

## MANIPULATORS FOR REELS

### MANIPULATORS FOR REELS OF PAPER AND PLASTIC FILM

#### Pneumatic Manipulator for handling reels of paper



#### **Photos: 4724 - 4725**

- **MODEL:** PN Series
- **Gripping tooling type:** pneumatic with rotation
- **Load to handle:** reels with 152 mm core diameter,
- **Work cycle:** Reels have to be picked from pallet and placed on a trolley.
- **INDEVA Solution:** pneumatic expanding chucks of different lengths according to the reel size. The chucks can be easily exchanged. The gripping tooling allows load rotation.
- **Advantages of INDEVA solutions:**

The operator is never forced to work in non ergonomic positions: thanks to telescopic handles the operator can reach very high without lifting his arms above shoulder level and place the reel to the ground level without bending his back.

## Electronic Manipulator INDEVA for handling reels of plastic film.



### Photo 5425

- **MODEL:** Liftronic® L160S ceiling mounted with articulated arm
- **Gripping tooling type:** gripping by vacuum
- **Load to handle:** film reels with external diameter ranging from 190 mm to 400 mm
- **Work cycle:** The reel has to be picked from vertical position at about 1m height and released onto the machine in horizontal position (release height about 1m).
- **INDEVA Solution:** A ceiling mounted INDEVA model Liftronic with articulated arm, complete with gripping tooling by vacuum. The tooling features two lines of vacuum cups mounted on a frame with adjustable width to suit reels of different diameter. The tooling can be exchanged with a mechanical chuck that grips reels from the outside.
- **Advantages of INDEVA solutions:** The Indeva allows intuitive handling of reels of different weights. No adjustments when weight changes; the rope system allows for flexible movements, being electronic it is much more compact than pneumatic systems and allows for greater visibility.

## Manipulator for handling reels of plastic film



### **Photo 4903**

- **MODEL:** Liftronic
- **Gripping Tooling type:** Liftronic
- **Load to handle:** film reels with weight ranging from 16 to 70 kg.
- **Work cycle:** The reel has to be picked in horizontal position from the machine, then rotated by 90° and placed onto a pallet up to 2300 mm height, in vertical position.
- **INDEVA Solution:** An INDEVA model Liftronic, complete with gripping tooling by powered expanding chuck; the reel rotation is activated by means of buttons controlling an electric device. The handles length is expandable by means of an actuator in order to allow reel release up to 2300 mm height.
- **Advantages of INDEVA solutions:** The Indeva allows intuitive handling of reels of different weights. No adjustments when weight changes; the rope system allows for flexible movements, being electronic it is much more compact than pneumatic systems and allows for greater visibility.

## Manipulator for handling reels of packaging paper or plastic



*photo5170*

- MODEL:** Liftronic L80R montato a rotaia
- **Gripping Tooling type:** by expanding chuck
- **Load to handle:** reels weighing 30 kg.
- **Work cycle:** The reel has to be picked from a trolley 150 mm high in vertical position, then rotated by 90° and placed onto the machine pin at 1575 mm height.
- **INDEVA Solution:** An INDEVA model Liftronic, rail mounted with a rigid arm, complete with orbital head and gripping tooling with expanding chuck that grips the reels from its core.
- **Advantages of INDEVA solutions:** The Indeva is overhead bridge mounted and allows for more space on the floor for the operator.



## Manipulator for reels o paper and plastic



### **Photos 5209-5210-5211**

-**MODEL:** Liftronic column mounted L160C

- **Gripping Tooling type:** by expanding chuck

- **Load to handle:** reels weighing max 100 kg

- **Work cycle:** the reels have to be picked from their cradles, one at 765 mm from the floor and the other at 1380 mm. The reels lay either in horizontal or vertical or inclined by 15° positions. They have to be released in vertical position at different heights up to 1350 mm.

- **INDEVA Solution:** Column mounted INDEVA model Liftronic with max capacity for 160 kg. Gripping tooling with orbital head and expanding chuck with auto balancing feature for handling reels of different weights up to 100 kg. By pressing a button a mechanical lock is released and the reel can be rotated by 90° manually. A powered device automatically adjusts the barycenter according to the reel size and keeps the tooling balanced also when unloaded. The chuck can be inclined by + - 15° in order to pick also the reels which lay inclined.

