# Discover the power of technology

Founded in 1991

Guralp is the first **R&D** centre in Turkeys overhead crane industry With Branches on 3 continents and service providers, worldwide our world class production facility now presents the all new **GURALP**Hoist selection catalogue with new and exciting options...



#### **Overload Sensor**

- Constant load control with PLC cut off
  - Reliable operation ulletLoad display option •



#### **Trolley Group**

- Specifically designed for Crane applications. Direct drive technology in all double rail trolleys
  - Helical gears with high safety factor •
- Smooth starting and braking with frequency inverter control
  - Compact construction with minimal hook approach •





#### **Travel Limit Switches**

• Pre-switching for slowdown and limit switching for stopping in both directions for trolley and crane



- $\label{lem:hoist Limit Switches} \textbf{Adjustable rotary limit switch for upper and lower limit setting} \ \bullet$ 
  - for highest and lowest hook positions
    - Directly activated by rope drum •



#### **Hook Block**

- Forged steel hook •
- 360 degree swivel •
- Standard safety latch •
- Enclosed sheave wheels •

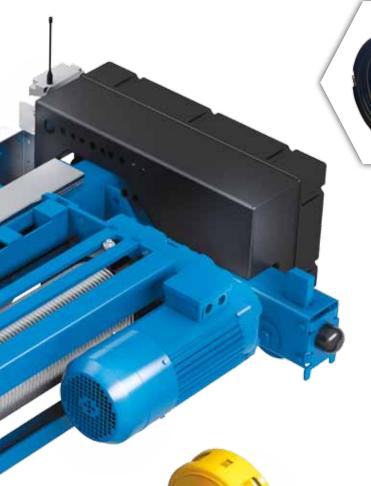




#### Controls

- IP55 and IP65 protection class
- Soft stop and start with PLC and frequency control
  Software for different applications

- Maximum safety
   Ergonomically designed to fit each specific hoist



#### Rope Guide

- High safety with pressure springMachined from cast iron (GGG60)



#### Rope Drum

- Machined from seamless tube
- Finely machined grooves minimized rope wearing





#### Hoist Motor / Gearbox / Brake Group

- Superior German technologyHelical gears processed with high precision
- Quiet operation
- High start and stall torque
  Class F isolation and IP65 motor protection class
  PTC thermistor overheat protection

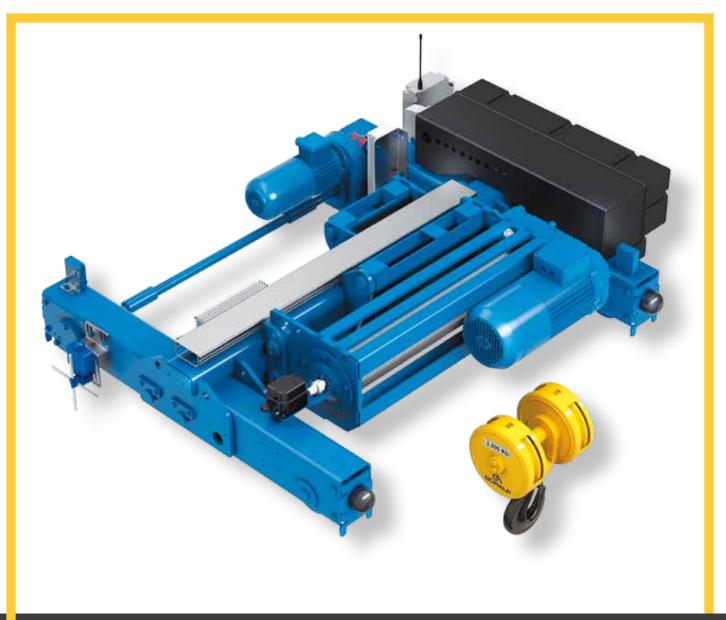


- Long life time (one million cycles without adjustment)Adjustable torque
- Asbestos free brake pads
- High cycle frequency
- Safety factor > 2,5



