

Tiger Air Monorail Trolley Hoists



Main Features

- Range - 10 tonne, 12 tonne, 16 tonne and 20 tonne
- Reliable, fast, efficient, quiet and lightweight
- Greater than 5:1 factor of safety
- Certified for ATEX Category 3 – normal safety



Tiger air monorail trolley hoists are designed for, and proven in, many industries including mining, shipyards, offshore construction and power stations. They are also used for industrial and general engineering applications such as automotive plants, foundries, and heat treatment plants. The hoists operate at air pressures of between 4 and 6 bar. They comply with the requirements of ASME B30.16 and EN14492-2. Our manufacturing facility is ISO9001 certified.

Safety

Anti-fall, anti-derailment and anti-tilt features are standard throughout the range.

Load Limiter

Integral differential pressure load limiting valve automatically prevents the operator lifting a load of more than 125 % of the working load limit. Load limiter is 100 % repeatable at all working pressures and does not wear or generate damaging heat.

Emergency Stop

All monorail hoists are supplied with main line emergency stop as standard. This shuts off the main air supply to the hoist and traverse motors when activated.

Temperature Range

Ambient temperature range -20°C to +70°C (for temperatures outside of this range please contact us for details).

Precise Control

Accurate and precise positioning of loads is standard for all models.

Fail Safe Disc Brake

Non-asbestos self-adjusting disc brake is applied automatically when the air supply to the hoist is shut off. The brake is self-adjusting for the life of the brake and can hold more than 125 % of the working load limit.

Integral Silencer

The exhaust air silencer is built into the hoist gearbox housing and limits the noise level to below 83dB(A).

Load Chain

Grade 8 load chain ensures stringent high-speed duty cycles can be met. The load chain is in accordance with the requirements of EN818-7 Appendix B.

Sealed Gearbox

The sealed planetary gearbox ensures that the most stringent duty cycles can be met. The gears are heat treated and mounted on high strength, low friction bearings.

Vane Motor

Assisted vane lifting ensures maximum starting torque when starting under load.

Ease of Maintenance

The modular design of the hoist allows easy access to internal components such as the motor, gearbox, brake and load limiter. Common parts are used throughout the range.

Optional Chain Carrier

Designed to carry and hold the length of load chain required for the operation, our stainless steel chain bucket is available in different size options. These chain carriers prevent loose chain from getting snagged during lifting or lowering operations and protect any loose chain during transit to and from the operational site.

ATEX

Manufactured in accordance with ATEX Directive 2014/34/EU and Machinery Directive 2006/42/EC and suitable for ATEX Category 3 – normal safety. Our products are assigned as follows: ATEX marking: : Ex II 3 GD c IIB T4 IIIB T135°C. Suitable for gas and dust hazardous areas: Zone 2 (gas) and Zone 22 (dust).



Ex II 3 GD c IIB T4 IIIB T135°C

II	3	GD	c	IIB	T4	IIIB	T135°C
							T135°C Dust Temperature Class: Maximum external surface temperature 135°C
							IIIB Groups of Dust: Protected for group IIIC which includes groups IIIA
							T4 Gas Temperature Class: Maximum external surface temperature 135°C
							IIB Gas Explosion Group: Protected for group IIB which includes group IIA
							c Protection type: Design safety
							GD Ex Atmosphere: Gas and Dust
							3 Category: Normal Safety
							II Equipment Group: surface industries



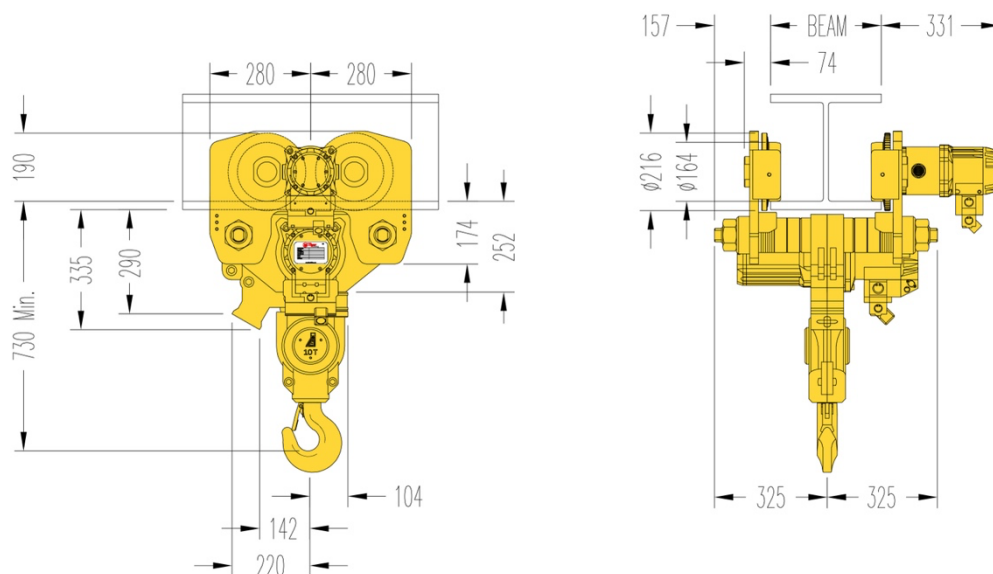
Also available for ATEX Category 2 – high safety – please contact us for more information.

