

Haitian Saturn Series



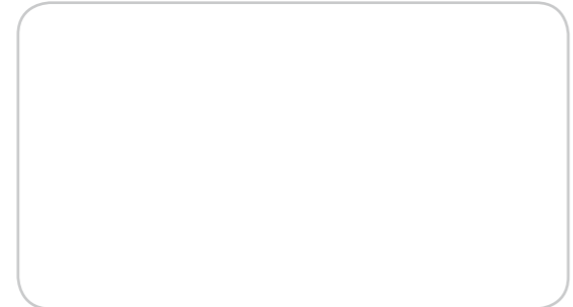
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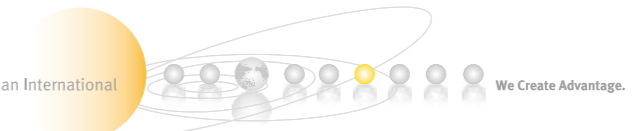
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Haitian Partner:



A Member of Haitian International



We Create Advantage.

Top quality

At a unique price-performance ratio.



The hydraulic standard solution "Haitian Saturn Series" focuses on the mass market. It is the most popular injection molding machine series in China and other countries throughout the world, with the best price and performance ratio.

With 40 years experience in machine design and manufacture, the Haitian Saturn Series is providing the highest level of market satisfaction, delivering customer's requirements in terms of simplicity of operation, reliability, high quality and overall production consistency.

The Haitian Saturn Series offers the customer flexibility to expand functions by the addition of options to meet the customer's special requirements for high efficiency.

We create advantage:

- » 40 years R&D and manufacturing experience
- » Cost driven design based on innovation
- » Highly accurate imported machine components
- » Highly efficient assembly process
- » Quality control at each stage of production
- » Accessible pre-sales and after sales service
- » Customer optimization according to requirements

Haitian Saturn Series - SA 1200/410



Haitian Saturn Series - SA 3800/2250



Haitian Saturn Series - SA 10000/8400



Haitian Saturn Series

In detail.

General

- » Haitian standard color
- » Optimized machine housing
- » Adjustable footpad
- » Standard hopper
- » Extended nozzle
- » Spare parts
- » Professional machine tools

Clamping unit

- » 5-point double toggle system
- » Mechanical, electrical safety gate interlock
- » Low pressure mold protection
- » Multi stage control of pressure, speed and position of mold open/close
- » Variable mode of ejector movement
- » Wear-resistant track of moveable platen
- » Cooling water manifold for mold cooling
- » 1 pair of hydraulic core puller
2 pairs for 5,300 kN to 14,000 kN
3 pairs for 16,000 kN to 28,000 kN
4 pairs for 33,000 kN to 40,000 kN
- » Automatic safety sliding door on the operating side (above 10,000 kN)
- » Automatic central lubrication
- » Fast mold clamping with differential device
- » Braking device for mold protection
- » Automatic mold height adjustment
- » Chrome plated tie bar
- » Controlled mold opening and clamping by stroke sensor
- » Controlled ejector by stroke sensor
- » Robot interface



