

# PNEUMATIC HOISTS

## Introduction

With the RED ROOSTER Air Hoists we specialise in the sale, rental and repair of air powered hoists, trolleys and winches. Our pneumatic hoists with safe working loads ranging from 125 kg to 100 tonne are conform with the EC Machinery Directive and the European Standard for hoists BS EN 14492-2. All of our hoist parts are manufactured in either Japan or Europe, controlled under the ISO 9001: 2008 quality control system.

The RED ROOSTER TMM, TCR, TCS, TNC AND TMH series pneumatic hoists offer a comprehensive range of hoists suited for all types of industrial and marine environments. For use in areas where there is a risk of explosion due to

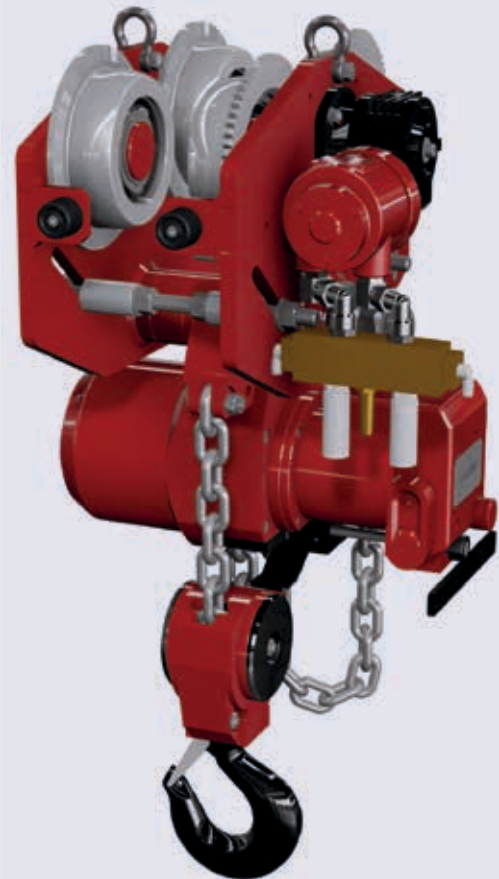
flammable gases or dust, we can offer a range of ATEX classifications to suit your requirements (see ATEX section on page 16). With safety the number one priority, RED ROOSTER hoists have been used and tested for the past 25 years. Where engineers and operators require a hoist fit for purpose, easily controlled and maintained, with readily available spare parts, you'll find RED ROOSTER hoists. We have the perfect lifting solution for where the duty is high, or where a robust hoist is required to withstand harsh conditions. As standard, RED ROOSTER hoists are able to work within a temperature range of -10°C to +70°C, with some slight modifications we can make the hoists suitable to use at -20°C.

### Features

- TOKU high quality vane motor and planetary, gearbox with long life grease
- Overload protection
- High strength cast steel housing for durability
- Compact and lightweight for easy handling
- Extended duty cycles and frequent reversals
- Variable speed for raising and lowering accurately
- Alloy steel hooks with safety catches (Bottom hook fitted with thrust bearing for easy operation)
- Adjustable load limiter (Not for TMM, TCR Mini or TCS)
- Failsafe automatic disk brake (fully enclosed) ensures the load cannot fall if power is lost
- Emergency stop
- Mechanical upper and lower hoist limits
- Lifting heights to meet your needs
- Choice of cord, pendant control or control systems
- Low noise level down to 80 dB (Silencer and filter easily changed)
- Low air consumption (TCR and TMH model)
- Air pressure from 4.5 to 6 Bar (7 Bar maximum)
- Durable in harsh environments
- Self cooling air motor with the exhaust over the motor
- Low maintenance
- Easily available spares at the right conditions
- Hoist body manufactured in Japan, all other parts in Europe
- High quality calibrated load chain of European/ Japanese manufacture with 5:1 FOS
- High speed (TCS model)
- Special designed hoists and trolleys
- Ex classification to EC directive 94/9/EC (ATEX models)
- Various paint specifications and colours

### Used in various industries

Offshore oil industry, assembly lines, power plants, refineries, mechanical engineering, shipyards, foundries, oil storage and many other industries.

