

### Performance Highlights

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<thead>
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<tbody>
<tr>
<td>Output</td>
<td>97,280 brick per day per kiln</td>
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<tr>
<td>Firing cycle</td>
<td>19.8 hours</td>
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<tr>
<td>Operating temperature</td>
<td>1980°F</td>
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<tr>
<td>Fuel consumption</td>
<td>750 gross Btu’s per pound of fired ware</td>
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<tr>
<td>Recovery rate</td>
<td>98%</td>
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<tr>
<td>Overall kiln length</td>
<td>238’</td>
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<tr>
<td>Overall dryer length</td>
<td>118’</td>
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<tr>
<td>Kiln car size</td>
<td>14’ 6” wide, 14’ 7” long</td>
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<tr>
<td>Load per car</td>
<td>5,120 CSR brick (9” x 3.5” x 2.8”)</td>
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Silver Cloud flexibility
Canada Brick achieves a remarkable efficiency record of 1,000 brick produced per 1.5 square feet of plant area. Designed and built by Swindell Dressler, this is the largest brick plant in the Western Hemisphere.

Environmentally sound.
Swindell Dressler was also involved in the selection and installation of the scrubber system, which ensures that Canada Brick will continue to be an environmentally responsible neighbor.