

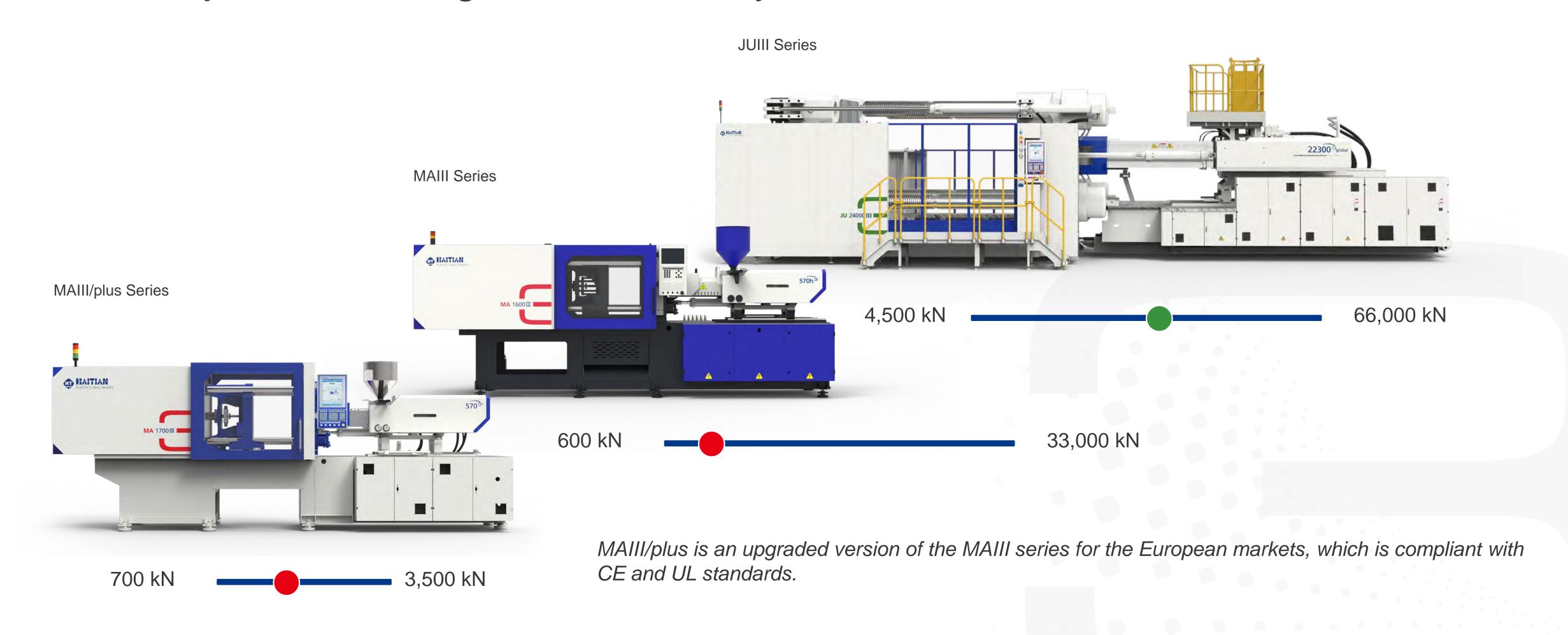


HAITIAN MARS III/PLUS SERIES





Haitian Injection Molding Machine Family





Development of Mars Series

Initial stage 2006 - 2007 Marketization generation I 2007 - 2012



Generation II 2013 - 2018



Enhanced version generation II 2015 - 2018



Generation III 2019



Launch of HTF series j5 servo control technology



Introduction of servo energy saving technology



Servo technology upgrading



More precise



New efficiency, new flexibility and new opportunities for the future

NEW DEVELOPMENTS

- Mechanical upgrades
- Economical machine concepts
- Technology to the Point

NEW MODULARITY

- Modular combination of mature core technologies
- Hybrid solutions for increased flexibility

OPEN INTEGRATION

- Flexible solutions with Connectivity Plus
- Intelligent performance with Motion Plus





Advantages at a glance

Precise

Low-friction linear guides ensure parallelism of the platen while reducing operating energy (Optional)

The optimized master of efficiency. With clamping force from 600-33,000KN

Strong injection molding capability

With wider range of injection process coverage and flexible combination of different injection units





Intelligent Control

Intelligent core components with precise digital control, compatible with all common interfaces; user-friendly HMI

Sold more than

230,000 units

GreenVantage

The highly efficient and energy saving "Mars Technology", highly dynamic and sensitive with higher efficiency and lower energy consumption