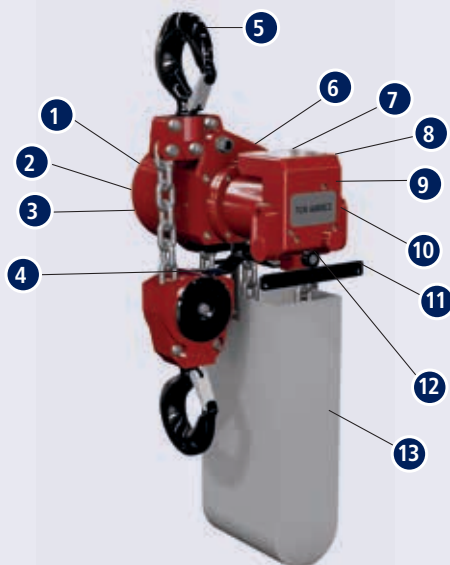


## SECTION 1

# PNEUMATIC HOISTS

Model	WLL (kg)	Chain falls	Air consumption (l/sec)		Full load lifting speed (m/min)	Minimum hose dia (I/D)	Page
			Raising	Lowering			
TCR-125	125	1	15	16	14	0,5"	20
TMM-140AE	140	1	10,5	10,8	9,3	11"	18
TCR-250ME	250	1	11,7	13,3	8	0,5"	19
TCR-250	250	1	15	16	9,3	0,5"	21
TCR-600250	250	1	25	27	10,5	0,5"	23
TCR-500	500	1	25	27	10,5	0,5"	23
TCR-500/2	500	2	15	16	4,6	0,5"	23
TCS-500	500	1	28	33	17	0,5"	22
TCS-980	980	2	28	33	8,5	0,5"	22
TCR-1000/2	1.000	2	25	27	5,3	0,5"	23
TCR-1000	1.000	1	25	28	6	0,5"	24
TCR-2000/2	2.000	2	25	30	3	0,5"	24
TCR-3000	3.000	1	33	43	2,8	0,75"	25
TMH-3000	3.000	1	64	78	5,5	1"	27
TCR-6000/2	6.000	2	33	43	1,4	0,75"	25
TMH-6000/2	6.000	2	64	78	2,7	1"	27
TCR-9000/3	9.000	3	33	43	0,9	0,75"	26
TMH-9000/3	9.000	3	64	78	1,8	1"	27
TNC-10TW	10.000	2	90	100	1,5	1"	27
TCR-12000/4	12.000	4	33	43	0,7	0,75"	26
TMH-12000/4	12.000	4	64	78	1,4	1"	27
TCR-15000/5	15.000	5	33	43	0,6	0,75"	26
TMH-15000/5	15.000	5	64	78	1,1	1"	27
TNC-15TW/3	15.000	3	90	100	1	1"	28
TNC-20TW/4	20.000	4	90	100	0,75	1"	28
TNC-25TW	25.000	2	90	100	0,6	1"	29
TNC-37.5TW/3	37.500	3	90	100	0,35	1"	29
TNC-50TW/4	50.000	4	90	100	0,3	1"	30
TNC-75TW/6	75.000	6	2x90	2x100	0,35	1"	30

## Pneumatic Hoist



1. All steel construction (Alluminium body for TCR mini and TCS)
2. Planetary gear box
3. Failsafe automatic disk brake
4. Upper and lower limit switches
5. Hook options
6. Various paint options - standard to full offshore specification
7. Low noise emissions and self cooling exhaust
8. Low air consumption
9. Overload protection (Not TCR mini, TMM or TCS)
10. Spring loaded vane motor
11. Cord or range of pendant control
12. Built in emergency stop valve on pendant model
13. Chain bag or bucket

## SECTION 1

# PNEUMATIC TROLLEYS

The RED ROOSTER range of trolleys is designed to match our range of pneumatic hoists, with capacities from 250 kg to 50 tonne, but they are easily adapted to be used with other manufacturers hoists. The trolleys are designed to work on a wide range of beam sizes and beam types, with

parallel or tapered flanges. The trolley can either have a lifting lug to hook in the hoist or be built in using a link plate. The versatile design and interchangeable parts can be used on a range of geared, low headroom, articulated and overhead crane units.

