

Design for sustainability (DfS) scorecard

With our DfS scorecard, we drive sustainability improvement during the product development process through multiple product sustainability criteria divided into seven impact areas.



mPAGE® Lux Gel Casting System

Cast fresh, consistent electrophoresis gels each day, in just 3 minutes



Impact areas

Results



MATERIALS

Removal of hazardous reagents APS & TEMED (acrylamide is a known carcinogen and is still included in this product as no suitable replacements currently exist in this application).
Life cycle mass savings of at least 20 %, even with the addition of the curing station.



SUPPLIERS & MANUFACTURING

No change compared to baseline product in consideration of our DfS criteria



PACKAGING

30 % reduction in life cycle packaging over baseline system.
All fiber-based packaging has sustainable forestry certifications and all protective foam inserts are made from 100 % recycled polyethylene foam.



ENERGY & EMISSIONS

Although energy is required for curing the gel, the energy required to cure 1000 gels/year is only 1.65 kWh, the equivalent of approximately 33 hours of laptop use.



WATER

No change compared to baseline system in consideration of our DfS criteria.



USABILITY & INNOVATION

The time required to prepare fresh gels has been reduced to just 3 minutes, compared to at least 30 minutes with representative fast hand-cast kits.



CIRCULAR ECONOMY

At least 25 % reduction in single-use plastic waste generated through gel preparation workflow.

Baseline product: Representative fast hand casting kit