FOUR-GIRDER CHARGING CRANES

The charging crane transports scrap and liquid steel to the furnace. The same crane can work as backup to the ladle crane if needed. Konecranes charging cranes are well-protected from the flames and radiated heat, as well as the brief, intense heat of the charge itself. These cranes are a critical part of production and, since the load is molten steel, safety and reliability are the key words in the crane design.

Auxiliary trolley allows loads to be tilted flexibly in multiple directions. It is operated with the main trolley: can be driven with it at synchronized speeds.

Heat shields to protect the crane from the radiated heat.

	Tailored heavy-duty crane	Single trolley crane	Double trolley crane
Classification			
Working cycles (EN13001-1)	Up to 8 million	1–2 million	1–2 million
Load spectrum (EN13001-1)	Up to Q5	Q4-Q5	Q4-Q5
FEM 1.001 3rd edition / year 1998	Up to M8	M7-M8	M7-M8
Trolley			
Main trolley	Tailored open winch	Tailored open winch	Tailored open winch
Auxiliary trolley	Tailored open winch		Tailored open winch
Main hoist lifting devices			
Attached with hook	Hook beam		
Attached with rope	Hook beam	Hook beam	Hook beam
Lifting capacity			
Main hoisting capacity	Tailored	40-340 tons	100-540 tons
Auxiliary hoisting capacity	Tailored	10-100 tons	40-140 tons
Main dimensions			
Span	Tailored	20-30 m	20-30 m
Lifting height	Tailored	10-30 m	10–30 m
Speeds			
Bridge travel speeds	Tailored	60-80 m/min	60-80 m/min
Trolley traversing speeds	Tailored	30-40 m/min	30-40 m/min
Hoisting speed with nominal load	Tailored	7–10 m/min	7–10 m/min
Electrical systems			
Bridge power supply	Conductors	Conductors	Conductors
Trolley power supply	Festoon	Festoon	Festoon
Motor control system	Konecranes Variable Frequency Drives (VFD)	Konecranes VFD	Konecranes VFD
Electrical braking	Regenerative network braking units/Resistors optional	Regenerative network braking units	Regenerative network braking units
Control			
Manual	Cabin/Radio	Cabin	Cabin
Automated	Option		
Monitoring			
Event history recorder in Programmable Logic Controller (PLC)	Standard	Standard	Standard
Crane Monitoring System	Option	Option	Option



