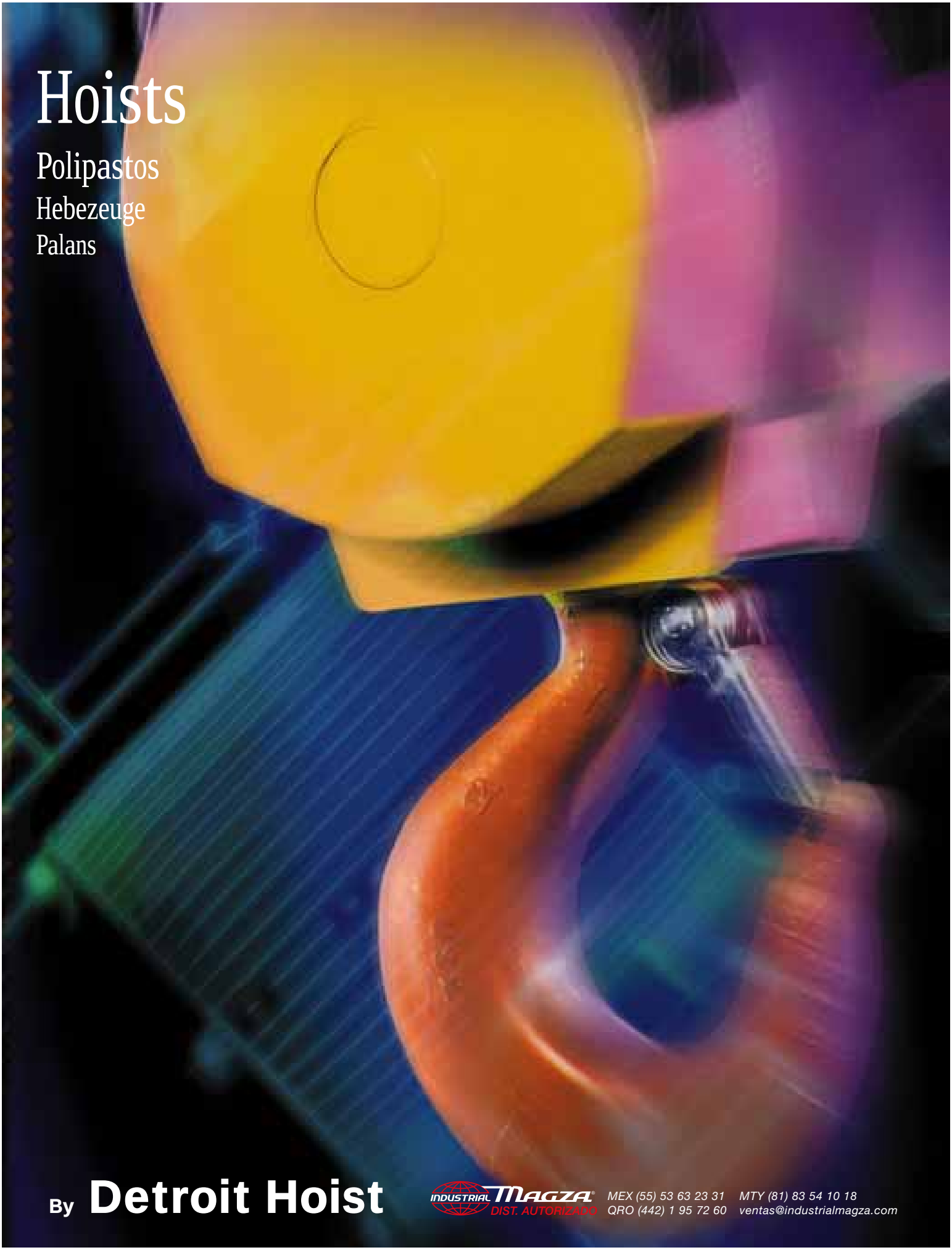
Hoists

Polipastos
Hebezeuge
Palans



By **Detroit Hoist**

Better Cranes Begin with Detroit Hoist

At the forefront of hoist technology - US made since 1905

For almost a century Detroit Hoist has designed and manufactured wire rope hoists. Many of the nation's leading companies were among it's early users, relationships which in many cases continue to this day. On-going research and development continues to yield remarkable innovations and provide the user with more choices of a reliable and rugged machine to handle loads safely and economically into the next century.

