Incentives to Change
Efficient water usage in production directly impacts the production speed and the bottom line. It also will be a significant environmental impact by reducing waste water and overall water usage.

Organization
A subsidiary of Saint-Gobain, the world’s largest building products company, the Shakopee facility produces roofing and roofing materials.

Intern Project
Improving the web cooling/drying process of roofing shingles while reducing water and energy usage.

Solutions

Reduce Water Consumption through Cooler Water:
Install a chiller to reduce water temperatures by 20° which will cool the rolls faster, reducing water consumption with quicker cooling.

Reduce Water & Energy Consumption with Additional Rolls:
Add rolls for extended cooling, eliminating wet sheet problems, reducing water usage in cooling, and reducing energy usage with lower air blower use.

Reduce Water Consumption through New Water Flow:
Change water flow patterns, change pumping schedules, and re-use water from air compressors, eliminating water overflow in cooling loop.