# Control A | C.2 | IPC

The CONTROL C.2 and controller IPC with its intuitive operation for UNIFLEX crimpers, test benches and several more products has a colour touch display. The new menus (Quick-Start-Menu and Production Menu) as well as the possibility to individualize each and every menu and application will make your work much easier. Everything can be controlled via HID, i.e. via Windows devices. In addition, you can record, monitor and assure the quality of your product and how the machine works via the PFM option.



#### Control A

Manual push-button operation

Only for Service and Workshop Machines



#### **Control C.2**

Control C.2 with screen protection option 807.2

HMI mit 7" Widescreen-Touch-Panel

Interfaces:

Ethernet RJ45

USB

Serieller Port (COM)

Profinet

ProfiBus



#### IPC

Industrial PC with 12" touch panel

Integrated RFID reader

Interfaces:

Ethernet RJ45

USB 3.1

serial port (COM)

Profinet

ProfiBus

CAN bus

#### $\underline{\text{Advantages of the UNIFLEX IPC control:}}$

- Intuitive operation User-friendly interface for simple and fast control.
- Maximum precision Accurate control of all machine parameters for highest repeatability.
- Flexibility Customizable programs for various applications and materials.
- Smart automation Efficient workflows through storable processes and automation options.
- Real-time diagnostics Comprehensive monitoring and error analysis for quick maintenance
- Future-proof Updates and extensions ensure long-term investment security.
- Network capability Integration into existing systems for networked production.
- Windows-compatible Compatible with Windows for seamless integration.
- **High-definition display** Clear presentation and easy operation.
- **Powerful processor** Fast processing and smooth operation.

The UNIFLEX IPC control combines user-friendliness, performance and precision for efficient and reliable hose processing.

Start the machine system:

#### **START**



Language – more available on request



Various Users can be created

#### LOGIN



User Login - Factory settings via user and password with functional assi gnments and user Login rights.

#### **MENU**

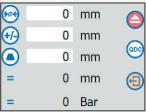


Login with menu - Quick Menu and Production Menu selection

After logging in, two usage options are available: the Quick Menu and the Production Menu



#### **QUICK MENU**



Input of press diameter, correction values and press laws (automatically)

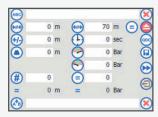
## **PRODUCTION MENU**



More parameters to comfortably conduct serial pressing. Selection menu for pressing sorted by press dimension/pressure, using production data from the database or by scanning with the

#### **PRODUCTION MENU**

(1) Via press dimension (parameter)



Input of press dimension, correction values, hold time, opening diameter, preselection counter and press dies (automatic)

(2) Via pressure (parameter)



Input of pressure, hold time, opening diameter, preselection counter and press

(3) Via the integrated database



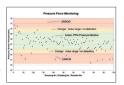
Items can be searched for or created numerically/alphanumerically. Items can be conveniently selected via the "Quick Search Menu.

(4) Via Barcode scanner



Scan item data via barcode scanner

## Included: Press Force Monitoring



PFM - Standard on all machines with Control C.2.

Quality-enhancing option for serial production. With PFM, the upper and lower pressure limits can be defined by setting the tolerance values determined from a test pressing. Pressings deviating from these limits are flagged as errors. Optionally, a pressure shutdown can be activated, where the upper and lower diameters are monitored. This increases your process reliability. You can detect errors in the pre-assembly of the hose and fitting, skipped work steps, or incorrect positioning of the hose fitting on the hydraulic hose and respond appropriately. PFM thus provides integrated quality control without additional effort.



Multistep



ICC - Industrial Crimp Calculator

Automatically calculate your pressing diameter directly from your hose and fitting dimensions based on compression. Includes the officially agreed upon, tested, and approved industrial hose crimp calculator/interface with fitting and sleeve data from Mario, PT, Campbell, and Dixon.

# **Controls IPC**

#### **CONTROLS IPC**

#### **START SCREEN**

#### INFO - RESHAPING, 2 FREE COUNTERS - SERVICE, CONTACT







#### **WORKSHOP MODE - QUICK MENU**

# ± -- nazatiza (



QDC – CALL PRESS JAW CHANGE POSITION AND SUGGESTED PRESS DIES SET



Input of pressing diameter, correction values and press jaws (automatic)

#### **PRODUCTION VIA PRESS DIMENSION MODE**





Input of press dimension, correction values, hold time, opening diameter, preselection counter and press dies (automatic).

