



REFERENCES



3M
 FERRARI
 MONSANTO
 ABB
 FERRERO
 NESTLE'
 AKZO FIBERS
 FIAT
 NISSAN
 AMOCO FABRICS
 FIRESTONE
 PECHINEY
 OPEL
 APRILIA
 FORD
 PEUGEOT
 AUDI
 GENERAL MOTORS
 PHARMACIA LEO THERAPEUTICS
 B.P. CHEMICALS
 GLAXO
 PHILIP MORRIS
 GOODYEAR
 PIAGGIO
 BANQUE DE FRANCE
 BANK OF ENGLAND
 HEWLETT PACKARD
 PIRELLI
 BEKAERT
 HOECHST
 PPG
 BMW
 HOECHST CELANESE
 PROCTER & GAMBLE
 BRITISH AMERICAN TOBACCO

IBM
 RENAULT
 ROLLS ROYCE
 ISUZU
 REYNOLDS TOBACCO
 ITALTEL
 RHONE POULENC
 CIBA GEIGY
 JOHNSON & JOHNSON
 SAAB / SCANIA
 CITROEN
 KELLOGGS
 SARA LEE
 COCA COLA
 KIMBERLY CLARK
 SHELL
 COMAU
 KODAK
 STILL
 CONTINENTAL
 KRAFT GENERAL FOODS
 THYSSEN
 DAIMLER CHRYSLER
 UNIFI
 DUNLOP
 UNIROYAL
 DUPONT
 MERLONI
 VARTA
 ENICHEM
 MICHELIN
 VOLVO
 FAR EASTERN TEXTILE
 MOET & CHANDON
 ZANUSSI



Which is your ideal

LIFTRONIC® Series

New generation electronic manipulators

Intelligent and sensitive

The LIFTRONIC® series zero gravity balancers named Intelligent Devices for Handling or simply INDEVA are an evolution of the traditional manipulators. Equipped with advanced microprocessor based logic instead of the traditional pneumatic logic, the INDEVA are not affected by the typical technological limitations of pneumatic manipulators and can achieve a far better performance. The LIFTRONIC® series INDEVA are more compact and lighter compared to traditional manipulators and allow operators to handle loads with greater speed and precision. Thanks to their advanced control system the INDEVA instantaneously adjust to changes in load mass and operator intent with no manual adjustment required. By simply grasping the in-line handle or the load itself (float mode) and gently applying force in the desired direction, the operator can handle loads as if they weighed only a few grams.



Real manipulator?

PN Series

Traditional pneumatic manipulators
Practical and strong

The PN series manipulators are completely pneumatic balancers to lift, move, turn and position loads up to 250 kg

as if they were almost weightless.

Reliable, robust and versatile, they are suitable for handling offset loads.

All the PN series balancers can be designed according to the ATEX regulations as per the EU Directives 94/9 regarding applications in controlled environments with danger of explosion, classified classes 1 and 2 (Gas).



Universal Intelligent Balancer INDEVA

Intelligent Device for Handling

LIFTRONIC®

LIFTRONIC® is an Indeva. Models are available with capacity from 80 to 320 kg, including the end effector. It can be installed to different supports: column with Orbit_Arm®, ceiling, overhead rails and Liftruck®. Our modular tooling concept "MODULO" and the microprocessor programmable logic make LIFTRONIC® a unique load handling solution that matches demands in every industry field.

VERSATILE It can be equipped with countless types of lifting tools, (mechanic, magnetic or vacuum), manually, electrically or pneumatically driven.