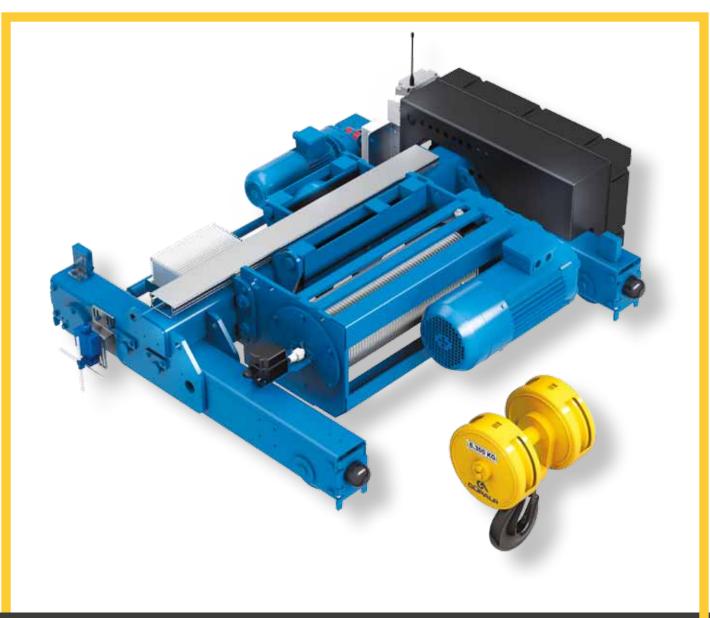


"Lighten your loads with GÜRALP"

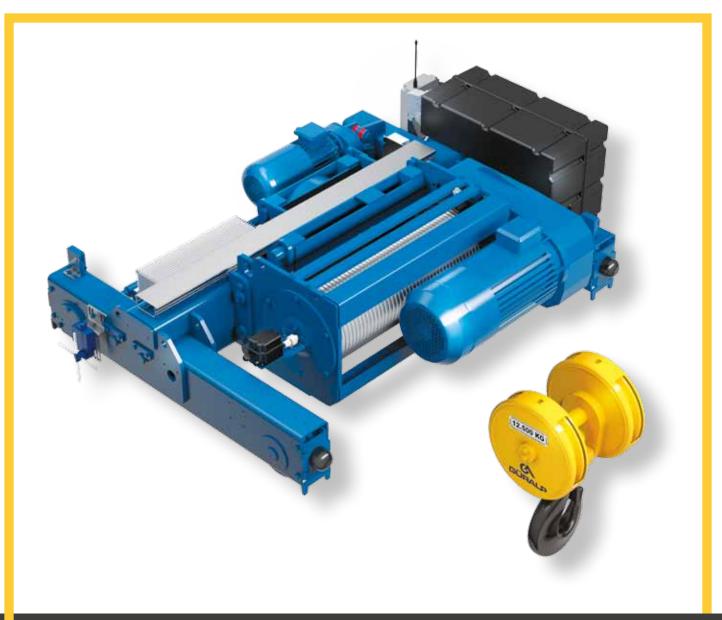


				Work	ing Spee	d	
Capacity (kg)	Reeving	Working Class FEM / ISO	Lifting Height (m)	Lifting Speed (m/min)	Cros: Opt	s Travel S ions (m/i	peed min)
			12				
1000			16				
		3m / M6	20				
			12				
1250	2/1		16	1,4/8			
			20				
			12				
1600		2m / M5	16				
			20		2,5 - 10	20	7,5 - 30
			6		2,5	5-	7,5
2000			8				
			10				
		3m / M6	6				
2500	4/1		8	0,7 / 4			
			10				
			6				
3200		2m / M5	8				
			10				

The above given technical specs are valid for contactor controlled hoists. The same hoists have the VFD controlled versions as well.



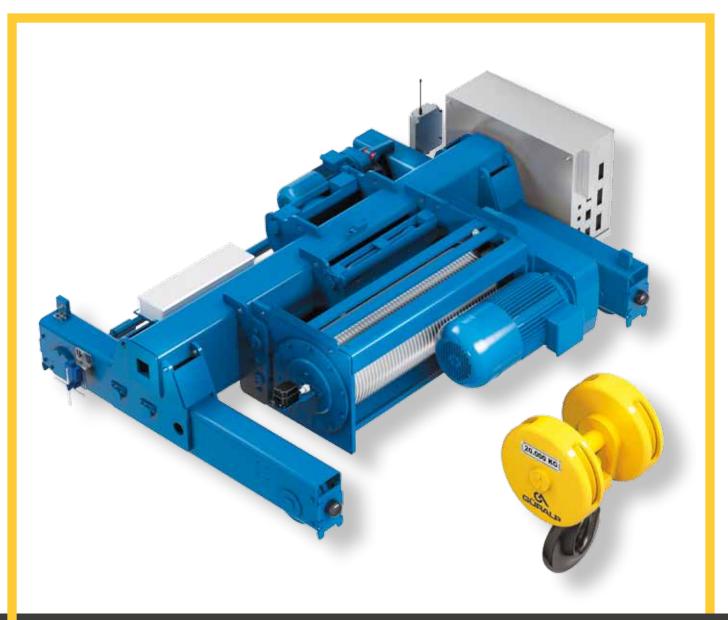
				Work	king Spee	d	
Capacity (kg)	Reeving	Working Class FEM / ISO	Lifting Height (m)	Lifting Speed (m/min)	Cros: Opt	Cross Travel Speed Options (m/min)	
			12				
2000		3m / M6	16				
			24				
			12				
2500	2/1		16	1,4 / 8			
			24				
		2m / M5	12				
3200			16				
			24		2,5 - 10	20	- 30
			6		2,5	5-	7,5 -
4000		3m / M6	8				
			12				
			6				
5000	4/1		8	0,7 / 4			
			12				
		2m / M5	6				
6300			8				
			12				