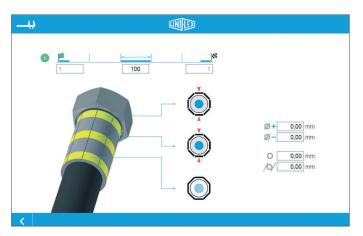
#### **PRODUCTION VIA PRESSURE MODE**





Input of pressure, hold time, opening diameter, preselection counter and press dies.

#### **CALIPER**

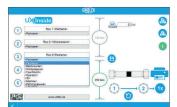


With the caliper, the result of the reshaping process can be checked using a freely selectable tolerance range. To do this, measure the workpiece at the position indicated by the red triangle.



## **Control IPC**

#### **LABEL**



Label System (ULS), a label can be automatically printed for each workpiece, which is then manually attached to the workpiece. The color coding can be changed every year, making the age of the hose assembly easily identifiable at any time.

#### **MULTISTEP**



With the label printer and the UNIFLEX With interval reshaping, it is possible to carry out a reshaping process in several stages (with different reshaping pressures or pressing diameters, as well as different opening diameters).

#### **CMK**



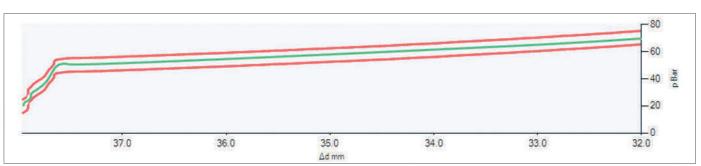


The machine capability index (CMK) describes the ability of the machine to meet the specified requirements. With the CMK function in the control unit, it is possible to continuously monitor the status of machine capability during production (integrated algorithm for verification).

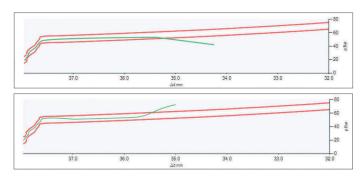
#### **PFM**



The PFM function enables continuous monitoring of the pressure or pressing diameter during production. If a parameter deviates from the learned target range, the pressing process is immediately stopped, and a message is displayed to the operator. This allows faulty components to be reliably detected during production.

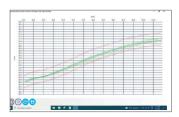


The monitoring system compares the pressure in milliseconds and immediately stops the pressing process if a deviation occurs. The functionality enables the detection of double pressings, the use of incorrect press jaw diameters, the use of non-compliant workpieces (incorrect selection of press sleeves, press nipples, and hoses), faulty execution of hose skiving, and incomplete pre-assembly of components. All this data is recorded and can be accessed at any time..



#### **COMPARING DIAGRAMS**







Additionally, diagrams of the data sets can be directly accessed here for the pressed workpieces.

#### **JOB MODE**





The job mode enables controlled processing of multiple orders in production. It is also possible to combine several orders from different data sets in the database into one work order. For this purpose, a quantity is assigned to each individual data set.

#### **QUEUE MODE**



#### **QUEUE SETTING**



The queue mode sequentially executes individual pressing data sets stored in a database during production. This allows specific parameters to be determined and reported for individual workpieces (e.g., One-Piece flow).

#### **IoT - INTERNET OF THINGS**



IoT selection menu



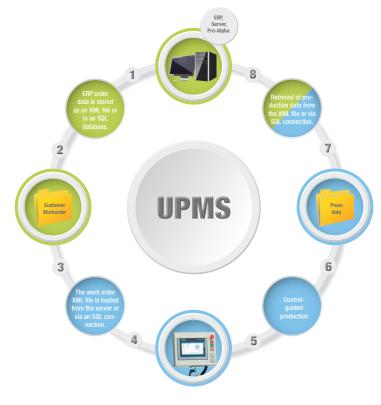
File path settings (Part table, Job folder, Queue folder)



In the log file overview, saved press parameters are displayed.



Network setting



#### **USB STORAGE MEDIUM**



The data was loaded successfully from USB storage medium.

#### **RFID**



The RFID Reader enables the automatic In the green area, the currently set login to the machine using an RFID chip. measurement unit is displayed. By

## SETTING MEASUREMENT UNIT



In the green area, the currently set measurement unit is displayed. By tapping a button, the corresponding measurement unit is set.

## SETTING LANGUAGE