Model*	WLL (kg)	No. of wheels	No. of driven wheels	Min. bend radius (m)	Min. hose dia (I/D)	Air consumption	Speed (m/min)*		
							A*	B*	C*
AT2S	Up to 2.000	4	2	1.5	0,5"	25 l/sec	9	6	12
AT3S	3.000	4	2	2	0,75"	25 l/sec	6	6	12
AT6S	6.000	4	2	2.5	0,75"	25 l/sec	6	6	12
AT10S	9.000 /10.000 /12.000	4	2	2.5	1"	50 l/sec	8	8	-
AT15S	15.000	4	2	3	1"	50 l/sec	6	6	-
AT25S	20.000	4	2	3	1"	50 l/sec	4	4	-
AT25S	25.000	4	2	3	1"	50 l/sec	4	4	-
AT25-2S	25.000	8	4	Straight	1" / 1,25"	100 l/sec	6	6	-
AT37.5-2S	35.000	8	4	Straight	1" / 1,25"	100 l/sec	4	4	-
AT50-2S	50.000	8	4	Straight	1" / 1,25"	100 l/sec	4	4	-

\* AT...S = standard, AT...ATX = ATEX / Other trolley speeds available on request

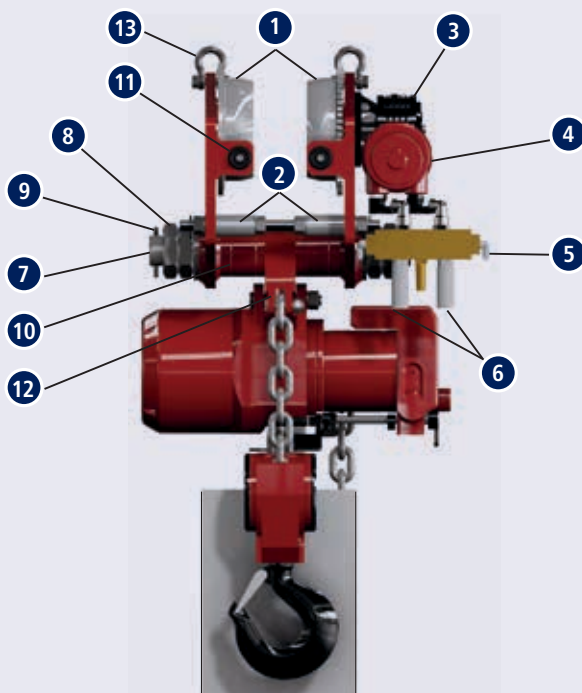
\* A = standard, B = ATEX, C = optional

Type	Model
Low Headroom	LHR
Ultra Low Headroom	ULH
Articulated	ART
Rack & Pinion	RP

For all pneumatic trolleys	
Standard trolley temperature	-10°C to +50°C
Optional trolley temperature	-20°C to +70°C
Air pressure	6 Bar / 90 PSI
Wheel material	Steel / Bronze

With our vast experience, in house design and manufacturing facilities, we can also offer a range of special trolleys. We can modify existing products or design to produce a custom made solution.

## Pneumatic Trolley



1. Trolley wheels with sealed bearings (to suit flat or tapered beams)
2. Anti tilt rollers (can be set to suit flange)
3. Gear box (self locking)
4. Air motor
5. Control valve
6. Silencers (low noise levels)
7. Load bar (wide range to suit beam)
8. Lock nuts
9. Split pin
10. Adjusting spacers / washers (for easy adjustment)
11. Rubber buffers (standard on ATEX units)
12. Link plate (to suit all RED ROOSTER hoists)
13. Lift points in side plates for shackles

## SECTION 1

# STANDARD PUSH AND GEARED TROLLEYS 250 KG TO 3 TONNE

Designed to operate with our range of pneumatic hoists our standard push and geared trolleys are easily adapted to be used with other manufacturers hoists or as part of a travelling system.