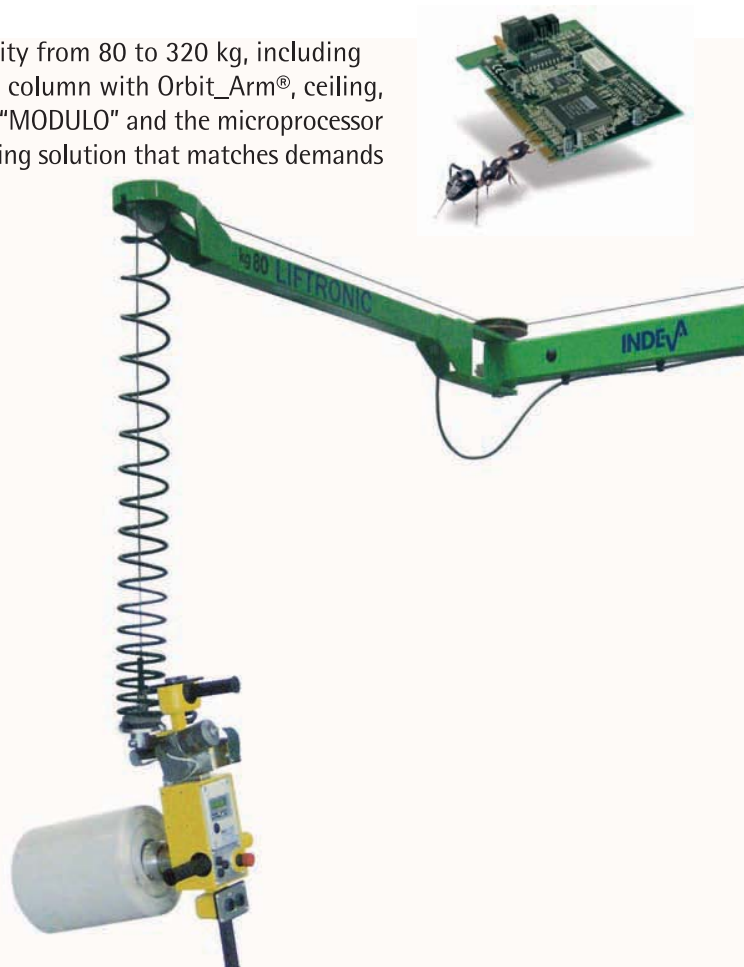
SELF-BALANCING A microprocessor based device allows the instant and automatic compensation of the load weight.

ERGONOMIC The fingertip control mode by means of an in-line force sensing handle, provides immediate response to the operator's movement up or down. This drastically reduces inertia and allows the system to operate as an extension of the operator's arm. The float control mode allows direct handling (hands on the load) without handles or buttons.

FAST The latest technology motor drive and electronic control allow for much higher speed than achievable with traditional manipulators.

LIGHT Weighing just 40 kg, it can be easily installed on light structures. Its lifting tools are lighter and smaller than those used with the pneumatic manipulators and allow for better visibility and easier maneuverability.

SAFE A failsafe mechanic lock is triggered in the case of a power shortage and a brake limits the lowering speed of the motor.



Overhead rail and ceiling mounted models for gross capacities up to 320 kg are also available.

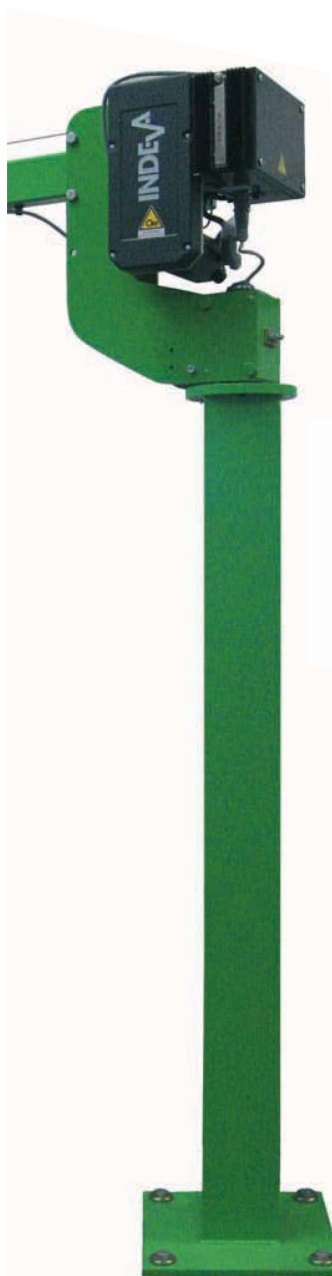
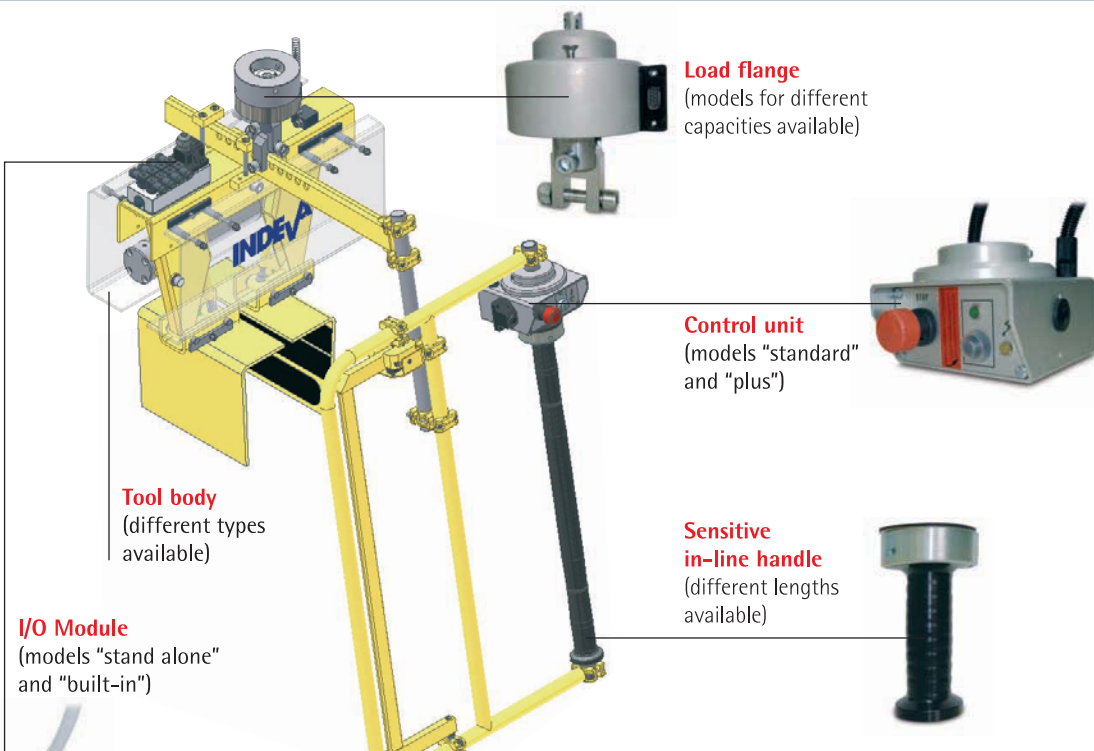
MODELS		COLUMN MOUNTED MODELS				
		L80C	L125C	L160C	L240C	L320C
Gross capacity (including lifting tool)	Kg	80	125	160	240	320
Vertical stroke	m	3	2,8	2,8	1,87	1,45
Lifting speed max	m/min	36	22,5	18	12	9
Power supply	V-AC Hz	110-230 50/60				
Power consumption max	VA	700				
Enclosure protection	IP	54				