Mission Statement

Detroit Hoist is committed to providing top-quality, state-of-the-art hoists and crane components. Customer satisfaction is paramount for our continued success and we are striving to be the best at what we do and to deliver what we promise—on time and at competitive prices.

Product Support

Each hoist is delivered with operation– and maintenance instructions, parts lists and wiring diagrams. Most spare parts for current– and past production models are available for immediate shipment from our central warehouse in Michigan. Expert advice and authorized service location nearest you is available from our in-house advisory service 800-521-9126 or e-mail service@detroithoist.com.

Load Tests & Inspection

Every Detroit hoist is load tested to 125% of rated capacity in accordance with HMI standards, inspected and adjusted as necessary prior to delivery to ensure complete confidence and customer satisfaction.

Hoist Duty Service Classification (as defined by ASME HST-4M-1991)

Hoist Duty Class	Typical Areas of Application	Operational Time Ratings at *K* = 0.65			
		Uniformly Distributed Work Periods		Infrequent Work Periods	
		Max.ON Time, min/hr	Max.No. Starts/hr	Max.ON Time From Cold Start, min	Max. No. of Starts
H1	Powerhouse & utilities, infrequent handling. Hoists used primarily to install & service heavy equipment, where loads frequently approach rated load, and where the hoist is idle for 1 to 6 month periods between periods of operation.	7.5 (12.5%)	75	15	100
H2	**Light machine shop, fabricating service, and maintenance. Loads and utilization randomly distributed. Rated loads infrequently handled. Total running time not over 12.5% of the work period.**	**7.5 (12.5%)**	**75**	**15**	**100**
H3	**General machine shop, fabricating, assembly, storage, and warehousing. Loads and utilization randomly distributed. Total running time not over 25% of the work period.**	**15 (25%)**	**150**	**30**	**200**
H4	**High volume handling of heavy loads, frequently near rated load in steel warehousing, machine and fabricating shops, mills, and foundries, with total running time not over 50% of the work period.**	**30 (50%)**	**300**	**30**	**300**
H5	Bulk handling of material in combination with buckets, magnets or other heavy attachments. Equipment often cab operated. Duty cycles approaching continuous operation are frequently necessary. User must specify exact details of operation, including weight of attachments.	60 (100%)	600	N/A there are no infrequent work periods in this class.	

Wire Rope Hoists to 50 Ton Capacity

Electric Hoists

Detroit hoists meet and exceed industry safety standards. Each hoist is designed and manufactured to meet or exceed HMI, H3/H4, OSHA, ANSIand NEC standards for duty cycles typical of general machine shops, fabrication and warehousing.

Caution: Detroit Hoists products are not intended to lift or transport human beings.

Many models and modifications are available to suit individual operating conditions and environments from standard indoor, to outdoor, to hazardous environments. Value and reliability is made possible through the use of time proven serial components. Modular designs facilitate customized solutions of specific applications at reasonable cost.

A wide range of electric motors, control systems and rope reeving methods result in an enormous variety of capacities, hoist speeds and lifting heights. Most models feature 'true vertical lift' as standard. The table below shows but a few of all available choices. Please contact us or a dealer nearest you for assistance in selecting the right hoist for your operation.

Pneumatic Hoists

Most hoist models are also available with piston-type air operated motors and controls and with spark resistant features for hazardous environments.

Hoist Model	HP	Capacity Ton						Lifting Speed FPM						Lifting Height FT (Max. available)					
DL	5	2.5	5					28	14					50	25				
	10	5	10					28	14					50	25				
DH	5	3		5						15				82		39			
	7.5			5						21						39			
D (Dynex)	5	3			7.5			30			10			177			41		
	7.5			5	7.5					21	15					86	41		
	10			5	10					30	15					86	41		
					15						10						41		
	14					20						10						41	
	15			7.5	15					30	15					86	41		
F (Futura)	20	10		10	20		30	30		30	15		10	280		158	77		49
	30			15	25		40			30	15		10			147	71		46
	40						50				24		10						40
Reeving		2/1	4/1	4/2	8/2	10/2	12/2	2/1	4/1	4/2	8/2	10/2	12/2	2/1	4/1	4/2	8/2	10/2	12/2

Come up to the Quality of Detroit Hoist

Hoist Motors

Heavy duty, cast iron frame, design D, class F insulated, 60-minute rated motors are totally enclosed, fan-cooled and provide protection against vapors, dust and abrasives. Rated for Class I, Division 2 hazardous areas. Built-in thermal sensors guard against overheating.