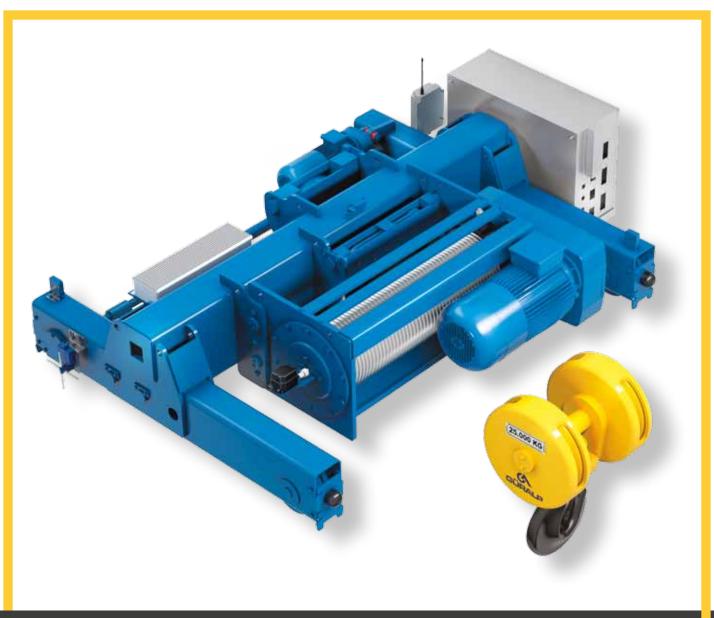
				Work	ing Spee	d	
Capacity (kg)	Reeving	Working Class FEM / ISO	Lifting Height (m)	Lifting Speed (m/min)	Cross Opt	Travel S ions (m/r	peed min)
			12				
4000		3m / M6	16				
			24		2,5 - 10	5-20	
			12				
5000	2/1	2m / M5	16	1,3/8			
			24				
		1Am / M4	12				
6300			16				
			24				- 30
			6				7,5 -
8000		3m / M6	8				
			12				
			6				
10000	4/1	2m / M5	8	0,6 / 4			
			12				
			6				
12500		1Am / M4	8				
			12				



G :: (1 )	Reeving	Working Class FEM / ISO	Lifting Height (m)	Working Speed			
Capacity (kg)				Lifting Speed (m/min)	Cros Opt	s Travel S ions (m/r	peed min)
			17				
6300			24				
	2/1		32	1,2 / 8			
			17				
8000		2m / M5	24		-10		
			32			20	- 30
			8		2,5	5 -	7,5
12500			12				
	4/1		16				
			8	0,6 / 4			
16000			12				
			16				



				Work	ing Spee	d		
Capacity (kg)	Reeving	Working Class FEM / ISO	Lifting Height (m)	Lifting Speed (m/min)	Cros: Opt	Cross Travel Speed Options (m/min)		
			16					
8000		2m / M5	24					
	2/1		36	1,2 / 7,6				
			16					
10000		1Am / M4	24		2,5 - 10			
			36					
	4/1		8	-				
16000		2m / M5	12					
			18			20	- 30	
			8	0,6 / 3,8	2,5	5-	7,5 - 3	
20000		1Am / M4	12					
			18					
			8					
25000		2m / M5	12					
	6/1							
			8	0,4 / 2,5				
32000		1Am / M4	12					



	D			Work	ing Spee	d	
Capacity (kg)	Reeving	Working Class FEM / ISO	Lifting Height (m)	Lifting Speed (m/min)	Cross Opti	Travel S ons (m /	peed min)
			14				
8000			22				
	2/1		33				
			14	1,1 / 6,8			
10000			22				
			33				
		2m / M5	7				
16000			11				
			16		2,5 - 10	20	- 30
			7		2,5	5-	7,5 -
20000	4/1		11	0,5 / 3,4			
			16				
			7				
25000			11				
		1Am / M4	16				
30000	6/1		7	0,4 / 2,3			
			11				

The above given technical specs are valid for contactor controlled hoists. The same hoists have the VFD controlled versions as well.



