ENGEL INJECTION MOULDING MACHINE
victory 200/50 tech
Technical details and equipments according to data sheet

Machine execution for processing of:
LSR

CLAMP UNIT:
Patented Tiebarless hydraulic clamping system. Elimination of the tiebars offers a significant increase in the usable platen area as well as decreasing mold change and part removal time. Parallelism is guaranteed by a maintenance free flexible linkage (Flexlink) while allowing full access to the ejector mechanism. Freedom from tie-bar offers a decisive increase in usable platen area in comparison to machines with tie-bars. Unhindered access to the ejector area is allowed.

Platens in standard execution
Layout according to Euromap: EMP

Platens with locating diameter in standard execution
Locating diameter: 100 mm

Central ejector

Single pneumatic corepull on moving platen
Euromap 13 / AN-147

Single pneumatic corepull on stationary platen
Euromap 13 / AN-147

Safety gate open on top

Pneumatic valve gate control - 1 circuit

program degassing

8-zone mold heating control. Includes additional temperature control card. Connections according to Euromap 14

mold heatings are split in equal numbers to the fixed and moving mold half wiring in accordance with EUROMAP 14

INJECTION UNIT:
Modular construction in compact design. Through advanced control technology, optimum injection capacity and metering performance are achieved. Easy access ensures quick changeover times for barrels and screws. Closed loop feedthroat temperature control is included as standard.
BARREL AND SCREW ASSEMBLY:
A variety of choices of diameter, materials and geometry from standard selections allow the assembly of a customized package to suit any application.

**Barrel execution:**

Refer to Technology Package for execution

**Screw execution:**

Refer to Technology Package for execution

**Nozzle execution:**

Refer to technology package for execution

**Barrel heating:**

230 volt barrel and nozzle heaterbands

Barrel and nozzle heating prepared for the processing of thermoplastics

**HYDRAULICS:**

Energy efficient hydraulic system with low noise level, optimal modulation of the respective working point of the machine, valves placed close to the hydraulic appliances, closed-loop controlled pre-heating and cooling, filtration with low wear of oil, closed-loop control of all machine motions.

Power unit ECODRIVE with excellent energy efficiency by high dynamic servo pump SHV 1, servo valve for closed-loop control of injection process, very low noise level and very little cooling water consumption, for sequential machine motions

Recommended hydraulic oil:
Long life hydraulic oil OMV hyd HLP-SH 46

Oil cooler with standard cooling capacity
CONTROLS/ELECTRICAL:

22 c230500510  CC200 control package including:
- "Windows" style display with 15" TFT-color Touch Screen
- Data storage via USB interface
- Ethernet network interface
- Freely programmable cycle sequence supported by graphical symbols
- Screen pages configurable
- e-help
- Notepad
- Alarm Messaging via Email
- weekly timer
- Micrograph
- Microplast
- PD-log
Screen text
1. **language for screen text**
   - italian: IT
2. **language for screen text**
   - english: EN

23 c231000110  Incoming voltage
(by IT or FI-used power systems a disconnecting transformer for servo drives is requested)
3X400V+N+PE/50HZ

24 c231001200  ecograph
for energy analysis of IMM

25 c231500045  2 Additional language(s) for screen text
1. **Additional language for screen text**
   - german: DE
2. **Additional language for screen text**
   - spanish: ES

26 c232000200  Access rights with key card

27 c233500110  PD-graphics I - continuous, graphical monitoring of process parameters, average value, standard deviation, coefficient of correlation, warning and intervention limits selectable

28 c233500400  Microflow

29 c233501200  Graphical display of productivity analysis

30 c233501310  Minicam
Setup assistance for process parameters based on an expert system

31 c234000100  Single-phase, 230V service receptacle
Schuko 16A:SS1

32 c234001000  Three-phase switched receptacle, 10A / 16A located at clamp end, non-operator side CEE, 16A:3P1
Three-phase switched receptacle, 10A / 16A located at non-operator side, outside injection door
CEE, 16A:3P1

MEDIA:

solenoid air valve 2/2-ways, 1/2”
mounted on fixed machine platen
OPT109157

solenoid air valve 2/2-ways, 1/2”,
mounted on movable machine platen
OPT117564

Combined water terminal
for machine and mould cooling

Water flow control manifold 0-10 l/min,
12-circuits

8 water flow control circuits routed to R3/8”
bulkhead manifolds: 4 circuits to each platen.
High temperature rubber hoses (80 deg. C) routed
to moving platen via cabletrack on non-operator
side (max. pressure - 6 bar). Flow control
manifold not included.

TECHNOLOGY PACKAGES:

LSR-package consisting of:
- Bi-metallic (M3), water cooled barrel, L/D=16
- Nitrided (S1) screw including spring loaded
  check disk
- LSR pressure transducer with on screen readout
  mounted at feedthroat
- Preparation for LSR material filter pack
  (housing only)
- LSR material shut off valve 1/2”
- Injection pressure limited in manual mode
- Switch fo screw retraction without dosing
- Program flushing with LSR-material (for
  integrated systems only)
- Program for delayed cooling water switch off
- Vacuum system interface including receptacle at
  line voltage (16 Amps / phase)
- Pumping unit interface
  external system, dosing and alarm signal,
  each on a 4-pin outlet: S4

execution without regulated traverse cooling

melt barrel and screw diameter 35 mm

Needle type pneumatic shut off nozzle, water cooled, Herzog design
orifice 3 mm
nozzle penetration 50 mm

42 c412001519 diving nozzle head diameter 16 mm instead of standard execution
OPT130132

43 c412001588 vacuum valve 1/2" Mount: close to mold area

44 c412001645 pressure transducer for vacuum monitoring including PD-recording

45 c412001660 Water cooling on both platens

MISCELLANEOUS PACKAGES:

46 c420200100 execution as per European Norm EN 201

LABELLING/PAINTING

56 c480500120 2 Labelling bilingual
1. language for labelling
   italian: IT
2. language for labelling
   english: EN

48 c481500110 Standard painting
   (ENGEL light green/black grey and grey)

SUPPLEMENTAL EQUIPMENT:

49 c540500900 program "virt mould" for viewing and revising of parameter settings and for process optimization on PC incl. simulation

58 c541500220 Machine supplied with hydraulic oil zinc containing oil:O1

51 c542500100 Levelling and vibration mounts in standard execution

52 c542501000 Machine delivery in one piece (clamp unit and injection unit H)

53 c543000100 Manual - 1 copy
   italian: IT

57 c543000150 Additional Manual - 1 copy
   english: EN