PRESS-FIT SYSTEM

PRESS-FIT SYSTEM CONFIGURATION

CONTROL UNIT

- ❒ Power module for press spindle
- ❒ Positioning and force control and monitor
- ❒ Management of press-fit process
- ❒ ....

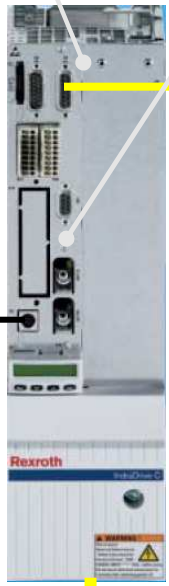
INTERCHANGES WITH PLC

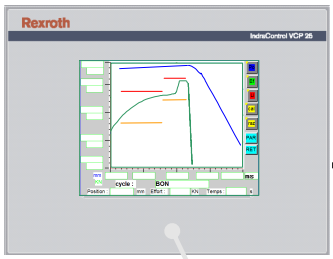
Current available interface channels with other remote control units are the followings:

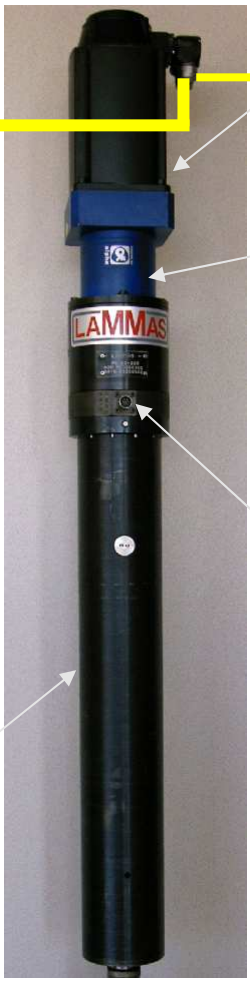
- ❒ Parallel interface
- ❒ PROFIBUS-DP
- ❒ CAN_OPEN
- ❒ DEVICENET
- ❒ PROFINET

MOTOR

- ❒ Brushless synchronous motor with absolute encoder
- ❒ Positioning accuracy 0,01mm







REDUCTION GEAR

- ❒ Planetary gearbox

DIGITAL INTERFACE HMI

- ❒ Setting of application parameters
- ❒ Display in tabular form the process results of force-position curve
- ❒ Traceability
- ❒ Print stored data of the press-fit processes
- ❒ ...

FORCE MEASURING

- ❒ Integrated load cell
- ❒ Measuring accuracy <0,5%

SPINDLE

- ❒ Planetary recirculating roller screw
- ❒ Splined shaft with 6 grooves driven by a ball spline nut

CARACTERISTIQUES MAIN CLAUSES OF LAMMAS PRESS

- ✓ Coaxiality of then motor, gearbox and spindle
- ✓ The planetary roller screw allows to work with heavy loads and severe conditions, thanks to the presence of no. 4 angular contact ball bearings mounted in opposition to each other to support loads on the two directions.
- ✓ The spindle that consists of a splined shaft driven by a ball spline nut.

PRODUCTS AND PERFORMANCES

PRESS-FIT CODES

LAMMAS code	Nominal force (KN)	Max. stroke (mm)
PL 0030 0150	30	150
PL 0030 0250	30	250
PL 0060 0150	60	150
PL 0060 0250	60	250
PL 0080 0150	80	150
PL 0080 0250	80	250
PL 0120 0150	120	150
PL 0120 0250	120	250
PL 0200 0150	200	150
PL 0200 0250	200	250

LAMMAS is available ta evaluate the feasibility of presses with different powers of strokes, from those listed in the table, based on the technical data of the requested application.
Press composition :

- Press spindle
- Brushless synchronous motor with absolute encoder and cable kit
- Planetary gearbox
- Load cell, signal amplifier and cable set
- Digital opérator interface
- Basic software for process data management and back-up

ADVANTAGES OF USING PRESS-FIT

	Electrical press LAMMAS	Press with hydraulic cylinder
Positioning	Very easy, adjustable by loading ans positioning data set	Complicated, few settings allowed
Speed	Very hight, modifiable	Middle, fixed
Rigidity of the body	Compact and verry hight	Middle
Efficiency	>90%	<50%
Installation and starting up	Simple, speedy and modifiable	Complexity of the hydraulic system
Maintenance	Practically maintenance free	Many adjustments and calibrations to be repeated
Environmental conditions	Silent, and no pollutant	Risk of oil leakage, noisy