Options

- Pole-changing motors 4/12 pole
- Explosion proof motors
- Air piston motors

Motor Brake

DC rectified double sided disc brake, heavy duty brake coil, premium asbestos free brake linings, for long life and low maintenance.

Options

- AC multi disc wet brake for severe applications. Oil shear technology eliminates disc wear and downtime due to brake maintenance.
- Dynamic braking through frequency inverter

Hoist Gearbox

Totally enclosed gear case with oil level sight glass, lifetime lubricated gear train. Forged alloy gears, helical cut, no overhung loads, no couplings, 3rd gear has splined output shaft to connect directly to drum spline input. Designed to AGMA standards.

Options

- For specific applications, this gearbox is available without mechanical load

Mechanical Load Brake

The Detroit Hoist mechanical load brake is self adjusting and serves as a secondary braking system to control, stop and hold the load independent of the motor brake.

The brake features a sprag design with a minimum of 18 brake elements for the smallest load brake size. The locking mechanism is designed to last the lifetime of the hoist.

Options

- Available also as free fall speed control rather than as a holding brake.

Rope Drum

Rope drums are machined to accurate o.d. and grooved to accommodate the full length of wire rope in one layer. Rope wedges lock the rope securely into wedge pockets at rope termination points. Drum diameters and groove depths meet the recommendation of HMI and other international standards.

Drum spline connects directly to the gearbox output spline. Spline is connection covered by lifetime warranty.

Options

- Drum hardened for severe use or constant lifts in specific sectors.

Rope Reeving Components

Most of our hoists feature 'true vertical lift', i.e. the hook remains centered at all times beneath the hoist. All sheaves are provided with sealed bearings. The load block frame is a weldment with the hook saddle secured by shear pins. Sheave covers are machined from rugged castings. The hook rotates 360º on a thrust bearing and is fitted with a safety latch.

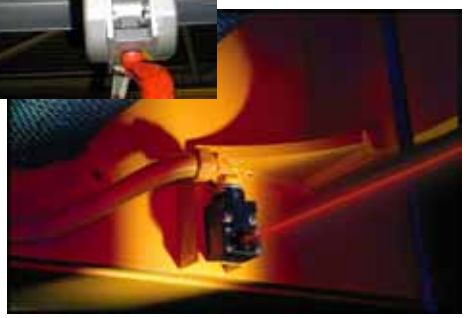
Optional rope guides ensure that ropes remain safely and securely seated in drum grooves.

New: Rope Equalizer Pivot Lever System (Patent pending)

Ask for our special bulletin describing benefits of this system for new and existing wire rope hoists.

Limit Switches

Photoelectric sensor automatically stops the hoisting motion when the load block reaches its maximum safe operating height. Indicator lights are visible to operator at shop floor level. Unlimited operations and unaffected by wear this switch is superior to mechanical levers.



Options

- Proximity limit switches for operational purposes.
- Geared upper & lower limit switch.

Hoist Controls

NEMA 12 sheet metal enclosures to suit most indoor environments are standard.

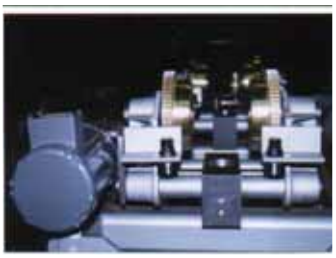
NEMA 4 or NEMA 7 enclosures are available for special environments. Controls include reversing contactors, manual reset circuit breakers, primary & secondary fuses for the control transformer standard rated at 150VA. Speed timers are used on 2-speed applications.

Options

- Frequency inverters
- Push button pendants
- Radio remote control

Maxilift™ Trolleys (for maximum lift & minimum clearance)

TRUTRAK™ Monorail Trolleys



- Wheels driven on both sides of runway for positive traction and reduced wheel wear.
- Motorized or hand geared.
- Field adjustable for a wide range of S and WF beams and box girder sections.
- Single flange wheels cast from GGG70 ductile iron containing graphite to reduce noise, wheel wear and maintenance. Bronze wheels available for spark resistant applications. Wheels furnished with sealed bearings.
- Drop stops and bumpers.