Exterior Design

European-style appearance

Open body, drive distribution box placed

in non-operation





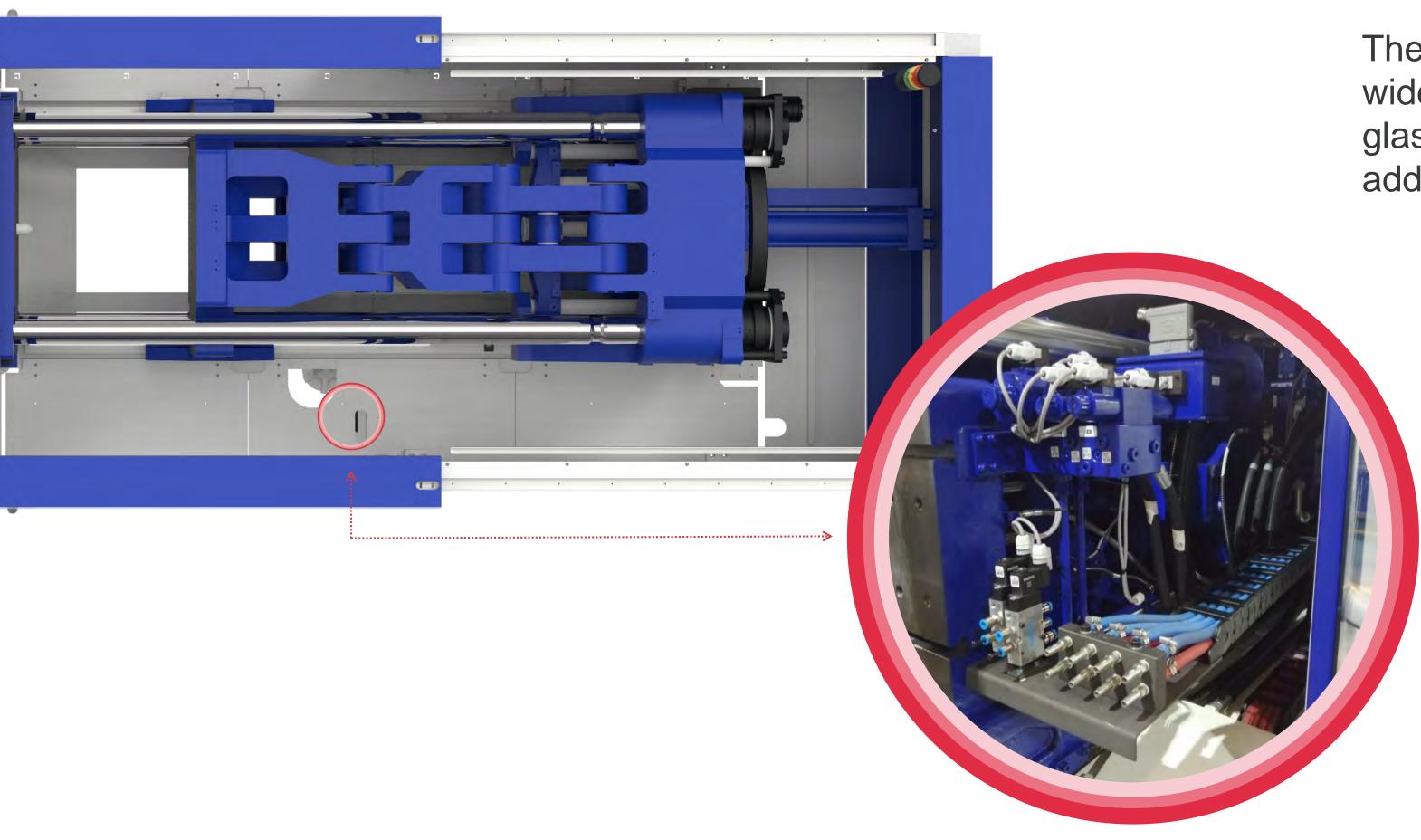
Exterior Design

- Frameless door easy entry for mold changes and robots
- Free space under basement for auxiliaries and conveyor belts

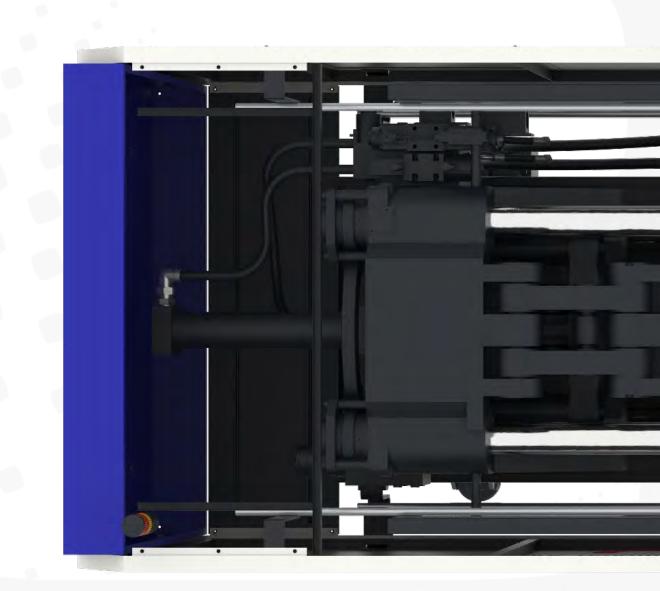




Exterior Design



The safety door on the non-operation side is widened, and three sets of core-pulling and glass tube flowmeters are reserved, to address the needs of European customers







