



THE BOLT-ON INJECTION UNIT



INJECTION UNIT SIZE
120 -1540

ALL-ELECTRIC

**MILACRON**





BOLT-ON INJECTION UNIT

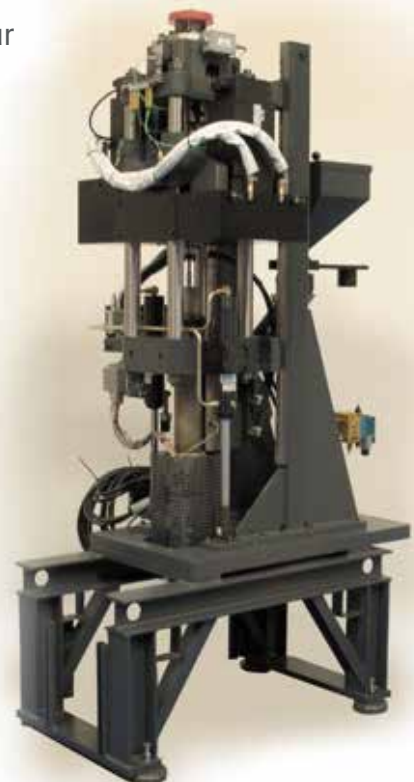
HIGH-PRECISION ALL-ELECTRIC INJECTION MOULDING

INGENIOUS, COMMITTED AND EXPERIENCED

The Bolt-On Injection Unit gives you the flexibility to process many application possibilities. The injection and plasticizing movements of the Bolt-On Injection Unit are controlled by servo drives. This not only results in maximum acceleration, but also ensures maximum accuracy and exceptional reliability throughout the injection process, as well as high-precision speed, position and pressure control.

THE EQUIPMENT FOR NEW CHALLENGES

- 2  Vertical as well as horizontal attachment possibilities to injection moulding machines or vertical presses of any manufacturer
-  Upgrade from single to multi-component machine of any manufacturer
-  Optionally with its own hydraulic module for powerful nozzle contact force or with the oil supply of your injection moulding machine
-  With your own visualization or via VNC on the screen of your injection moulding machine



RELIABILITY AND REPEATABILITY FOR HIGH-PRECISION ELECTRIC INJECTION MOULDING

The latest generation of servo drives are designed to handle rapid accelerations and short-term current peaks. Energy consumption is optimized by feeding energy back into the power grid.

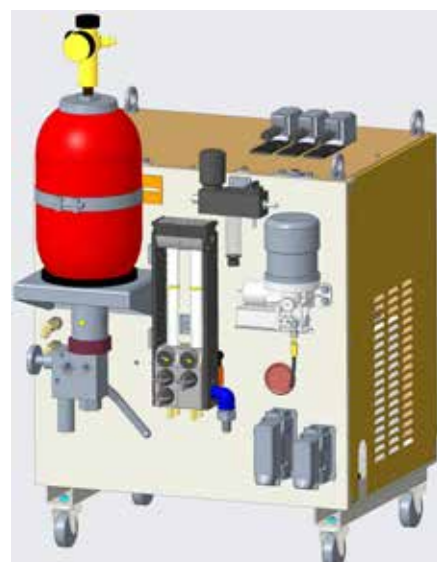
THE HYDRAULIC-MODULE FOR ALL REQUIREMENTS

POWERFUL, FAST, EFFICIENT

The hydraulic-module with its energy-optimized 2-stage pressure philosophy ensures that the movement of the injection unit and the pressure buildup for the nozzle contact force are optimized.

With its optional 10 l accumulator, the drive unit ensures dynamic movements and powerful nozzle contact force.

Furthermore, optional NG6 core pulls are possible for actuating actuators in your mould.



THE MOSAIC OPERATING UNIT

USER-FRIENDLY AS A MATTER OF PRINCIPLE



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THE CONVINCING DETAILS

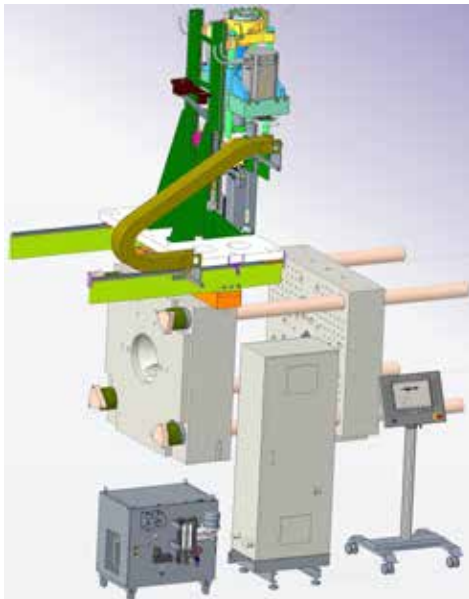
- Ergonomic design
- Generous 15" touch screen
- For optimal readability
- Intuitive operation
- Functionality
- Production security through password-protected access levels or optionally by chip card according to Euromap 65