REQUESTED APPLICATIOND

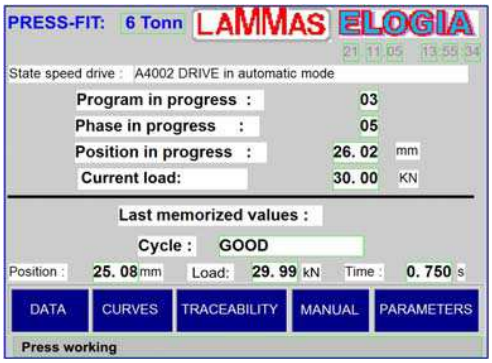
- Pressing
- Seaming, riveting
- Coupling
- Drawing of iron sheet
- Assembling
- ….

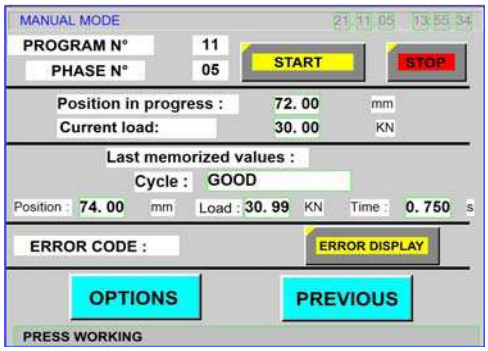
REFERENCES

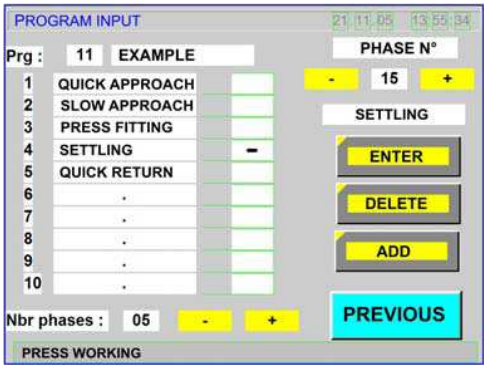
Renault, Peugeot, Citroen, Bentler, Mécachrome, Volvo…

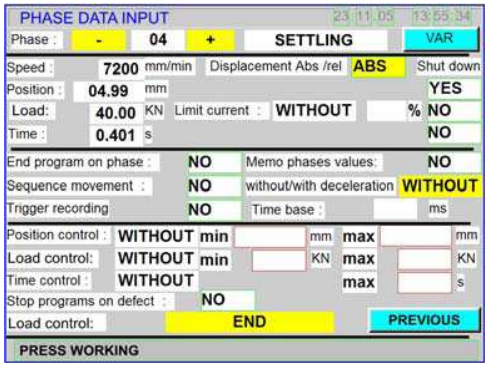
INTERFACE PARAMETER MENU

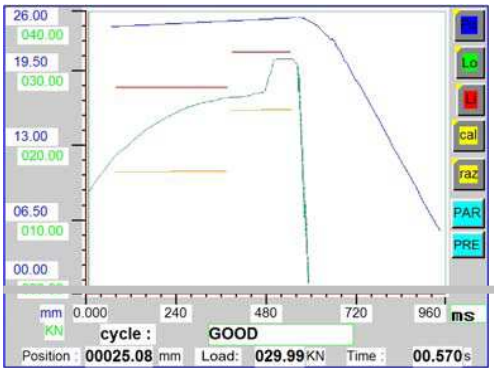
TRANSLIGNE

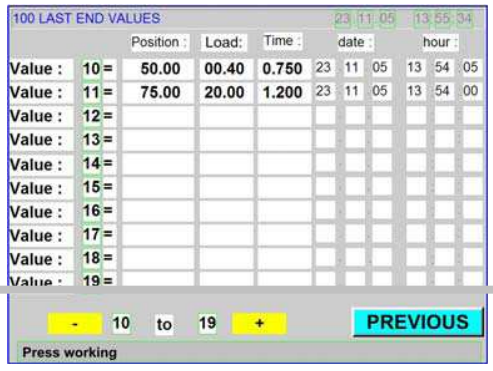












LAMMAS
Str. Prov. Castellamonte 1
10010 BAIRO
ITALIE
Tél. : 0039 0124 501 266
Fax : 0039 0124 501 326

TRANSLIGNE
155 impasse du Château
38300 SEREZIN DE LA TOUR
FRANCE
Tél. : +33 (0)4 74 92 19 19
Fax : +33 (0)4 74 92 19 18
E.mail : transligne@transligne.fr
Web : www.transligne.fr