#### Inverter Controlled Variable Speed Motor For Hoisting

				Workir	ng Speed		
Capacity (kg)	Reeving	Working Class FEM / ISO	Lifting Height (m)	Lifting Speed (m/min)	Cross Travel Speed Options (m/min)		peed min)
			8				
			12				
25000		2m / M5	18				
			24	24			
			8				
			12				
32000	4/1	2m / M5	18	1,25 - 5			
			24				
			8				
			12				
40000		1Am / M4	18				
			24				
			8				
			12		5 - 20		7,5 - 30
40000		2m / M5	16			5 - 20	
			20				
			8				
			12				
50000	6/1	1Am / M4	16	0,8 - 3,2			
			20				
			8				
			12				
63000		1Bm / M3	16				
			20	_			
			6				
63000		2m / M5	On Request > 6				
	8/1			0,6 - 2,4			
			6				
80000		1Am / M4	On Request > 6				

#### Double Speed Motor For Hoisting

				Workin	ıg Speed		
Capacity (kg)	Reeving	Working Class FEM / ISO	Lifting Height (m)	Lifting Speed (m/min)	Cross Travel Speed Options (m/min)		peed min)
			8				
			12				
25000	4/1	2m / M5	18	1/4			
			24				
			8				
			12		- 10	20	- 30
32000		3m / M6	16		2,5	- 2	7,5 -
			20				
	6/1		8	0,65 / 2,6			
			12				
40000		2m / M5	16				
			20				

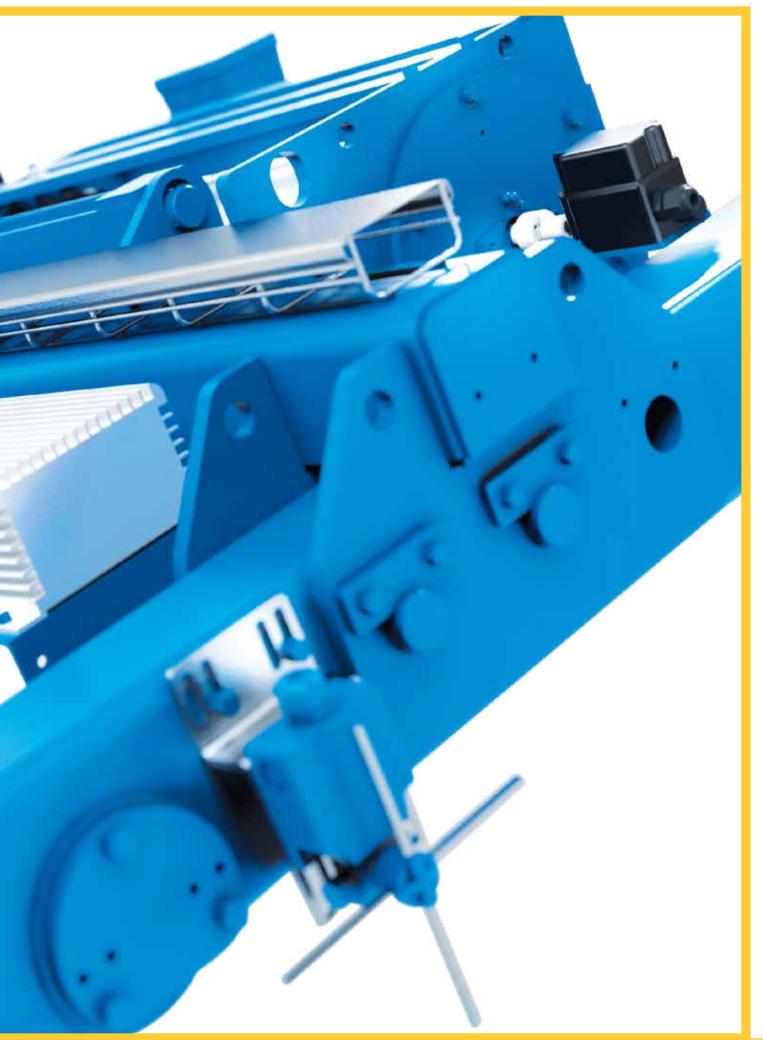
The hoists are produced between the capacities 1 ton and 80 ton's as standard, with different speed and working class options. The hoist groups involve stationary, monorail trolley and double girder trolley hoists. Their compact design provides the ability to work at narrow spaces.

As the consequence of the improved technological investments, being fabricated within automation conditions, our hoists have the capability to serve for a long and continuous time, which has been proofed with many tests. The design of these hoists with modular, standard, easy maintenance and service abilities, have been completed after the serious research of the technical staff about the crane concept that satisfies the world standards.