VERSATILE SOLUTION FOR ALL APPLICATIONS

With variable shot weights, the Bolt-On Injection Unit offers a wide range of injection moulding tasks from simple to demanding. The unique strength of the Bolt-On Injection Unit is its enormous versatility:

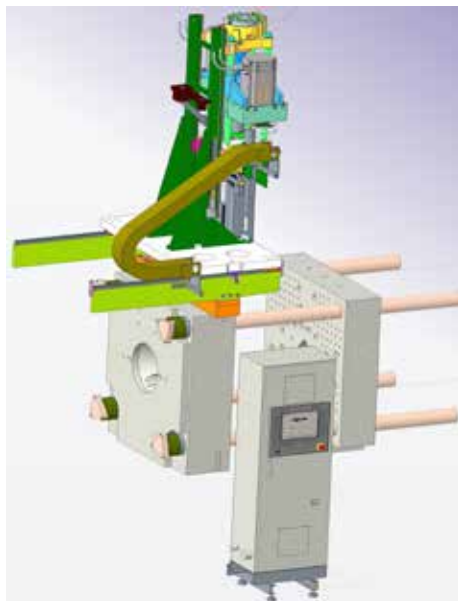


ALMOST UNLIMITED POSSIBILITIES



Fully autonomous solution

- Ⓜ With own hydraulic module
- Ⓜ With own Mosaic control
- Ⓜ Connection via Euromap 67

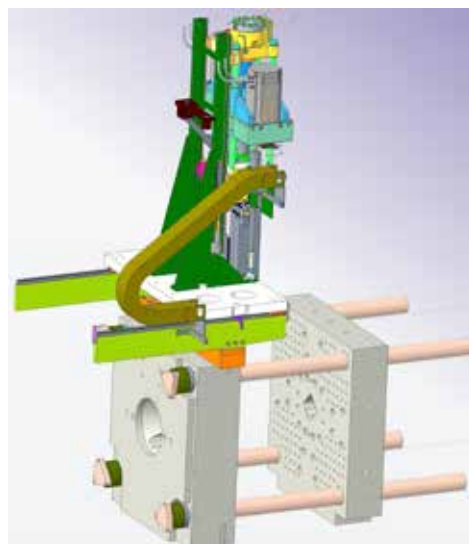


Semi autonomous solution

- Ⓜ With own hydraulic module
- Ⓜ Control integration via VNC
- Ⓜ Connection via Euromap 67
- Ⓜ The oil supply comes from the Injection molding machine

Fully integrated solution

- Ⓜ for Ferromatik machines with Mosaic and X20 PLC
- Ⓜ The oil supply comes from the Injection molding machine
- Ⓜ Using the machine's own Mosaic and PLC control system
- Ⓜ = fully integrated 2 component solution



TECHNICAL DATA

INJECTION UNIT SPECIFICATIONS	UNIT	120			300			450		
SCREW DIAMETER	mm	18	25	30	30	35	40	35	40	45
INJECTION CAPACITY MAX. (GPPS)	g	28	54	77	103	140	183	158	206	261
THEORETICAL DISPLACEMENT	cm ³	31	59	85	113	154	201	173	226	286
INJECTION PRESSURE MAX.	bar	2500	2016	1400	2500	1943	1488	2445	1985	1569
INJECTION RATE	cm ³ /s	52	101	145	117	159	208	159	207	262
INJECTION SCREW STROKE	mm	120			160			180		
SCREW L/D RATIO		20	20	20	22	23	20	22	23	20
SCREW SPEED	1/min	400			400			300		
PLASTICIZING RATE (GP SCREW)	g/s	3	9	13	18	25	32	21	30	32
NOZZLE HOLDING FORCE	kN	40			60			60		
NO. OF THERMOCOUPLES (BAR-REL&NOZZLE)		3+1			4+1			4+1		
TOTAL HEAT CAPACITY	kW	4,9	6,7	7,9	9,2	11,2	11,2	11,1	13,1	13,1

INJECTION UNIT SPECIFICATIONS	UNIT	630			970			1540		
SCREW DIAMETER	mm	40	45	50	45	50	60	50	60	70
INJECTION CAPACITY MAX. (GPPS)	g	229	289	357	348	429	618	500	792	1076
THEORETICAL DISPLACEMENT	cm ³	25	318	393	382	471	679	550	792	1078
INJECTION PRESSURE MAX.	bar	2494	1970	1596	2300	2058	1429	2300	1942	1427
INJECTION RATE	cm ³ /s	207	262	324	318	393	565	550	792	1078
INJECTION SCREW STROKE	mm	200			240			280		
SCREW L/D RATIO		22	22,2	20	22	24	20	22	24	20
SCREW SPEED	1/min	270			350			300		
PLASTICIZING RATE (GP SCREW)	g/s	27	32	38	46	58	80	46	70	90
NOZZLE HOLDING FORCE	kN	60			60			60		
NO. OF THERMOCOUPLES (BAR-REL&NOZZLE)		4+1			4+1			4+1		
TOTAL HEAT CAPACITY	kW	12,8	14,8	14,8	16,6	20	20	20	25,4	25,4



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