

# Case Study



## PROJECT INFORMATION

<b>Project name:</b>	Baby Life Factory
<b>Client:</b>	Al-Sanabel Converting Industries Company
<b>Consultant:</b>	Al-Raed Al-Arabi Architects & Consulting Eng.
<b>Contractor:</b>	OHUD Contracting Co.
<b>Location:</b>	Al-Qastal, Jordan

[www.dcp-int.com](http://www.dcp-int.com)



expertise



quality



full range



## PROJECT REQUIREMENT

### Task at Hand

Al-Sanabel Converting Industries Company is a leading company in the Middle East in the manufacturing of health products. Baby Life Healthcare Industries has provided high-quality, safety-focused products that address the needs of the healthcare industry for years.

As an alternative for conventional reinforcement using deformed steel bars, steel fiber was proposed for reinforcing the slab on grade (SOG) of the new facility being constructed for Baby Life factory to serve as a material that can fully substitute for conventional steel bars in the slab on grade.

In SOG construction, steel fiber has advantages over conventional steel bars reinforcement in terms of increasing cracking resistance and residual strength of cracked concrete due to the fibers bridging effect.

## DCP SOLUTION

To assess the benefit of adding steel fiber, several analytical solutions were carried out to obtain the applied load on the slab, and to evaluate the feasibility of steel fiber reinforced concrete replacing ordinary reinforced concrete. Therefore, steel fiber was used to replace the steel bars utilized in the traditional RC solution as the use of steel fiber will lead to substantially increased productivity while also reducing the construction cost and time.

DCP'S High-performance steel fibers with hooked ends for concrete reinforcement under the name "**ST Fiber Type I**" were used to enhance the slab's mechanical properties and reduce plastic shrinkage cracking and crack propagation due to full depth reinforcement distribution and fibers bridging effect.

### Products and Quantities Supplied

<b>ST Fiber Type I</b>	70 ton
------------------------	--------

### Supply Period

July to September, 2020



[www.dcp-int.com](http://www.dcp-int.com)