Be flexible, think modular

INDEVA "MODULO" TECHNOLOGY MEANS:

- more flexible and easily modified to suit new work requirements
- shorter design and manufacture lead time
- more reliable
- less and easier maintenance

Load flange
(models for different capacities available)

Control unit
(models "standard" and "plus")

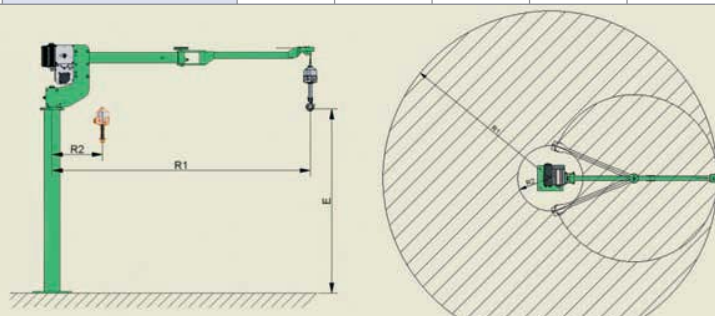
Sensitive in-line handle
(different lengths available)

Tool body
(different types available)

I/O Module
(models "stand alone" and "built-in")

JOINTED ARMS TECHNICAL SPECIFICATIONS
capacity (LC) and uncovered area (R2)

		R1 (m)	ARM LENGTH (R1)			
			2,5	3	3,5	4
STRUCTURE	LIGHT	LC (kg)	80	60	40	-
		R2 (mm)	460	550	650	-
	HEAVY	LC (kg)	260	190	140	105
		R2 (mm)	630	760	880	1020
	EXTRA	LC (kg)	-	320	320	280
		R2 (mm)	-	860	1005	1150



Data relative to both Liftronic series versions (Liftronic and Liftronic Easy).



Compact intelligent Balancer INDEVA

Intelligent Device for handling

LIFTRONIC® Easy

LIFTRONIC® EASY belongs to the Liftronic® series; designed for simple applications, non-complex and rapid work cycles. It is used with mechanic lifting tools (hooks, pantograph chucks, jaws, clamps, etc...), LIFTRONIC® EASY features an advanced pre-programmed logic that makes its performance really unique, yet it is simple to install and maintain. All this combined with its competitive price makes LIFTRONIC® EASY a really cost effective investment with very high short term returns. Different models are available for capacities up to 240 kg and for applications on different supports such as freestanding column, ceiling, overhead rails and jibs.