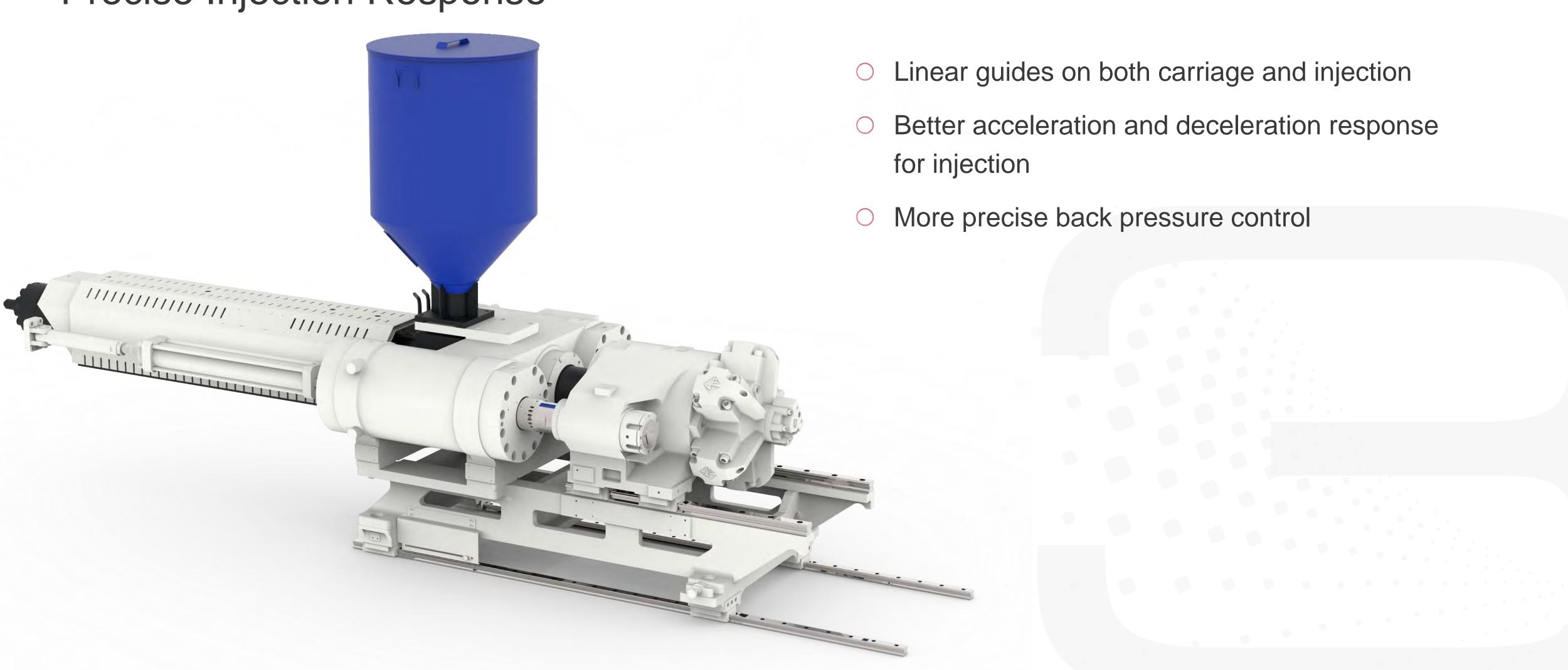


Injection Unit Combination of IU

MAIII/plus Standard Combination												
CU	IU											
	130	280	400	570	750	1000	1350	1700	2250	3200	4500	
70												
100												
130												
170												
210												
270												
350												



Injection Unit Precise Injection Response





Injection Unit Easy Maintenance



Swiveling injection unit as standard
 At least 30% time saving for screw replacement

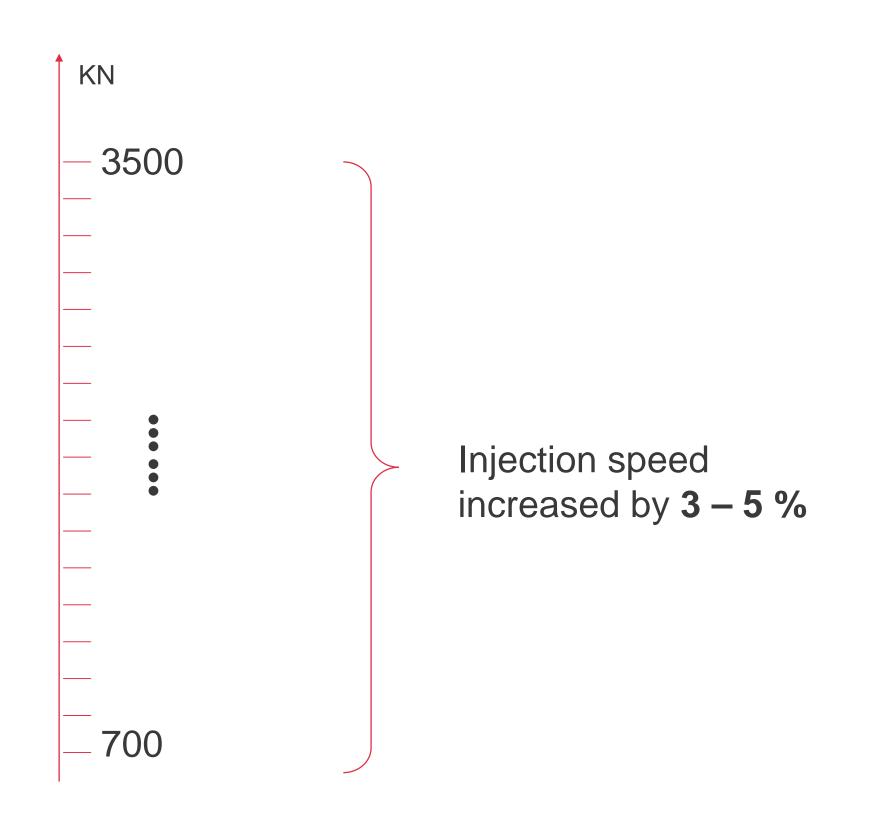


Injection Unit Efficient Plasticizing Components





Increased Injection Speed



Strong injection capacity featuring high injection pressure & speed

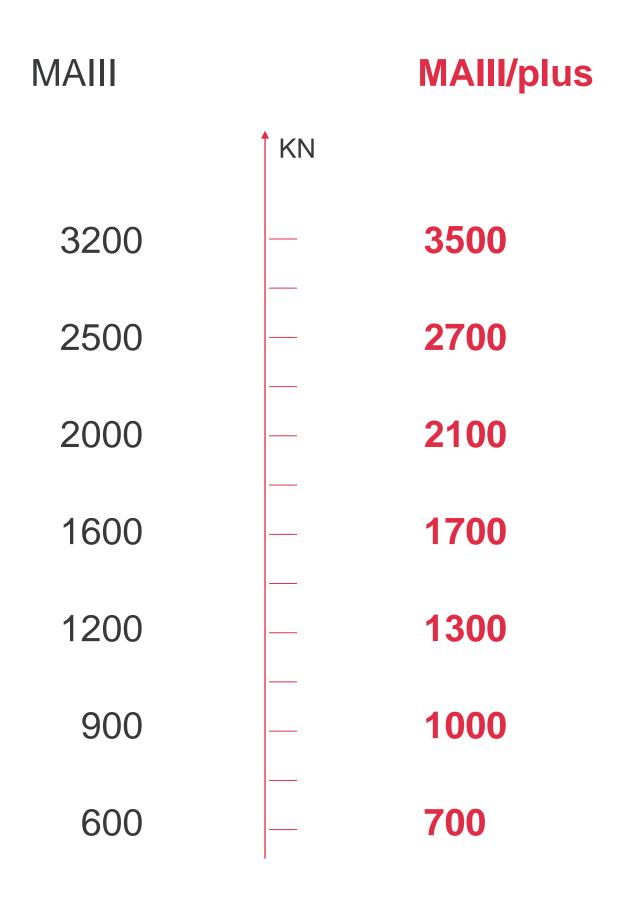
- Shorter dry cycle times
- Better solution for thin-walled parts
- Prevention from deformation through cooling
- Improved process range and improve process forming capabilities.