- **Advantages of INDEVA solutions:** great flexibility , smooth and precise movements, user friendly system, high level of safety , intuitive handling.

## Manipulator for reels of paper and plastic



### **Photo 5232-5233**

-**MODEL:** Liftronic L160R

- **Gripping Tooling type:** by expanding chuck

- **Load to handle:** reels weighing up to 139 kg

- **Work cycle:** the reels in vertical position have to be picked from a pallet at 1800 mm height; 90° rotation and release onto the machine pin at 2000 mm height in horizontal position.

- **INDEVA Solution:** an INDEVA model Liftronic mounted on overhead bi-rail system. Gripping tooling with orbital head and expanding chuck with auto balancing feature for handling reels of different weights up to 100 kg. By pressing a button a mechanical lock is released and the reel can be rotated by 90° manually.

- **Advantages of INDEVA solutions:** great flexibility , smooth and precise movements, user friendly system, high level of safety , intuitive handling.

## Manipulator for reels o paper and plastic



### **Photos 5582-5583**

-**MODEL:** Liftronic L160R

- **Gripping Tooling type:** by expanding chuck

- **Load to handle:** reels weighing up to 100 kg

- **Work cycle:** the reels in vertical position have to be picked from a pallet at 1300 mm height; 90° rotation and release onto the machine pin at 1235 mm height in horizontal position.

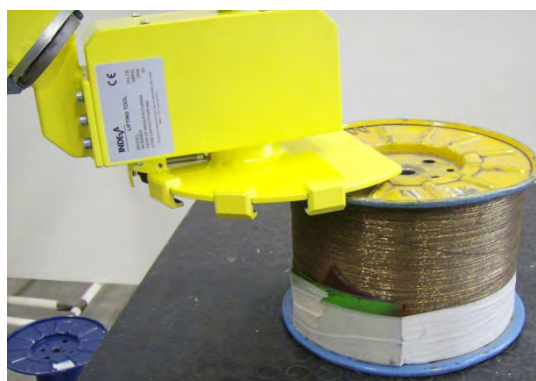
- **INDEVA Solution:** an overhead rail mounted INDEVA Liftronic. Gripping tooling with orbital head and expanding chuck with auto balancing feature for handling reels of different weights up to 100 kg. By pressing a button a mechanical lock is released and the reel can be rotated by 90° manually.

- **Advantages of INDEVA solutions:** great flexibility , smooth and precise movements, user friendly system, high level of safety , intuitive handling.