The Universal head: this contains the microprocessor controlled system logic. A balancing device automatically and continually detects and compensates the load weight. A special force sensing handle provides extremely fine control of up/down speed, thus drastically reducing inertia. The Float mode function allows operators to perform precision tasks with their hands on the load itself for maximum control.



Linear pantograph

By means of a linear pantograph INDEVA it is possible to handle loads of different sizes and configurations by a simple and quick jaw adjustment or replacement.



Compact pantograph: 8 configurations of a modular linear pantograph INDEVA.



Scissor type pantograph

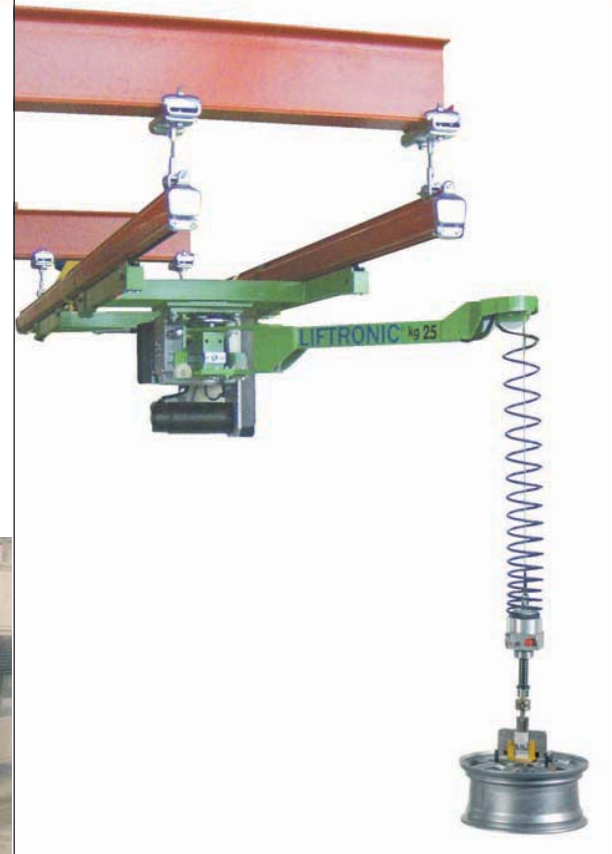
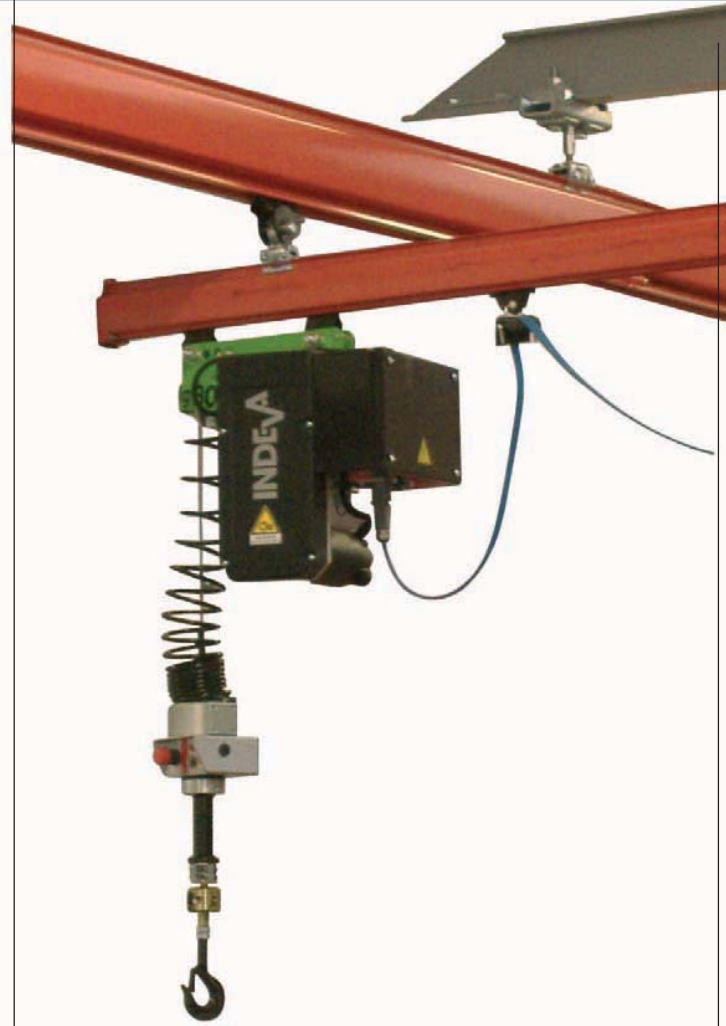
Lifting tool easy to adjust to different load sizes.