All trolley groups of the wire rope hoists are also available with most modern direct driven end carriages. A key focus of many **Güralp** customers is the hoist's headroom. Our design allows one of the lowest headrooms by utilizing specific design, special control panel and an ergonomic view.

Further improved and most efficient production lines ensure highest quality and most competitive products. 100% static tests and general risk analysis are making a difference and gives **Güralp** a significant quality advantage.







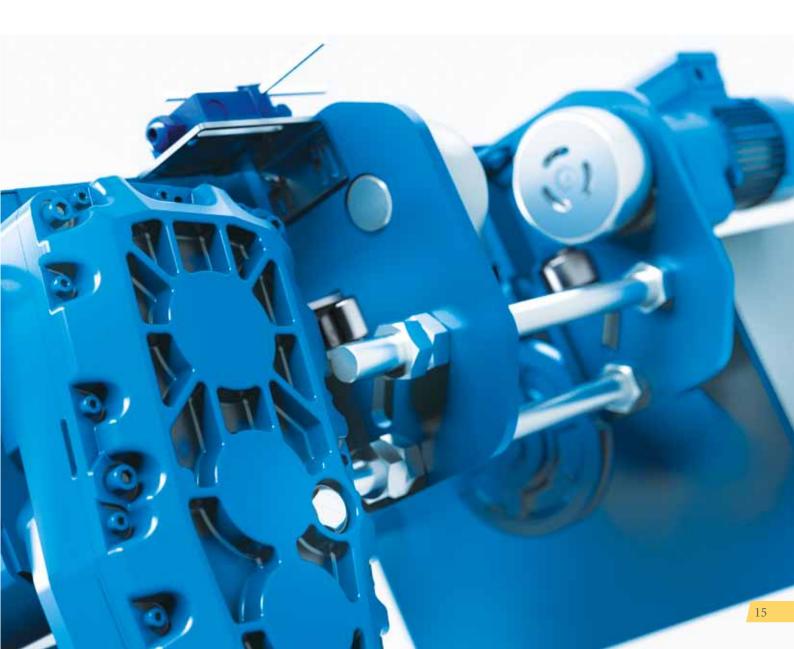


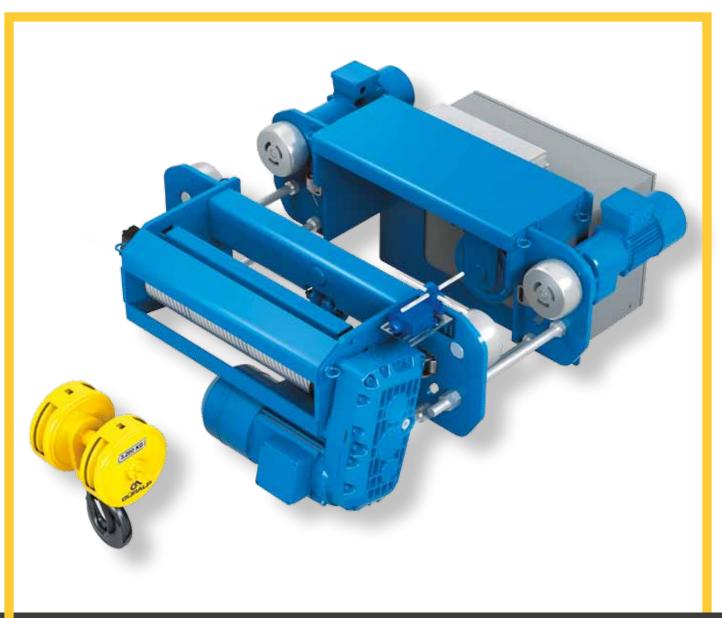


"Lighten your loads with GÜRALP"

# NOW

- Increased lifting and travel speeds
- More duty cycle options
- Ergonomic and light-weight design
- lmproved headroom maximises lifting height
- Maintenance friendly direct drive cross travel mechanism as opposed to pinion drive