MTH52 Range – 10, 16, 20 tonne Technical Data (at 6 bar)

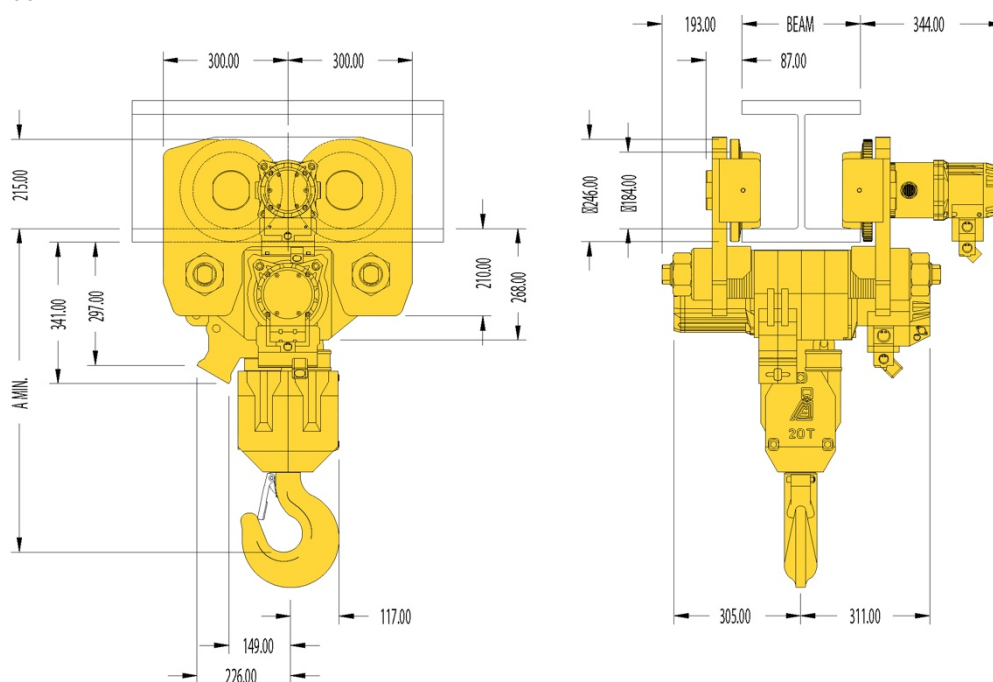
	MTH-102	MTH-120	MTH-160	MTH-200
Lifting Capacity (tonne)	10.0	12.0	16.0	20.0
Falls of Chain	2	2	3	4
Chain Size (mm)	16 x 45	16 x 45	16 x 45	16 x 45
Total Weight (kg) *	380	380	570	595
Full Load Lifting Speed (m/min) @ 6 bar	1.5	1.2	0.9	0.7
Full Load Lifting Speed (m/min) @ 4 bar	0.9	0.8	0.6	0.4
No Load Lifting Speed (m/min)	2.0	2.0	1.1	0.9
Full Load Lowering Speed (m/min) @ 6 bar	2.2	2.2	1.3	1.0
No Load Lowering Speed (m/min) @ 6 bar	1.7	1.7	1.0	0.8
Traverse Speed (m/min) @ 6 bar	12.5	12.5	12.5	12.5
Hoisting Air Consumption (m³/min) @ 6 bar	4.0	4.0	4.0	4.0
Traverse Air Consumption (m³/min) @ 6 bar	2.1	2.1	2.1	2.1
Air Connection	G3/4	G3/4	G3/4	G3/4
Supply Hose (Inside Ø) (mm)	25	25	25	25
Sound Level (dB(A))				
Full Load Lifting @ 6 bar	82	82	82	82
Full Load Lowering @ 6 bar	83	83	83	83
Group Classification	1Bm/M3	1Bm/M3	1Bm/M3	1Bm/M3
Beam Width Range (mm)	150-300	150-300	150-300	150-300
Minimum Headroom (mm)	730	730	742	800

* Weight of MTH52 model includes 3m lift, 2m toggle control. For longer lifts add 11.4kg for MTH-102 & MTH-120, 17.1kg for MTH-160 and 22.8kg for the MTH-200 per metre of lift. For pendant control add 1.6kg.

MTH-100 & MTH-120



MTH-160 & MTH-200



Due to our policy of continual product development, dimensions, weights and specifications may change without prior notice. Please check with your Tiger sales team when ordering.

Bespoke designs available on request – contact info@tigerlifting.com for more information.