Overhead rail and ceiling mounted models for gross capacities up to 240 kg are also available.

		COLUMN MOUNTED MODELS			
		E80C	E125C	E160C	E240C
Gross capacity (including lifting tool)	Kg	80	125	160	240
Vertical stroke	m	3	2,8	2,8	1,87
Lifting speed max	m/min	36	22,5	18	12
Power supply	V-AC Hz	110-230 50/60			
Power consumption max	VA	700			
Enclosure protection	IP	54			





Traditional Pneumatic Manipulator

PN Series

The PN series pneumatic manipulators are completely pneumatic balancers for capacity up to 250 kg including lifting tool. Different models are available: PN ERGO, PN FLEX, PN COMPATTO and PN ZIP, and different supports such as column, ceiling, overhead rails mounted.



ERGONOMIC The specially designed position of the cylinder grants consistent load balancing along the whole vertical stroke.

RELIABLE It's complete pneumatic logic guarantees a high level of long-term reliability and very simple maintenance.

SAFE Equipped with safety devices that retain the grip on the load, even in case of air supply interruption. Special brakes keep the arm and gripping tool still when not used.

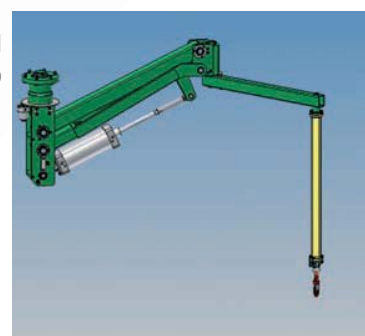
VERSATILE It can be equipped with countless types of lifting tools, mechanic or vacuum, standard or custom made.



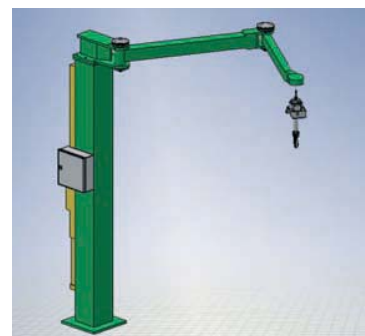
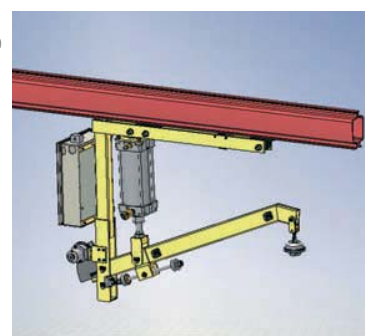
PN Ergo



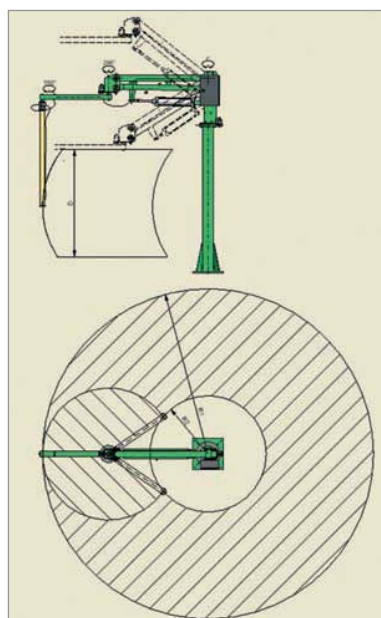
PN Compatto



PN Zip



PN Flex



PN ERGO MODELS Column mounted		PN 80	PN 160	PN 250
Capacity (including lifting tool)	Kg	80	160	250
Arm length (R1)	mm	2700	2700	2600
Vertical stroke	mm	1750	1720	1450
Offset handling: max distance from the lifting tool Z axis	mm	300	300	500
Uncovered area (R2)	mm	907	935	900
Rotation around column axis	degrees	Continuous		
Rotation around tool axis	degrees	Standard: 550; optional: continuous		
Air pressure min.	Bar	6,5		



Industry fields

- Agriculture
- Automotive And Car Components
- Bathroom And Toiletware
- Ceramic
- Chemicals/Pharmaceuticals
- Electro-mechanical
- Electronics, Computers And Telecommunications
- Engineering
- Food/Drink/Tobacco
- Foundry
- Furniture
- Glass And Fiberglass
- Household Electric Appliances
- Mechanics
- Metal Wires
- Motorcycles
- Paper Production And Printing
- Rubber/Plastics
- Textile
- Tyres
- Waste Disposal