## MANIPULATORS FOR WIRE REELS

### Manipulator for wire reels



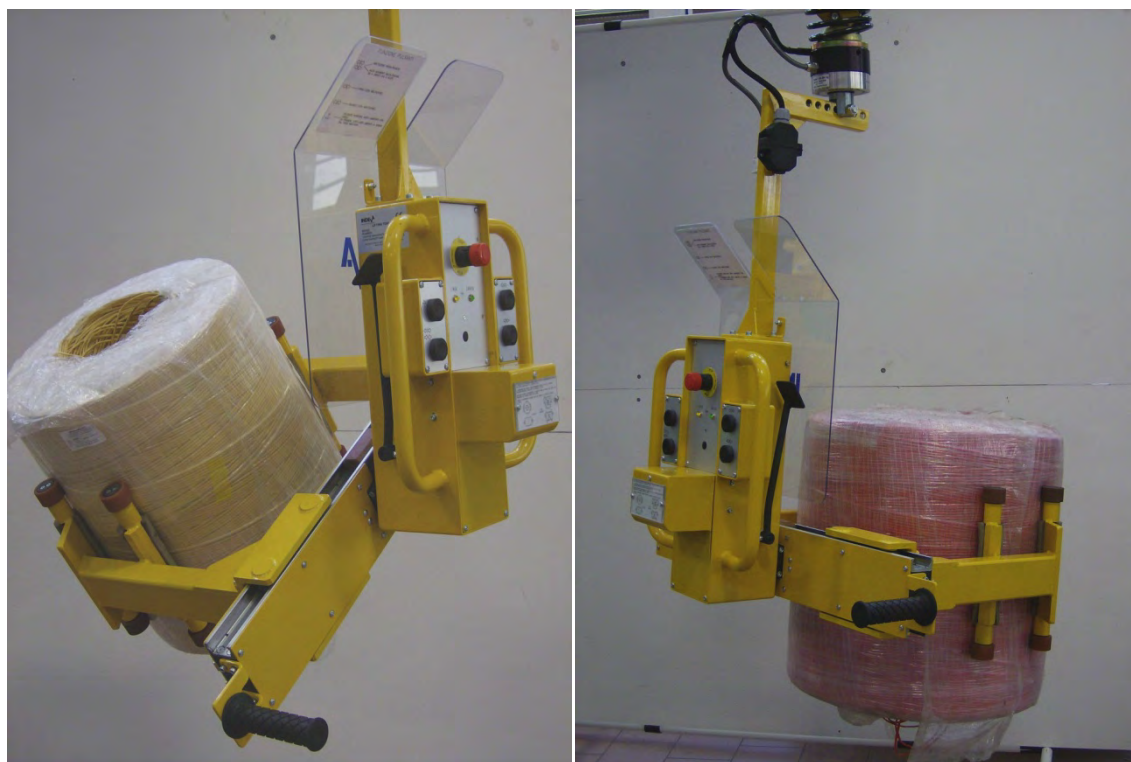
### *Photos 5034-5035*

- **MODEL:** Liftronic L.80 C
- **Gripping Tooling type:** mechanical with rotation
- **Load to handle:** reels weighing up to 45 kg
- **Work cycle:** the reels in vertical position have to be picked from a pallet at 700 mm height; 90° rotation and release onto the pin of a trolley in an inclined position by 5° with respect to the horizontal axis.
- **INDEVA Solution:** an overhead rail mounted INDEVA Liftronic. Gripping tooling with orbital head and a half moon device that holds the reel by its top, and when the grip is activated, a pin is pressed against the center of the iron top in order to safely fasten the reel. By pressing a button a mechanical lock is released and the reel can be rotated by 90° manually.
- **Advantages of INDEVA solutions:** great flexibility, smooth and precise movements, user friendly system, high level of safety, intuitive handling.



## MANIPULATOR FOR ROLLS AND BUMPS

### Manipulator for reels covered by plastic wrap



#### **Photos 4191-4192**

- **MODEL:** Liftronic L80 R
- **Gripping Tooling type:** mechanical with rotation
- **Load to handle:** reels weighing up to 60 kg
- **Work cycle:** the reels have to be picked from the machine pin at 900 mm height in horizontal position; 90° rotation and released unto a pallet at 1800 mm height.
- **INDEVA Solution:** an overhead rail mounted INDEVA Liftronic. Gripping tooling with jaws gripping the reels on their outer sides; by means of a powered device the jaws get adjusted to different reel sizes. 90° manual rotation.
- **Advantages of INDEVA solutions:** great flexibility , smooth and precise movements, user friendly system, high level of safety , intuitive handling.

## Manipulator for rolls of hose



### **Photos 5436-5437**

-**MODEL:** rail mounted Liftronic L160R.

- **Gripping Tooling type:** mechanical without rotation

- **Load to handle:** rolls of plastic hose up to 70 kg

- **Work cycle:** The rolls are picked from a pallet and placed onto the assembly line

- **INDEVA Solution:** an overhead rail mounted INDEVA Liftronic . Gripping tooling with a pneumatic chuck gripping the rolls from their inner core. The chuck jaws are covered with rubber in order not to damage the hose. The handles are extendable allowing ergonomic positions for the operator when reaching up high. Sensitive handle 400 mm long.

- **Advantages of INDEVA solutions:** great flexibility , smooth and precise movements, user friendly system, high level of safety , intuitive handling.

