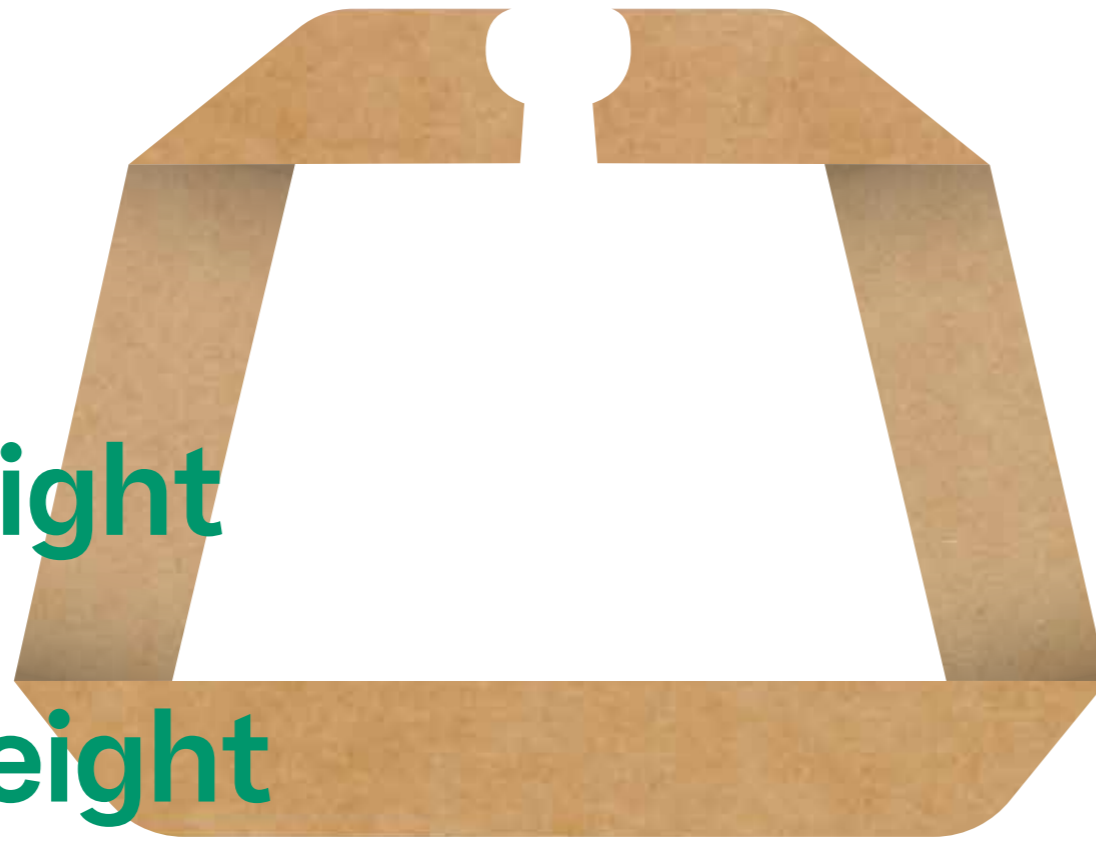


SCA Kraftliner Heavy Duty

# Lightweight through heavyweight



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This is a very successful field of R&D where we have explored cost and waste reduction by using liners with higher grammage. For instance, with a high-performance liner like SCA Kraftliner Heavy Duty, applications that would normally require a double wall board can be handled by a single wall board. We call it lightweighting through heavyweighting. The market benefits are apparent.

SCA Kraftliner Heavy Duty is produced with a base layer of mainly fresh fibre and a surface layer of the finest unbleached fibre that provide excellent strength, long-life durability and maximum protection. It is optimal for extremely heavy goods such as completely knocked down (CKD) cars, and also suited for other industrial applications where the value of goods needs to be protected. Important segments are the automotive, electronics and furniture industries.

## Control

Our strict control programme ensures that the moisture, strength, and glue absorption properties remain uniform and well defined. A high-tech process control enables our product to handle the most demanding corrugating and conversion processes. A rejection limit on peak-to-

peak CD variation classifies all moisture and dry streaks within the reel. This is essential for excellent runnability on modern high-speed corrugators and for the production of flat board. It also guarantees fewer defects and failures, and less waste.