Powerful Clamping System



- Upgraded clamping force
- Thickened and strengthened platen
- Bigger tie bar distance

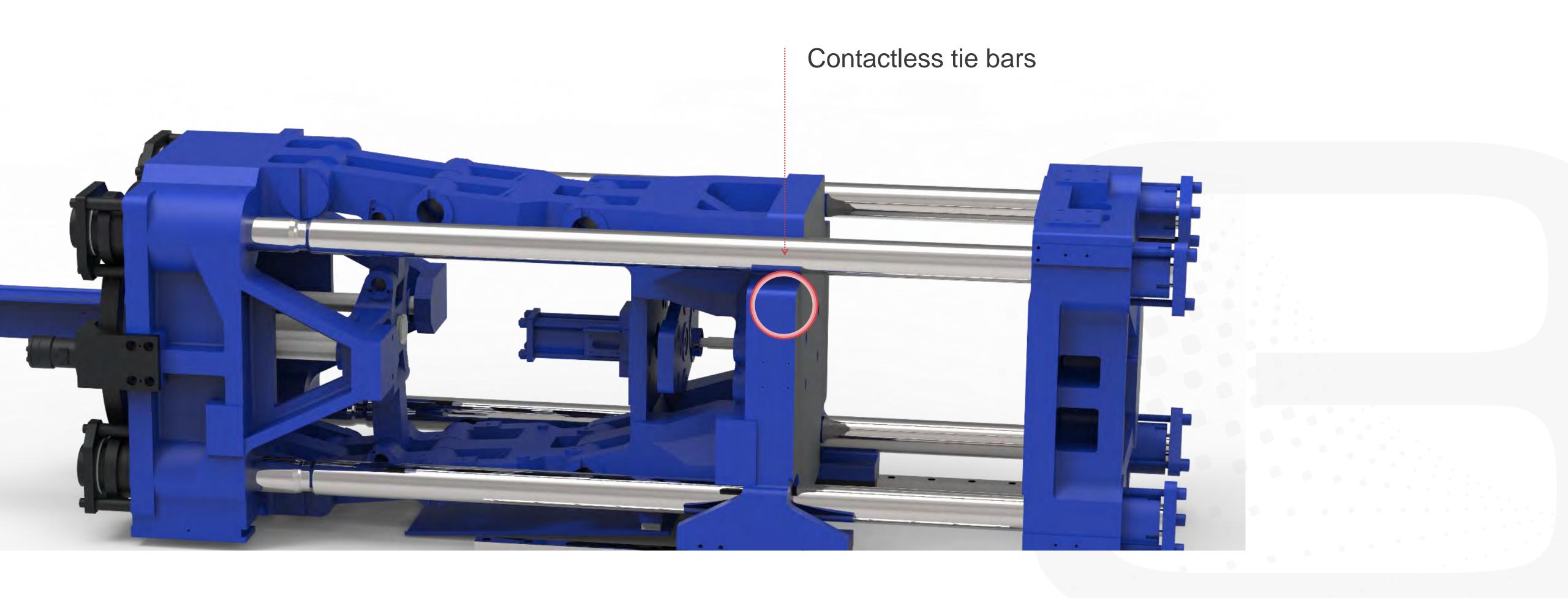


Clamping System Tie bar distance

	MAIII/plus	Distance tie bar	MAIIS	Distance tie bar
1	MA700III/130	360 x 360	MA600IIS/130	310 x 310
2	MA1000III/280	410×410	MA9000IIS/280	360 x 360
3	MA1300III/400	470×470	MA1200IIS/400	410 x 410
4	MA1700III/570	530×530	MA1600IIS/570	470 x 470
5	MA2100III/750	580×580	MA2000IIS/750	530 x 530
6	MA2700III/1000	680×680	MA2500IIS/1000	580 x 580
7	MA3500III/1700	730×730	MA3200IIS/1700	680 x 680