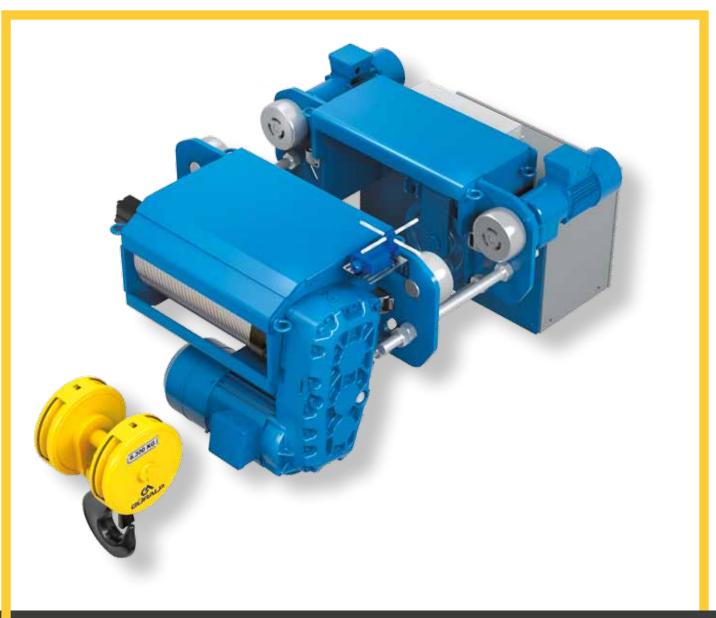




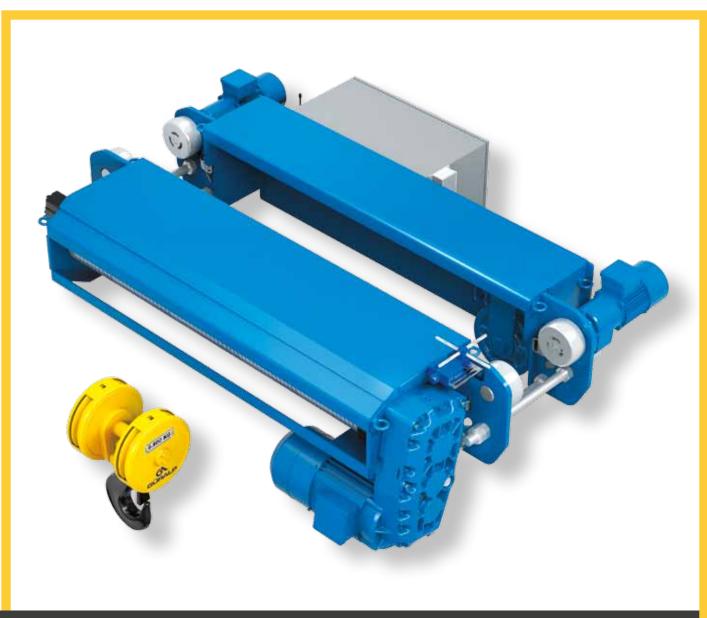
	Reeving	Working Class FEM / ISO	Lifting Height - (m)	Working Speed			
Capacity (kg)				Lifting Speed (m/min)	Cross Travel Speed Options (m/min)		
			12				
1600	2/1		20	1,2 / 8			
		2m / M5	30		20		
			6		- 2		
3200	4/1		10	0,6 / 4			
			15				



6 1 (1)	Reeving	Working Class FEM / ISO	Lifting Height - (m)	Working Speed			
Capacity (kg)				Lifting Speed (m/min)	Cross Travel Speed Options (m/min)		
			12				
2500	2/1		20	1,6 / 10,4			
		2m / M5	30		20		
			6		- 5		
5000	4/1		10	0,8 / 5,2			
			15				



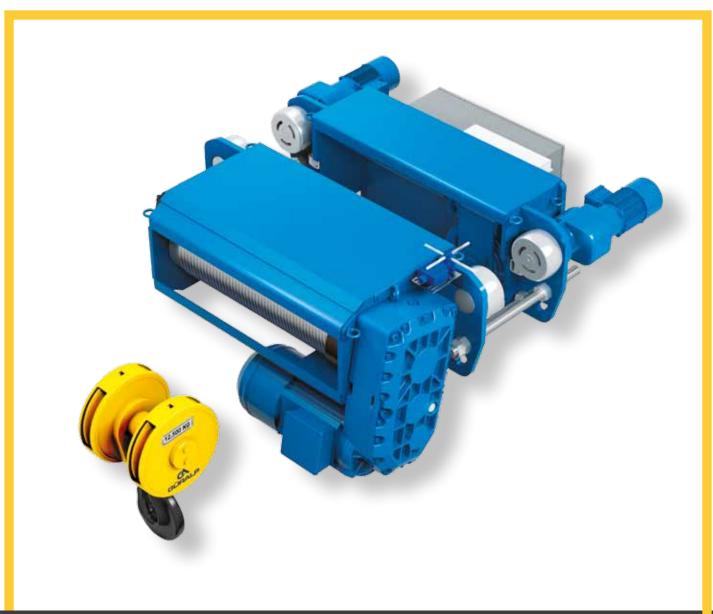
	Danis	W 1: 61	Lifting Haight	Working Speed			
Capacity (kg)	Reeving	Working Class FEM / ISO	Lifting Height (m)	Lifting Speed (m/min)	Cross Travel Speed Options (m/min)		
			12				
3150	2/1		20	1,4 / 8,4			
		2m / M5	30		50		
			6		7		
6300	4/1		10	0,7 / 4,2			
			15				



