





and carry with ease loads much larger than its own size This simple analogy represents Scaglia INDEVA's mission design and production of industrial manipulators that are compact yet strong, simple yet intelligent and that

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#### Scaglia INDEVA, a worldwide network at your service

The Company was founded in 1838 and has always been in the ownership of the Scaglia family. It was the foundation stone of an important industrial group, which has now diversified into a wide range of business interests worldwide. As a result of this expansion a highly efficient sales and service network has been developed to meet the demands of our many customers. At the end of 1970 Liftronic was born: a revolutionary material handling system that allows loads of up to 320 kg to be lifted and moved completely effortlessly. Scaglia SpA was the first Company to be awarded with the UNI EN ISO 9001:2000 Quality System Certification for the design, production and sale of material handling systems.

In 2004, in order to help enhance business growth and to provide ever better customer service, Scaglia INDEVA SpA was established. The new Company inherited the business and the know-how of Scaglia's Material Handling Division. Scaglia INDEVA is a world leader in the design and production of state of the art industrial manipulators with an established worldwide network of branches, distributors and agents. Its headquarters and production unit covering an area of 15,000 square meters and employing about 120 people, are located in Brembilla, Italy, about fifty kilometers from Milan.





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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 MEBLONI VARTA ENICHEM MICHELIN VOLVO FAR EASTERN TEXTILE MOET & CHANDON ZANUSSI

FFFRENCES

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#### Liftronic or PN

#### Which is your ideal manipulator?

# **LIFTRONIC**<sup>®</sup> Series

New generation electronic manipulators Intelligent and sensitive

The LIFTRONIC<sup>®</sup> 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.





# eal manipulator? PN Series

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#### 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**<sup>®</sup>

LIFTRONIC<sup>®</sup> 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<sup>®</sup>, ceiling, overhead rails and Liftruck<sup>®</sup>. Our modular tooling concept "MODULO" and the microprocessor programmable logic make LIFTRONIC<sup>®</sup> 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

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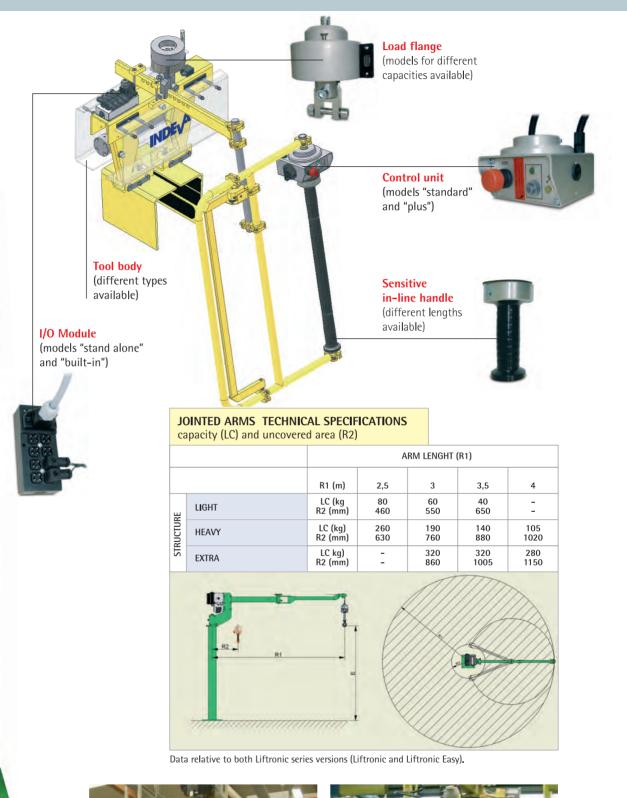
#### INDEVA "MODULO" TECHNOLOGY MEANS:

• more flexible and easily modified to suit new work requirements

• shorter design and manufacture lead time

• more reliable

• less and easier maintenance









### Compact intelligent Balancer INDEVA Intelligent Device for handling

# LIFTRONIC<sup>®</sup> Easy

LIFTRONIC<sup>®</sup> EASY belongs to the Liftronic<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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.

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



Scissor type pantograph Lifting tool easy to adjust to different load sizes.

		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			-230 /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.



INDE A

**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.



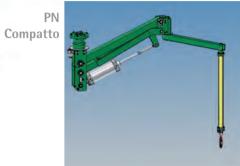




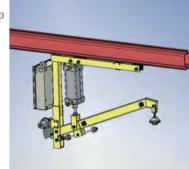


PN Ergo





PN Zip





**PN Flex** 

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







### **Industry fields**

• Agriculture

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- 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



























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