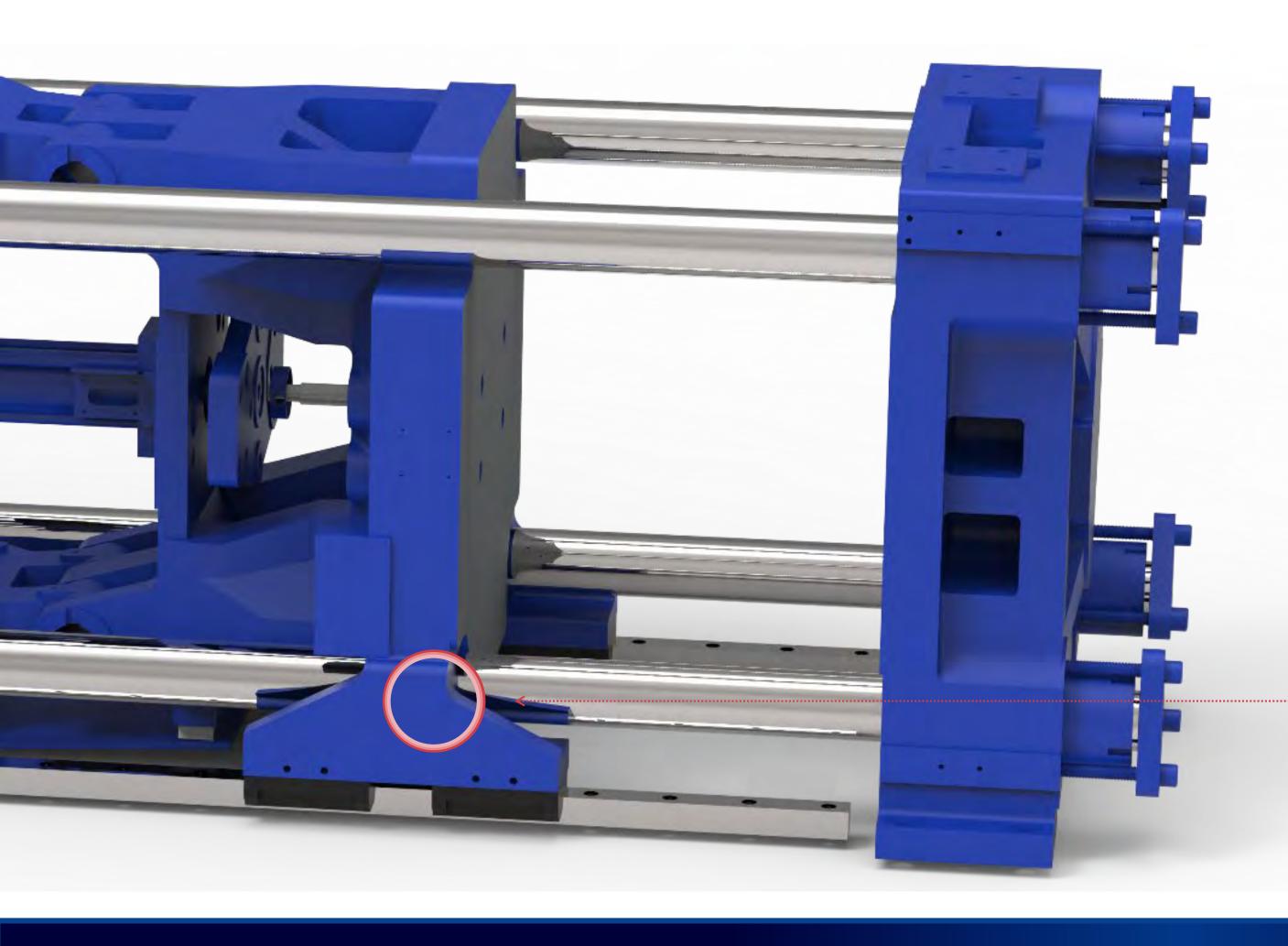


Clamping Unit





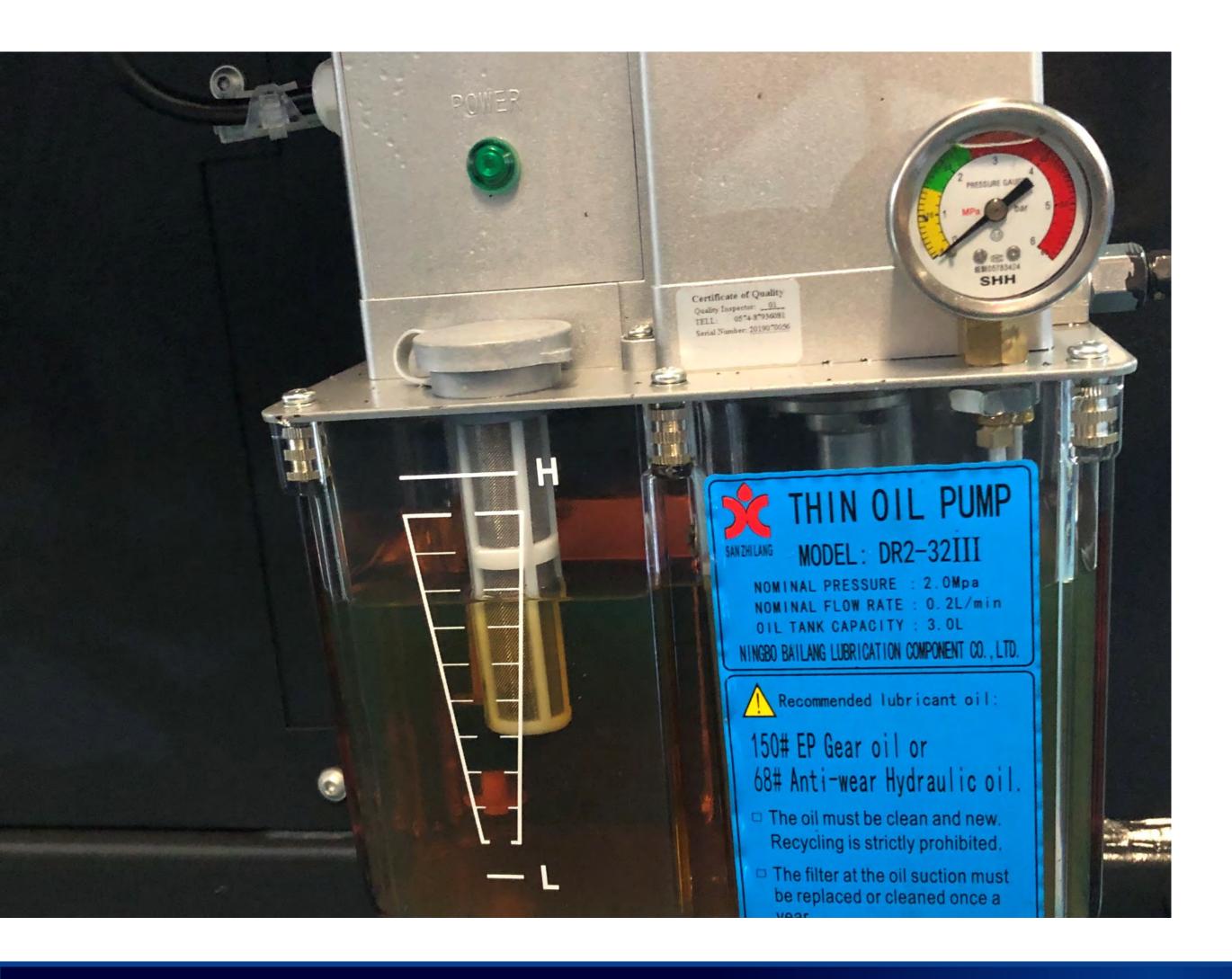
Clamping Unit (Optional)



- Linear guides on the clamping unit
- Increased parallelism
- Reduction of energy consumption