		W 1: 61	lifeira a llaimhe	Working Speed			
Capacity (kg)	Reeving	Working Class FEM / ISO	Lifting Height (m)	Lifting Speed (m/min)	Cross Travel Speed Options (m/min)		
			12				
3400	2/1		20	1,6 / 6			
		2m / M5	30		50		
			6		7		
6800	4/1		10	0,5 / 3,3			
			15				



Capacity (kg)	Danisa	Working Class FEM / ISO	Lifting Height (m)	Working Speed	
	Reeving			Lifting Speed (m/min)	Cross Travel Speed Options (m/min)
	2/1	2m / M5	12	1,6 / 10	20
5000			20		
			30		
			6		7
10000	4/1		10	0,8 / 5	
			15		



Composity (lan)	Reeving	Working Class FEM / ISO	Lifting Height - (m)	Working Speed		
Capacity (kg)				Lifting Speed (m/min)	Cross Travel Speed Options (m/min)	
			12			
5000			20			
			30			
	2/1		12	1,6 / 10		
6300		2m / M5	20		50	
			30			
			6		- 2	
10000			10			
	4/1		15			
			6	0,8 / 5		
12500				10		
			15			





"Lighten your loads with GÜRALP"



Capacity (kg)	Reeving	Working Class	Lifting Height	Cross Travel Speed
		FEM / ISO	(m)	Options (m/min)
			12	
1000			16	
		3m / M6	20	
			12	
1250	2/1		16	1,4 / 8
			20	
			12	
1600		2m / M5	16	
			20	
			6	
2000			8	
			10	
		3m / M6	6	
2500	4/1		8	0,7 / 4
			10	
			6	
3200		2m / M5	8	
			10	



Capacity (kg)	Reeving	Working Class FEM / ISO	Lifting Height (m)	Cross Travel Speed Options (m/min)
			12	
2000		3m / M6	16	
			24	
			12	
2500	2/1		16	1,4 / 8
			24	
		2m / M5	12	
3200			16	
			24	
			6	
4000		3m / M6	8	
			12	
			6	
5000	4/1		8	0,7 / 4
		2m / M5	12	
			6	
6300			8	
			12	



Capacity (kg)	Reeving	Working Class FEM / ISO	Lifting Height (m)	Cross Travel Speed Options (m/min)
			12	
4000		3m / M6	16	
			24	
			12	
5000	2/1	2m / M5	16	1,3 / 8
			24	
			12	
6300		1Am / M4	16	
			24	
			6	
8000		3m / M6	8	
			12	
			6	
10000	4/1	2m / M5	8	0,6 / 4
			12	
			6	
12500		1Am / M4	8	
			12	

The above given technical specs are valid for contactor controlled hoists. The same hoists have the VFD controlled versions as well.



Capacity (kg)	Reeving	Working Class FEM / ISO	Lifting Height (m)	Cross Travel Speed Options (m/min)
			17	
6300			24	
			32	
	2/1		17	1,2 / 8
8000		2m / M5	24	
			32	
			8	
12500			12	
	4/1		16	0,6 / 4
			8	
16000			12	
			16	

The above given technical specs are valid for contactor controlled hoists. The same hoists have the VFD controlled versions as well.



Capacity (kg)	Reeving	Working Class FEM / ISO	Lifting Height (m)	Cross Travel Speed Options (m/min)
			16	
8000		2m / M5	24	
			36	
			16	1,2 / 7,6
10000	2/1	1Am / M4	24	
			36	
			8	
16000		2m / M5	12	
			18	
			8	0,6 / 3,8
20000	4/1	1Am / M4	12	
			18	
			8	
25000		2m / M5	12	
	6/1			
			8	0,4 / 2,5
32000		1Am / M4	12	

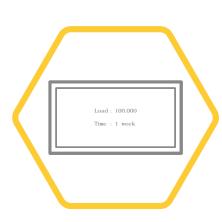


Capacity (kg)	Reeving	Working Class FEM / ISO	Lifting Height (m)	Cross Travel Speed Options (m/min)
			14	
8000			22	
	2/1		33	
			14	1,1 / 6,8
10000			22	
		2m / M5	33	
			7	
16000			11	
			16	
			7	
20000	4/1		11	0,5 / 3,4
			16	
			7	
25000			11	
			16	
		1 Am / M4		
30000	6/1		7	0,4 / 2,3
			11	