Options

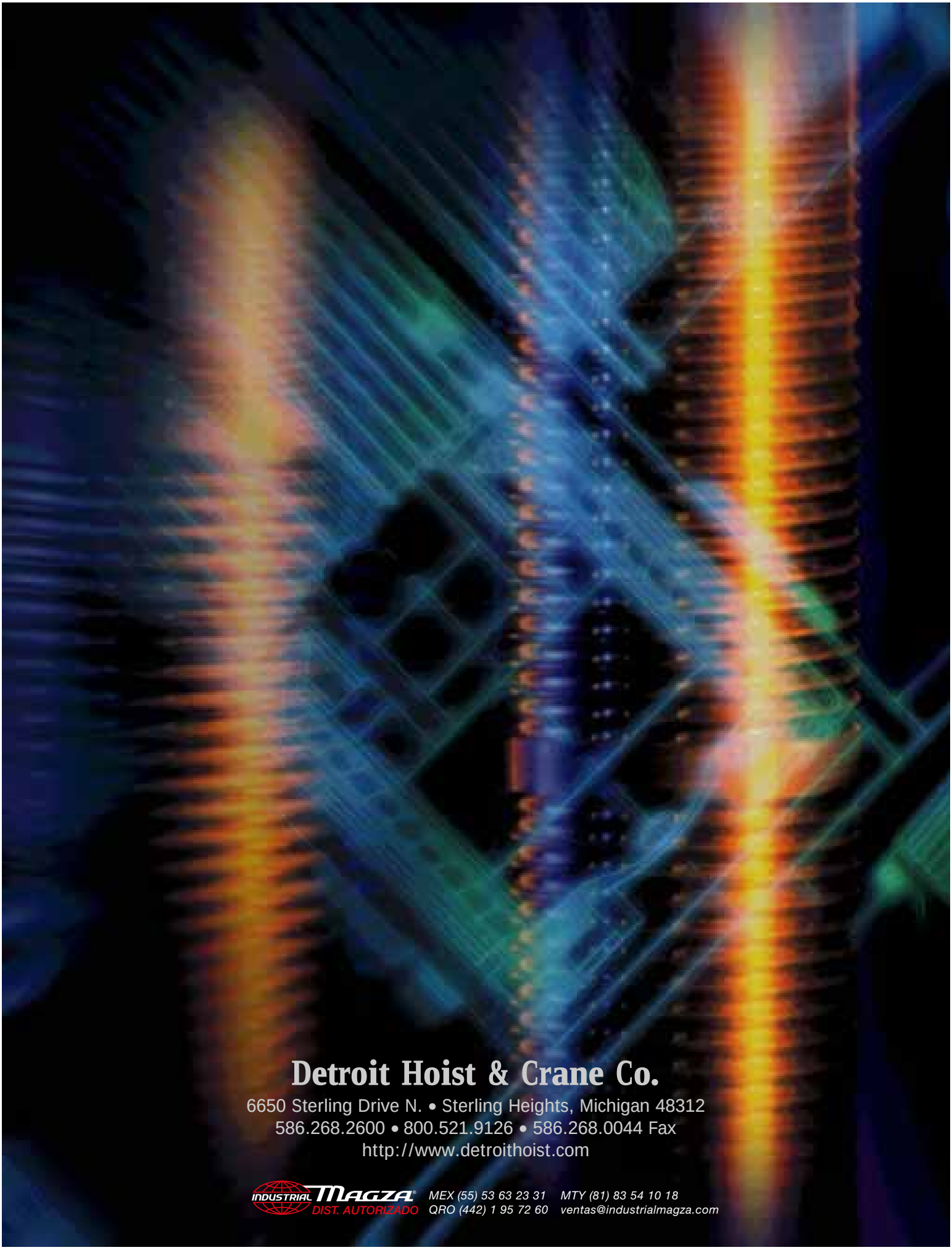
- Swivel articulated models for curved runways.
- Cross mounted available for special applications, e.g. tool & die shops etc.
- Hardened wheels.

Double Girder Trolleys—Low Profile

- Top running - double flanged wheels.
- Under running - single flanged wheels.
- Wheels cast from GGG70 ductile iron containing graphite to reduce noise, maintenance & wheel wear. Bronze wheels available for spark resistant applications. Wheels furnished with sealed bearings.
- Rail sweeps and rubber bumpers are standard.

Options

- 90º rotated & stooled down models
- Electronic soft start device
- 2-speed trolley travel
- Variable speeds thru frequency inverters



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