## Performance

The added strength and performance of SCA Kraftliner Heavy Duty opens a door to new innovative and extreme applications. This provides exceptional performance and offers new ways to lower weight, maximised transport efficiency, and minimum waste. SCA Kraftliner Heavy Duty fulfils the legal demands for direct contact with fatty, moist and dry food as well as foodstuffs that are shelled, peeled or washed before consumption.

### TYPICAL VALUES\* (as of July 2018)

Property	Unit	Method	250	280	300	400	440
Grammage	g/m <sup>2</sup>	ISO 536	250	280	300	400	440
Thickness	µm	ISO 534	320	360	380	510	560
Bursting strength	kPa	ISO 2758	1030	1120	1170	1490	1600
SCT CD	kN/m	ISO 9895	4.5	5.1	5.4	7.0	7.7
SCT MD	N/m	ISO 9895	7.5	8.2	8.3	10.5	12.0
Tensile strength MD	kN/m	ISO 1924-3	23.2	25.7	26.8	31.5	34.1
Tensile strength CD	kN/m	ISO 1924-3	10.2	11.1	12.3	16.0	16.5
Tensile stiffness MD	kN/m	ISO 1924-3	2000	2160	2250	2670	2900
Tensile stiffness CD	kN/m	ISO 1924-3	825	930	1010	1250	1360
Moisture average	%	Online	8	8	8	9	9
Porosity, Gurley	sec	ISO 5636-5	60	60	60	60	60
Roughness, Bendtsen	ml/min	ISO 8791-2	1000	1150	1200	1500	1500
Cobb 60	g/m <sup>2</sup>	ISO 535	32	32	32	30	30
Colour Y Value		ISO 2471	28	27	27	27	27

\* Typical value is our long-term average, typically the last annual average based on all measures on customer reels.

**Bursting strength:** High bursting strength is important for the containability of the corrugated box and the box performance in varying climate conditions, such as cold storage or freezer applications. It is also evidence of high fresh fibre content, which improves convertibility by reducing cracking and dusting when die cutting.

**SCT MD/CD:** The compression strength is vital for the edge crush strength (ECT) of the board, which in turn is significant for the box compression strength (BCT).

**Tensile stiffness:** Tensile stiffness of the liner in combination with the thickness of the corrugated board determines the bending stiffness of the corrugated board, which is key to resisting bulging of boxes and trays.

**Moisture:** Even moisture profile is essential for excellent runnability on modern high-speed corrugators and for the production of flat board.

**Testing conditions**  
All our values are based on testing at standard climate, 50% RH and 23°C. Our testing equipment is calibrated versus the Greenhouse Comparative Testing.

Latest updated version can be found on [www.sca.com/containerboard](http://www.sca.com/containerboard)



**WWF's Environmental Paper Company Index**  
SCA Containerboard has increased its scores overall from 75,3% in 2013 to 77,3% in 2017.



## The right product for the right job



SCA Kraftliner  
White Top



SCA Kraftliner  
Heavy Duty



SCA Kraftliner  
Wet Strength



SCA Kraftliner



SCA Eurokraft

All Kraftliner products are based on our original, high-quality **SCA Kraftliner**, made from a base layer of mainly fresh fibre and a surface layer of the finest unbleached fresh fibre.

The superior properties of SCA Kraftliner make it suitable for demanding applications, and by adding reliable technical properties we achieve outstanding performance for a range of specific purposes — consumer durables, electronics, hazardous goods, industrial products, and frozen foods, etc.

Our Kraftliner product extensions — **White Top** with brilliant performance and high-quality printing properties, **Wet Strength** for maximum capacity in high humidity and long-term storage, and higher grammage **Heavy Duty** for extreme execution in demanding applications — are the result of our own R&D.

**SCA Eurokraft** is our complement to the Kraftliner product range for less demanding applications. A bottom ply based on recycled fibre and a top ply of purely fresh fibre offer higher capability than recycled liners.