Lubrication System

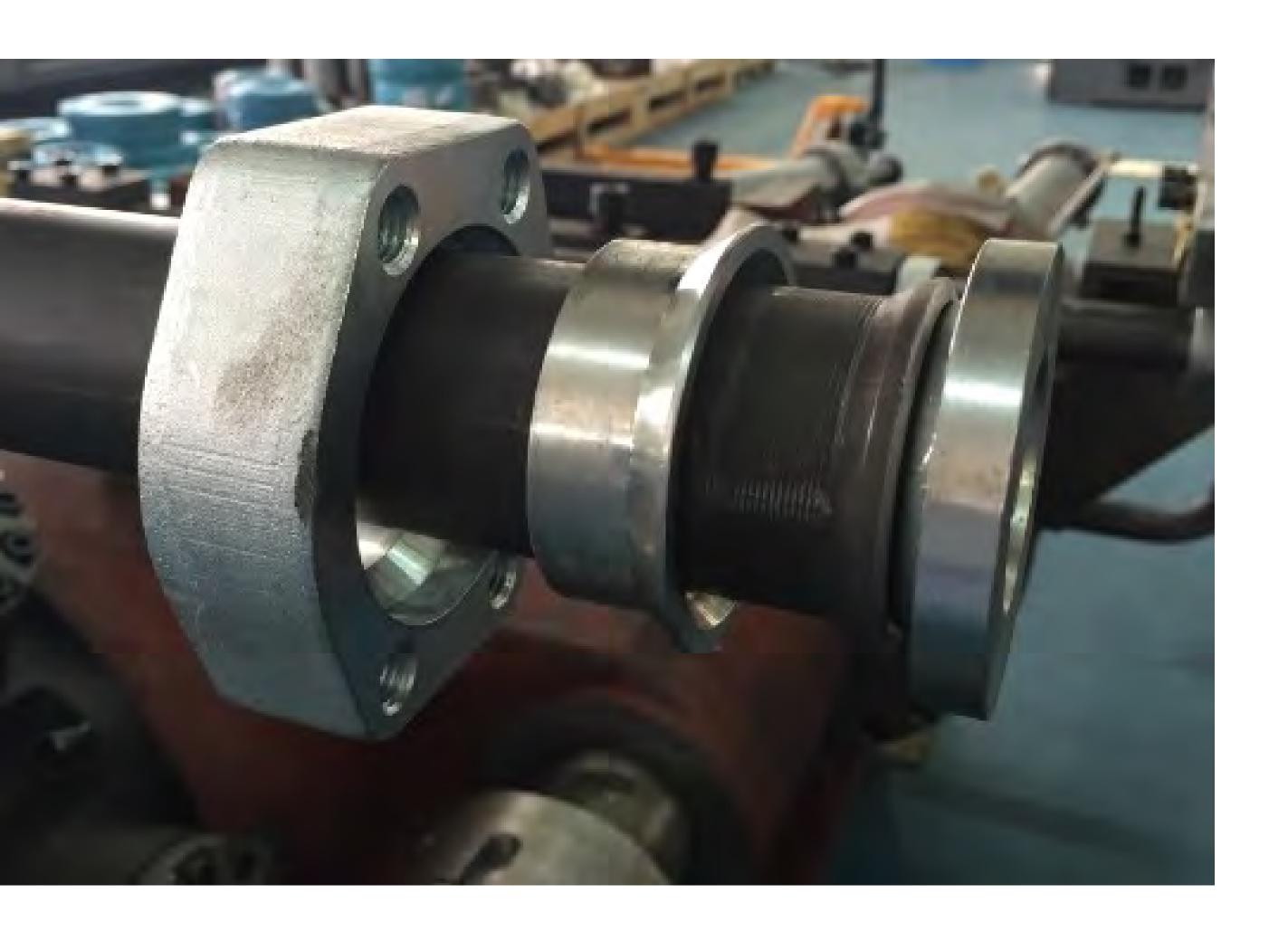


Graphite sleeve oil lubrication for mold opening and closing for machines between 60 to 1,300 t

- Clean and environmental friendly
- Longer life-span
- Less oil consumption
- Less maintenance cost



Non-welding power pipelines



- Non-welding technology for power pipeline
- Non-welding process for power pipelines
- More clean and less risk of oil leakage





Faster Cycle

- New high performance servo drive system (Self-developed product by Haitian)
- Faster injection acceleration response
- III: 100ms, IIS: 200ms and doubled response!