### **Programmable Control Unit**

Programmable Logic Controller (PLC) prevents not only the breakdowns arising from operator misusage, but also it enables monitoring of the FEM data; such as running time, motor starts, work cycles and emergency stops, providing visibility to crane usage. It offers preventing operator-inducted faults and also provides brake and inverter monitoring. In case the hoisting motor has two speeds, it is only possible to start and stop the motor at the lowest speed (except the emergency stop) in spite of the operator's instant speed changing commands. This prevents wearing on the brake and the hoist. In addition, fault recordings appearing on the controller screen, makes it possible to correct the fault more accurately and quickly.



#### Predictive Maintenance Application

By means of this application, you can easily follow up the maintenance periods.



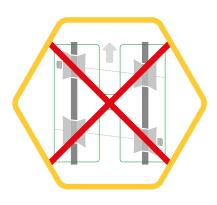
#### Anti-Sway System

Since linear ramps are used as the standard for crane horizontal motions, the load sways during acceleration or deceleration. Either when the motion is activated or during acceleration, the trolley or bridge will start to the move first and then the load will follow. Similarly, when the crane is commanded to stop or during deceleration, the trolley or bridge will slow down first and the load will follow. Thus, a pendulum-like oscillation will occur on the suspended load.

Due to this oscillation, problems on control and positioning are experienced. In order to stop this oscillation without using any special control units, the operator and assistants try to stop sways by holding the load with hand, or the experienced operator reduces the oscillation by applying reaction motions in respect to sways. These operations primarily jeopardize field and employee safety. Secondly, it causes loss of operation time.

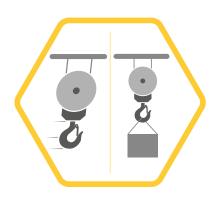
#### Benefits of Anti-sway applications

- More safety and less accident risk
- Protects load and hoist, so reduces the need for the maintenance
- Reduces the responsibility of the operator and accordingly provides more concentration on work
- With a low cycle time (up to 25%), it saves operating time and provides low energy costs especially for automatic machines



#### Anti - Crab System

On cranes with wide bridge spans, excessive stress and wear occur on the wheels due to different reasons such as uneven rails, differences in wheel diameters, differences in motor slip, wheel slip on the rail and unbalanced situation of the load. The anti-crab system detects the speed of the crane over the rail to prevent erosion on rail tracks, and adjusts the speed to prevent misalignment and slip.



# **Load Dependent Speed Control**

By means of the load cell on the hoist, it recognizes if it's loaded or not and idle crane is operated faster in order to expedite the processes. The load-dependent speed settings are adjusted so as not to stress the hoisting and traveling motors. The speed is adjusted be changeable inversely proportional to the handled load, i.e. the speed decreases as the load increases, and it increases as the load decreases.



#### **Electronic Overload Control**

The hoists are equipped with overload application to ensure safety of the crane and their surroundings. According to European Standard EN 12077-2, it is stipulated to use a safety device which stops the system when hoists are overloaded. The electronic overload application also enables following up the safety working period of the cranes.



#### Variable Frequency Drive

The variable freequence drive used in the system provide speed control when the crane is accelerated or decelerated. Soft stops and starts protect the hoist from immediate shocks and impacts, allowing a longer lifetime. If requested, the operator can control the crane at any speed within the set speed range.

#### **Load Status Indicator Screen**

The load / status display screens can be applied in two ways on our cranes:



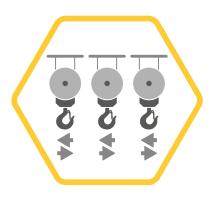
# On the External Display Screen

The weight of the handled load is displayed on the hoist. It can be seen easily at night and during daytime from 50 meters distance. Error, warning and situation information are provided to the user when necessary.



## With Radio Remote Control

With the LCD display on the optionally provided radio remote controls, it's possible to monitor the handled weight, error, warning, and system status information.



#### **Tandem Mode**

Provides managing of two or more cranes from a single control unit, where multiple cranes are required to be operated synchronously. With additional wireless communication between the cranes, it is ensured that all cranes stop functioning in case any failure of any one of the cranes.



#### Fully and Semi-Automatic Process Applications

We develop software's suitable for our customer's processes and provide trouble-free, continuous operation.

# La Special design hoists"



For your hoist requests with different capacity, speed or working class specs that cannot be satisfied within the standard products, we're able to create special designs that are carried out by our engineering team according to the related standards.











# OUR SPECIAL APPLICATIONS

