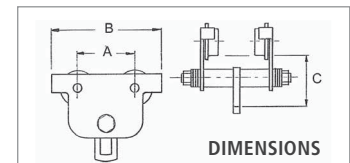
The trolleys are designed to work on a wide range of beam sizes and beam types, with parallel or tapered flanges. The trolley can either have a lifting lug to hook in the hoist or be built in using a link plate. The versatile design and interchangeable parts can be used on a range of geared, low headroom, articulated and overhead crane units.



GEARED TROLLEY GT



PUSH TROLLEY PT



DIMENSIONS

### Push trolleys PT

Model	Capacity (kg)	Range 1	Service	Dimensions A	Dimensions B	Dimensions C	Min. band radius	Weight push
TSP005/010	250 to 1.000	58 - 163 mm	Standard	112	182	106	1,3	8
TSP020	2.000	82 - 204 mm	Standard	131	280	129	1,5	14
TSP030	3.000	82 - 204 mm	Standard	152	324	169	1,7	23

Trolleys supplied for Hook In as standard / Link plate to build in optional

PT/2/R1-ATEX	250 to 1.000	58 - 163 mm	ATEX	131	280	129	1,5	14
PT/2/R2-ATEX	250 to 1.000	163 - 305 mm	ATEX	131	280	129	1,5	14
PT/3/R1-ATEX	3.000	100 - 204 mm	ATEX	152	324	169	1,7	23
PT/3/R2-ATEX	3.000	204 - 305 mm	ATEX	152	324	169	1,7	23

Trolleys supplied for Hook In as standard / Link plate to build in optional

### Geared trolleys GT

Model	Capacity (kg)	Range	Service	Dimensions A	Dimensions B	Dimensions C	Min. band radius	Weight geared
TSG010	250 to 1.000	58 - 163 mm	Standard	112	182	106	1,3	12
TSG020	2.000	82 - 204 mm	Standard	131	280	129	1,5	19
TSG030	3.000	82 - 204 mm	Standard	152	324	169	1,7	27

Link plate to build in optional

GT/2/R1-ATEX	250 to 1.000	58 - 163 mm	ATEX	131	280	129	1,5	19
GT/2/R2-ATEX	250 to 1.000	163 - 305 mm	ATEX	131	280	129	1,5	19
GT/3/R1-ATEX	3.000	100 - 204 mm	ATEX	152	324	169	1,7	27
GT/3/R2-ATEX	3.000	204 - 305 mm	ATEX	152	324	169	1,7	27

Link plate to build in optional

#### Features

- Good load to weight ratio
- Wheels profiled to run on parallel or tapered beams
- Steel or bronze wheels
- Sealed heavy duty bearings
- Anti drop plates
- Anti tilt rollers
- Easy to install
- Operates on curved beams, see specification for minimum radius
- Easily available spare parts at the right conditions
- Manufactured in the UK with EU motor gearbox
- Flange width up to 305 mm

#### Extra Features/Special designs

- Anti collision bumpers
- Larger capacities available
- Rack and Pinion drive (geared)
- Special paint systems
- Special design to fit any beam
- Parking brake
- ATEX specification cat. IIB & IIC

## SECTION 1

# OPTIONAL FEATURES AND CERTIFICATION

Every RED ROOSTER product is subject to the most rigorous examination and test prior to dispatch. Our testing facilities allow us to carry out dynamic testing up to 65 tonne with static testing up to 400 tonne.

We are specialists in the repair of our own and other manufacturer's hoists. After inspection, a report and

quotation is issued to enable the customer to decide on the viability of the repair. Once authorized by the customer the repair is dealt with promptly and efficiently to ensure a speedy return.

The company has been certified by BSI to ISO 9001: 2008 for quality.