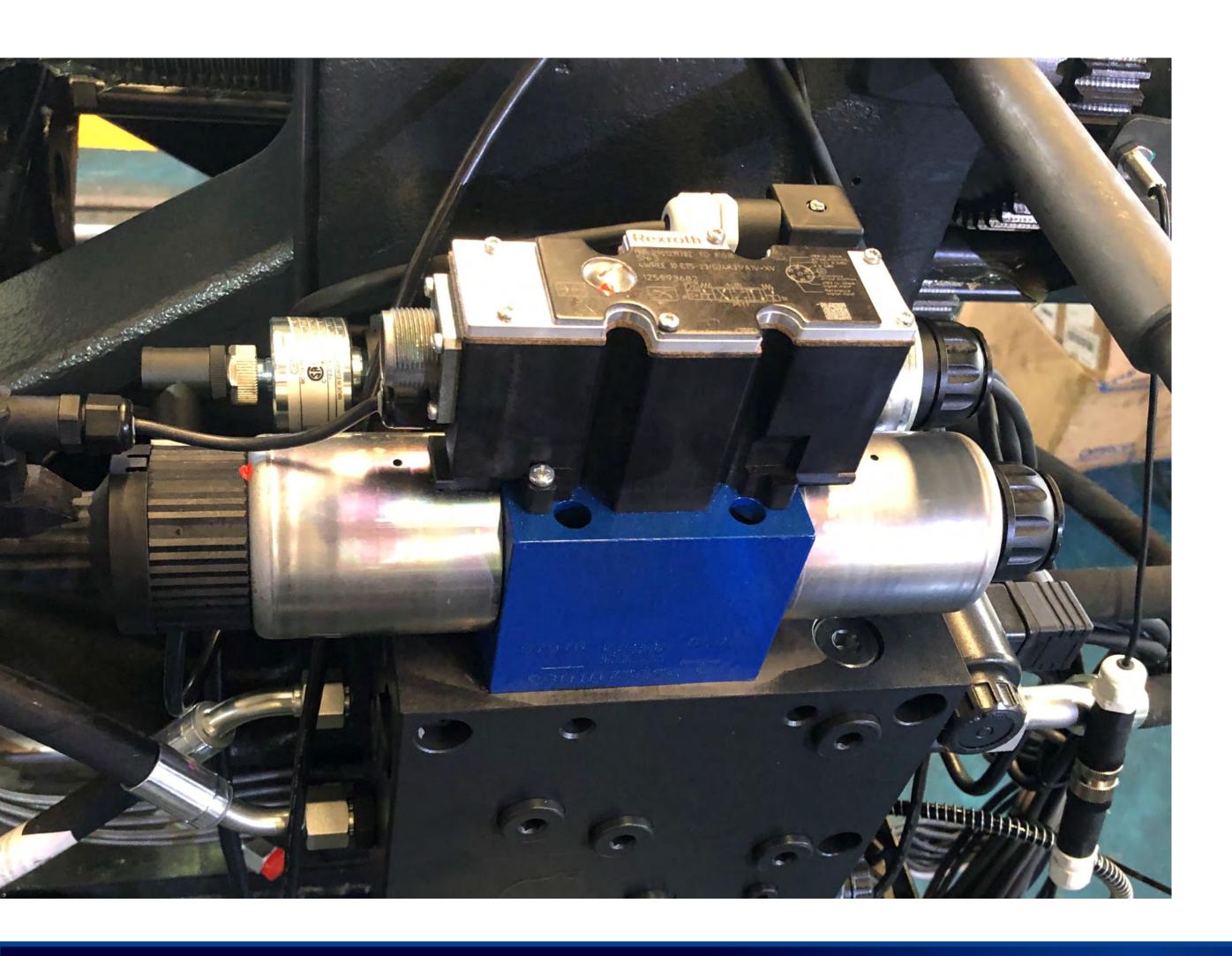








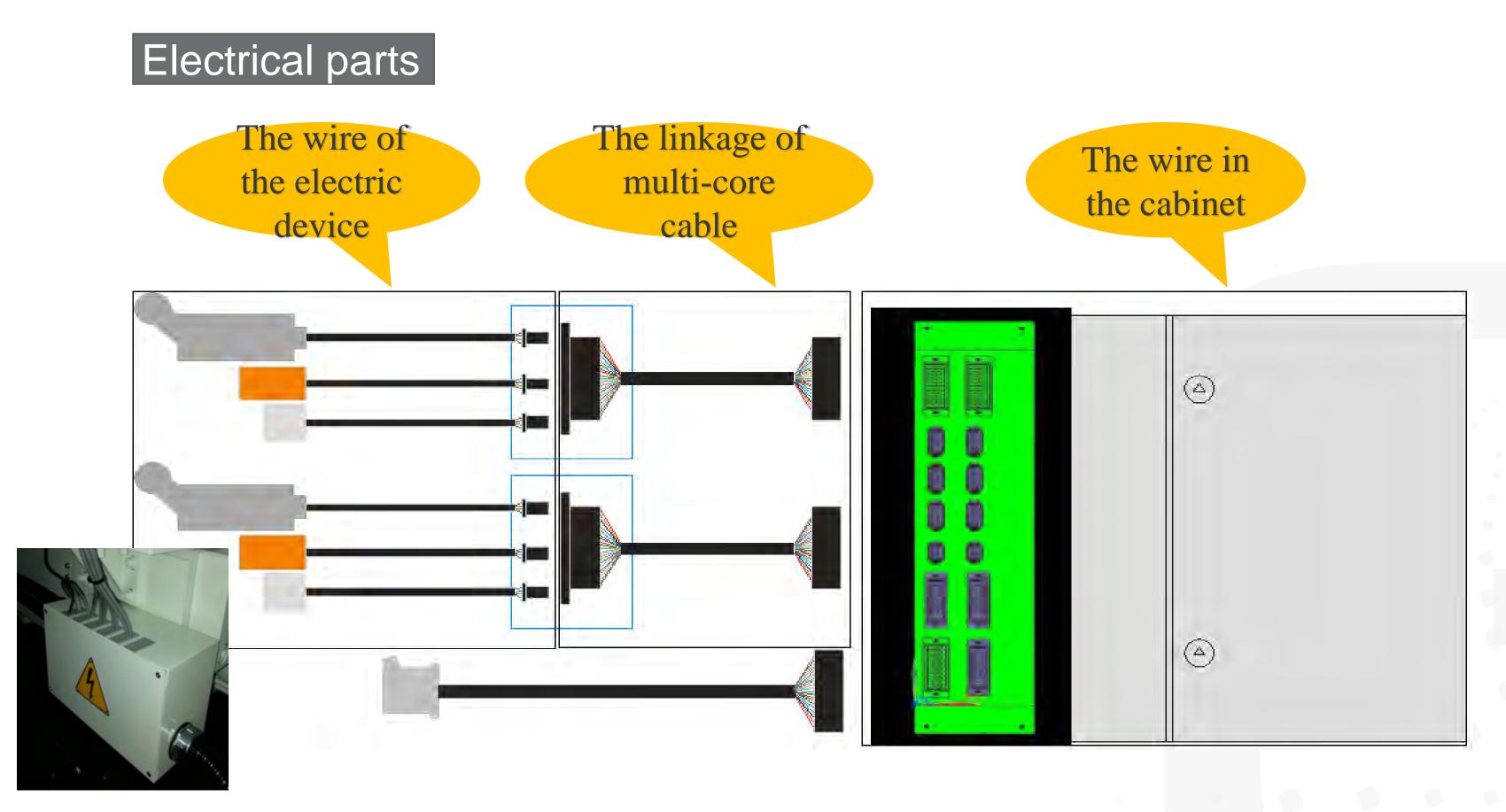
Higher Precision



- Proportional Control Technology
- Proportional valve for the clamping unit offers faster mold opening and closing
- Higher precision
- Repeatability up to 0.5mm