## Manipulator for long rolls of pvc sheets



### **Photos 4340-4341**

- **MODEL:** PN-ERGO-XM250
- **Gripping Tooling type:** mechanical with rotation
- **Load to handle:** rolls of pvc sheet with weight ranging from to 60 to 120 kg with length ranging from 1000 to 1500 mm.
- **Work cycle:** The rolls in vertical position are picked from a container , rotated by 90° and released in horizontal position on a wrapping machine 830 mm high.
- **INDEVA Solution:** pneumatic manipulator with balancing system for preset load weights. The jaws grip the roll on the sides; the jaws and the rotation device are pneumatically driven.
- **Advantages of INDEVA solutions:** By means of the pneumatic manipulator by INDEVA the operator can handle these long rolls very easily and effortlessly.



## MANIPULATORS FOR REELS OF TEXTILE FIBER AND YARN

### Manipulator for rolls of fabric wrapped in plastic



#### **Photos 5125-5126-5129**

- **MODEL:** column mounted Liftronic L240C
- **Gripping Tooling type:** mechanic without rotation
- **Load to handle:** fabric rolls with their shaft up to 180 kg
- **Work cycle:** The rolls with their shaft in horizontal position are picked from a trolley 500 mm high and are released into a metal case in horizontal position at heights ranging from about 600 mm to 1800 mm
- **INDEVA Solution:** a column mounted INDEVA model Liftronic complete with custom tooling with hooks that get hold of the shaft on both sides of the roll. A sensor detect when the shaft is safely hooked. A sensitive handle 600 mm long allows for ergonomic positions for the operator also when reaching up to 1800 mm height.
- **Advantages of INDEVA solutions:** great flexibility , smooth and precise movements, user friendly system, high level of safety , intuitive handling.

## Manipulator for yarn reels



### **Photos 4679-4680**

- **MODEL:** Liftruck
- **Gripping Tooling type:** mechanic with rotation
- **Load to handle:** yarn reels
- **Work cycle:** reels are picked from the pallet on the truck and get released after 90° rotation onto the creel pin.
- **INDEVA Solution:** Liftruck INDEVA , an order picker with a Liftronic incorporated. The tooling with orbital head allows for easy and quick grip, rotation and release. A safety device allows load release only when the reel is safely placed unto the pin.
- **Advantages of INDEVA solutions:** Liftruck allows loading creels up high and the employment of only one operator for the whole work cycle (getting pallets with reels form the warehouse, loading reels and collecting the empty pallets and cardboard boards and taking them back to the warehouse).

## Manipulator for handling yarn reels



### **Photo 4904**

-**MODEL:** column mounted Liftronic L 160C

- **Gripping Tooling type:** mechanic without rotation

- **Load to handle:** yarn reels weighing 15 kg

- **Work cycle:** reels are picked from the pallet three at a time and released unto a shelf.

- **INDEVA Solution:** Column mounted Liftronic equipped with custom tooling with three pneumatic chucks with jaws covered with rubber and sensor detecting when the reels are safely gripped. Complete with sensitive handle 400 mm long with double control button panel one at each end of the handle –top and bottom.

- **Advantages of INDEVA solutions:** cycle time is significantly reduced thanks to the possibility to grab three reels at a time ; ergonomics and safety for the operator and against damage to the product are ensured.



## Manipulator for long fabric rolls



**Photo 3676**

- **MODEL:** Liftronic Easy E125C
- **Gripping Tooling type:** mechanic without rotation
- **Load to handle:** fabric rolls weighing up to 70 kg and long up to 1700 mm.
- **Work cycle:** rolls are picked from a pallet and released unto shelves.
- **INDEVA Solution:** Column mounted Liftronic Easy equipped with custom tooling that grabs the roll from their inner core.
- **Advantages of INDEVA solutions:** great flexibility , smooth and precise movements, user friendly system, high level of safety , intuitive handling.

## Manipulator for handling rolls of yarn wrapped with plastic.



**Photo 5464**

-**MODEL:** Liftronic a colonna L80C

- **Gripping Tooling type:** mechanic with rotation

- **Load to handle:** fabric rolls weighing up to 36,5

- **Work cycle:** rolls are picked from a pallet and released unto shelves.

- **INDEVA Solution:** Column mounted Liftronic complete with gripping tooling composed of a pneumatic chuck with jaws grabbing the rolls on the outer sides; a device allow rotation on the horizontal axis.

- **Advantages of INDEVA solutions:** great flexibility , smooth and precise movements, user friendly system, high level of safety , intuitive handling.