

# SKF Bucket Elevator chains



Bucket elevators are used in various processes in the cement industry to transport materials typically 30 to 40 meters. Most of them are a chain type. The size and type of chain will depend on the height and duty of the elevator. Outputs can reach 450 m<sup>3</sup>/hr. Chains range in strength from 136 kN to 1000 kN breaking load. These have buckets fixed to one or two strands of chain.

SKF have all types of elevator chains with all standard attachments. Special series of elevator chains and special attachments also available on request.

A regular wear resistant conveyor chain is made from quenched and tempered alloy steel specially selected for the unique combination of demands from the application.

SKF has developed a number of special solutions to meet these demands, after experiments by which components (bush, pin, and roller) are ideally combined in point of dimensions, clearance and hardness. This solution means the life cycle of the chain can

be up to 2 times longer than that of regular wear resistant conveyor chains.

## Features

SKF Bucket Elevator chains are typically made of a series of specially selected alloy steel and have strength ratings that reflect market standards, and the industry requirements.

As with transmission chain, the elevator chain is made up of a number of basic components:

- Pins: Through-hardened and induction hardened for maximum performance. Extra deep induction hardening of pins and carburizing of bushings provide additional wear life
- Bushes: Deep case hardened
- Rollers: Sintered or turned, case-hardened or through hardened, with selected materials and heat treatment options available



- Plates – Pressed, with a number of heat treatment options are also available

### Longer wear life

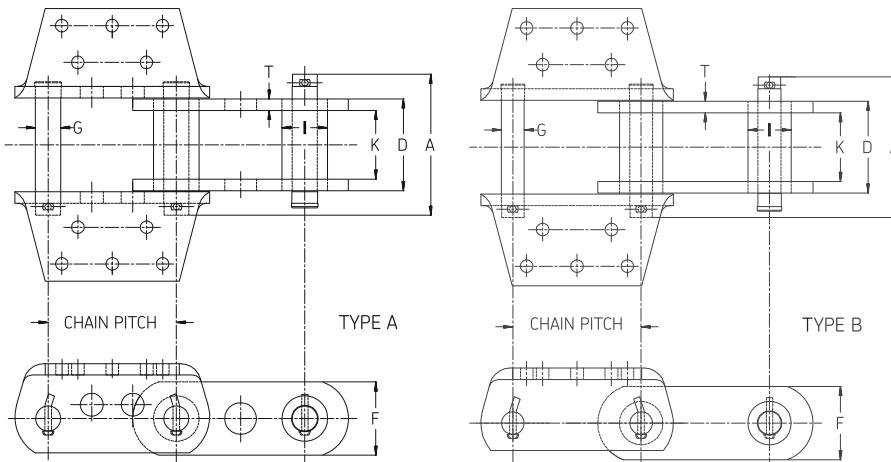
The high hardness specification was developed to resist the abrasive conditions found in the cement industry. A specific level and depth of hardness is produced and carefully checked to ensure that the chain provides the maximum wear and toughness necessary to survive extended periods of service in cement plant bucket elevators.

Most conveyor chains have attachments either integral to the plate (normally the outer plate) or welded onto the plate. Common attachments include:

- K type attachments – supplied integral or welded. A number following the letter indicating the number of fixing holes
- Special attachments – with unique hole patterns are also available

### The Result

The cement industry globally relies on the performance of the various chains to keep it running efficiently and supply to its markets and clients. The quality of the chains being used, and the maintenance practices, impact directly on the cement plants' performance, so reliability is paramount, with supply from a known quality supplier, and one with global knowledge, that can improve the plants operating efficiency. Bucket elevator chains have become highly valued and critical components of the power transmission products portfolio in all cement factories.



### Chain dimensions

Pitch	Type				Sidebars	Pins	Bushings	
		A	K	T	F	G	D	I
152.4	B	164	76.2	12.7	63.5	25.4	102	44.5
152.4	A	164	76.2	12.7	76.2	25.4	102	44.5
152.4	B	164	76.2	12.7	83.6	25.4	102	44.5
152.4	A	164	76.2	14.2	83.6	28.6	105	50.8
152.4	B	197	95.3	15.7	102	31.8	127	60.5
177.8	B	197	95.3	15.7	102	31.8	127	60.5
177.8	A	197	95.3	15.7	102	34.9	127	63.5
177.8	C	218	113	19	114	4.1	152	72.4

All dimensions are in mm

Note: All attachment type available.

For more details on the specifications, please contact us at:

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