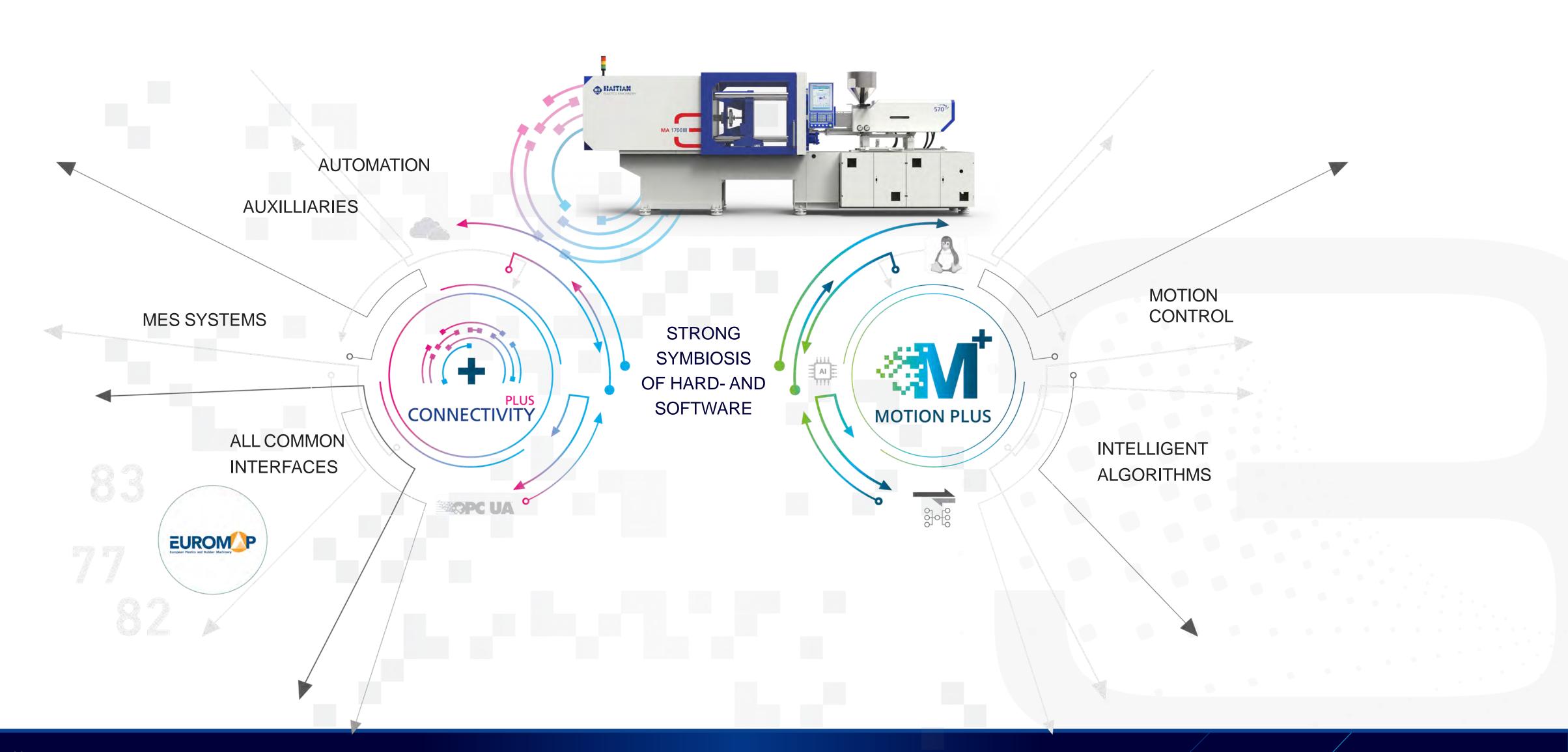
Optimization And Promotion Of MAIII/Plus



Bus design for wires, plug docking, wire prefabrication, short stocking cycle, high assembly efficiency and reliability.



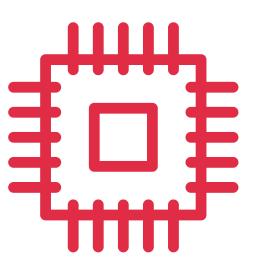
Open Integration



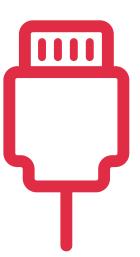
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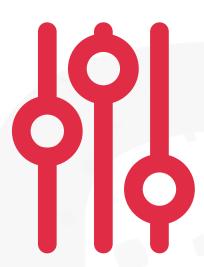
Improved Control Technology







Compatible with the latest international information interface standards



Precise control



User-friendly HMI

User-friendly panel with large screen and new UI interface



Standard KEBA i1180 controller + 12-inch screen, digital bus system EtherCAT, flexible expansion through IO expansion module

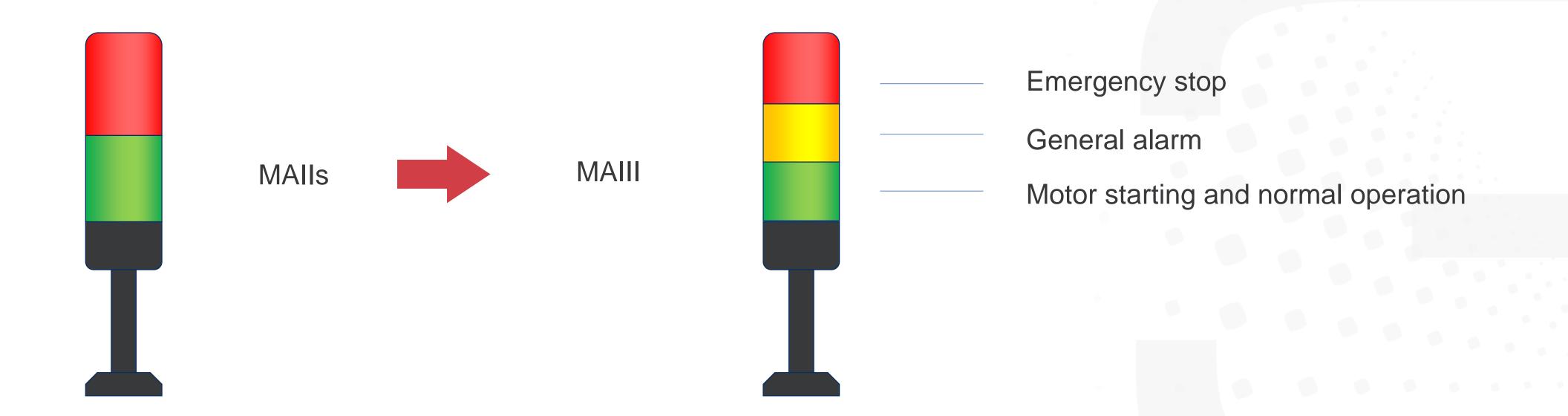


Optional KEBA i2885 controller +15 touch screen



Warning light

- Three-color warning light is standard for machines above 280t
- More visible for alarm conditions







THANK YOU!