### Optional features

- Marine Specification/Corrosion resistant
- Paint systems from C2 - Industrial to C5 - Offshore specification (Red finish as standard. Other RAL colours available on request)
- Choice of pendants
- Radio control pendant for electro pneumatic controls
- Control systems
- Chain collectors (PVC, galvanised or stainless steel)
- Various types of hook or clevis available
- Air supply systems and valves
- Piped away exhaust air
- In house design for "specials"
- Festoon systems
- Main air shut off valve

### ATEX - According to EC Directive 94/9/EC (Ex Classification)

- Marine Specification/Corrosion
- Standard hoists are suitable for use in areas certified as Group II 3 GD c IIA T4 (135°C) <sup>1)</sup>
- With extra protection can be used in areas certified as Group II 2 GD c IIB T4 (135°C) <sup>2)</sup>
- Further protection allows the hoist to work in areas certified as Group II 2 GD c IIC T4 (135°C) <sup>2)</sup> (not suitable for TCR Mini or TCS range)
- In house design for "specials"

<sup>1)</sup> Formerly known as zone 2 & 22

<sup>2)</sup> Formerly known as zone 1 & 21

### Standard documentation

- Report of Thorough Examination
- CE Declaration of Conformity (Machinery Directive)
- Hoist manual, safety instructions
- Explosion drawing & parts list
- Chain certificates
- Hook certificates

### Additional documentation/certification

- Painting certificates
- ATEX certificate
- Certificate of Conformity
- Certificate of Origin
- Material certificates
- Witness tests - Lloyds Register, DNV, BV, etc.
- Documentation package, quality plan, procedures, factory acceptance tests, etc.

## SECTION 1

# CROSS HAULING WITH RED ROOSTER HOISTS

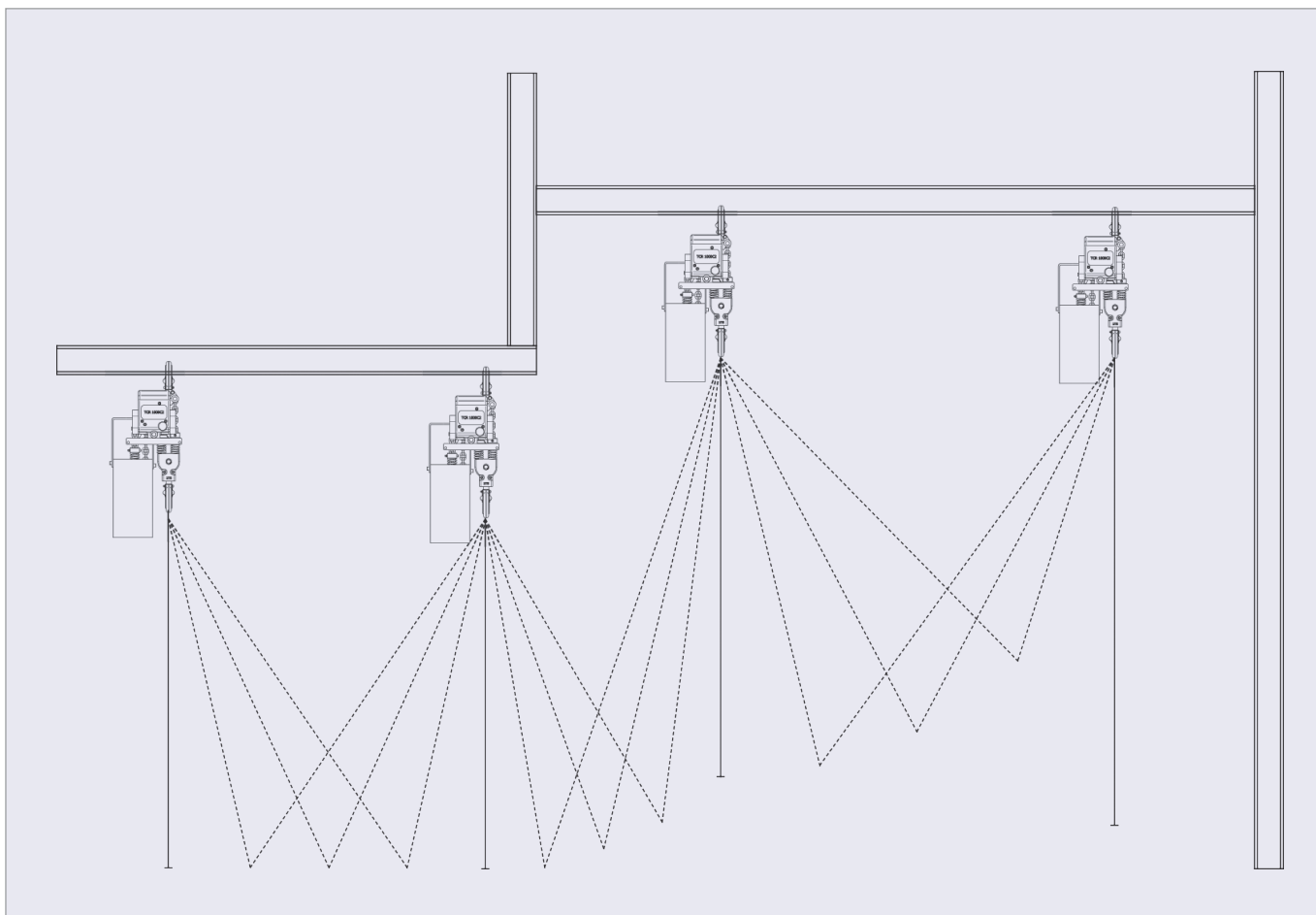
Like all air hoists, the RED ROOSTER hoist range is designed for vertical lifting. Under special circumstances, cross hauling can be achieved with single or two-fall hoist models, up to an angle of 20 degrees from the vertical, with 25 degrees on some capacities under specific conditions.

It is imperative that special precautions are in place for cross hauling applications - a lift plan, method statement and a risk assessment should be completed by a qualified person.

A site assessment should be carried out, checking the structure from which the hoists will be suspended, the hoist locations (route of travel), operator position and also the shape size and weight of the item to be cross hauled.

Site conditions should always be taken into account as different problems will be encountered at each site. We recommend tag lines to be attached to the hoists and wherever possible, lower the load down to the next hoist at an angle letting it take the load, then raise at a much reduced angle.

For all cross hauling applications, please contact our specialists to confirm the suitability of our hoists for the application.



## SECTION 1

# MARINE AND CORROSIVE PROTECTION PAINT SYSTEMS

We have established paint application systems to control the painting of our equipment based on ISO 12944.

Our systems can also be used for several parts of NORSOK M501. These systems give good durability with resistance to water, abrasion, chemicals and are flexible.

For our C2 and C3 systems we use Jotun paints Penguard FC Epoxy. For the high marine specifications C4 and C5 we use an anti-corrosive primer with a hardtop CA acrylic top coat.

Corrosive category and risk	Examples of typical environments in a temperate climate (info only)	
	Exterior	Interior
<b>C1 very low</b>	-	Heated buildings with clean atmospheres, e.g. offices, shops, schools, hotels
<b>C2 low</b>	Atmospheres with low level of pollution. Mostly rural areas	Unheated buildings where condensation may occur, e.g. depots, sports halls
<b>C3 medium</b>	Urban and industrial atmospheres, moderate sulphur dioxide pollution. Coastal area with low salinity	Production rooms with high humidity and some air pollution e.g. food-processing plants, laundries, breweries, dairies
<b>C4 high</b>	Industrial areas and coastal areas with moderate salinity	Chemical plants, swimming pools, coastal, ship and boatyards
<b>C5-1 very high (industrial)</b>	Industrial areas with high humidity and aggressive atmosphere	Buildings or areas with almost permanent condensation and high pollution
<b>C5-M very high (marine)</b>	Coastal and offshore areas with high salinity	Buildings or areas with almost permanent condensation and high pollution

A specialist painting contractor is used when other painting specifications are required. Not all painting systems are suitable for use on our air hoists and trolleys due to the shape and size of the equipment.