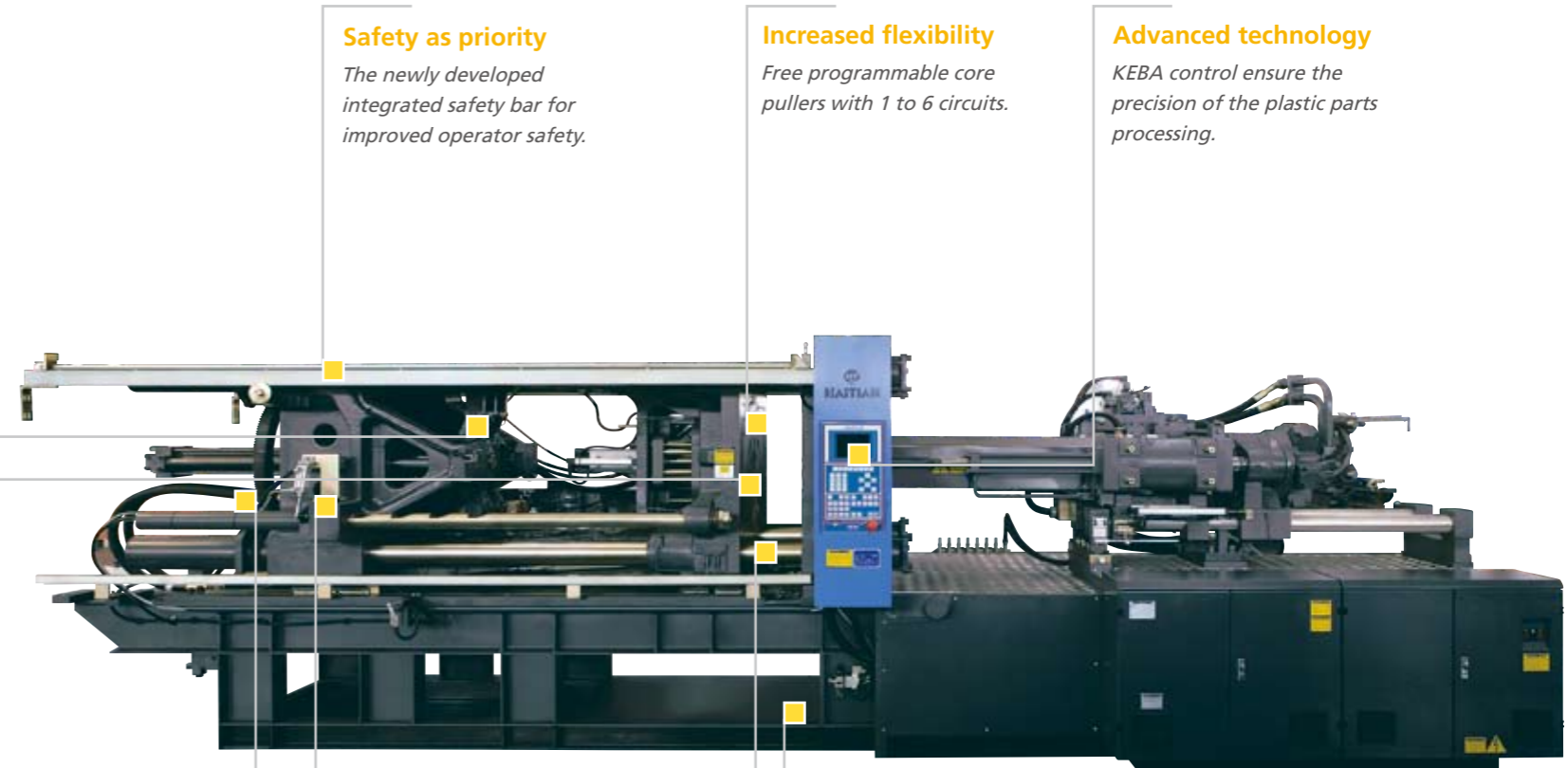
Dynamic and sensitive
The 5-point double toggle provides short locking time and high opening forces.



Euromap standard layout
European standard layout of the platen ensure the flexibility of fixing mold.



Time and cost saving
Automatic mold height adjustment ensure the time and cost saving during the mold changing.



Safety as priority
The newly developed integrated safety bar for improved operator safety.

Increased flexibility
Free programmable core pullers with 1 to 6 circuits.

Advanced technology
KEBA control ensure the precision of the plastic parts processing.

Optimized machine guarding
Optimized machine guarding design with consideration to fast and easy mold changing.

Wear resistant tie-bar
Chrome plated tie bars, made from alloy structural steel are designed and manufactured for high rigidity and wear-resistance.

Easily accessible
Discharge area opens on three sides to allow simple integration of peripheral components.

Haitian Saturn Series

in detail.

Injection unit

- » Two drive cylinder for the stroke of injection unit
- » Two drive cylinder for screw injection
- » Multi-stage installation of injection speed, pressure and position
- » Multi-stage installation of holding pressure, time and speed
- » Multi-stage installation of charging speed, time and position
- » Adjusted back pressure during charging
- » Automatic barrel heating function
- » Screw speed inspection
- » Controlled transfer position of injection to holding pressure
- » Monitored ending position of injection
- » Controlled injection process by stroke sensor
- » Prevented screw movement before full plasticizing
- » Nozzle protecting cover
- » Anti-slid barrel aluminum cover
- » Three retraction modes of injection unit
- » Self purging function
- » Efficient plasticizing device with strong torque motor
- » Mechanical supporting device for barrel (above 5,300 kN)
- » Free selection of variable screw sizes depending on application
- » Injection unit can be swivelled out to operator side (above 7,000 kN)
- » Controlled temperature of barrel by PID
- » Ceramic heater bands (above 2,800 kN)
- » Cooling device at the feeding throat
- » Nozzle alignment adjusting device

Hydraulics

- » Efficient and sound reduced hydraulic pump
- » Stable and powerful fixed hydraulic pump
- » By-pass oil filter
- » Oil tank with level control
- » Oil temperature alarm
- » Oil pre-heated function
- » Alarm in case of filter clogged
- » Oil cooling device controlled by valve
- » Core pull function parallel to mold opening/closing (16,000 kN-24,000 kN)



Hydraulic block

The energy-saving hydraulics are fitted with sound reduced and are made of high-quality European components. They allow much greater forces to be transferred and enable very uniform and precision movements of the machine.



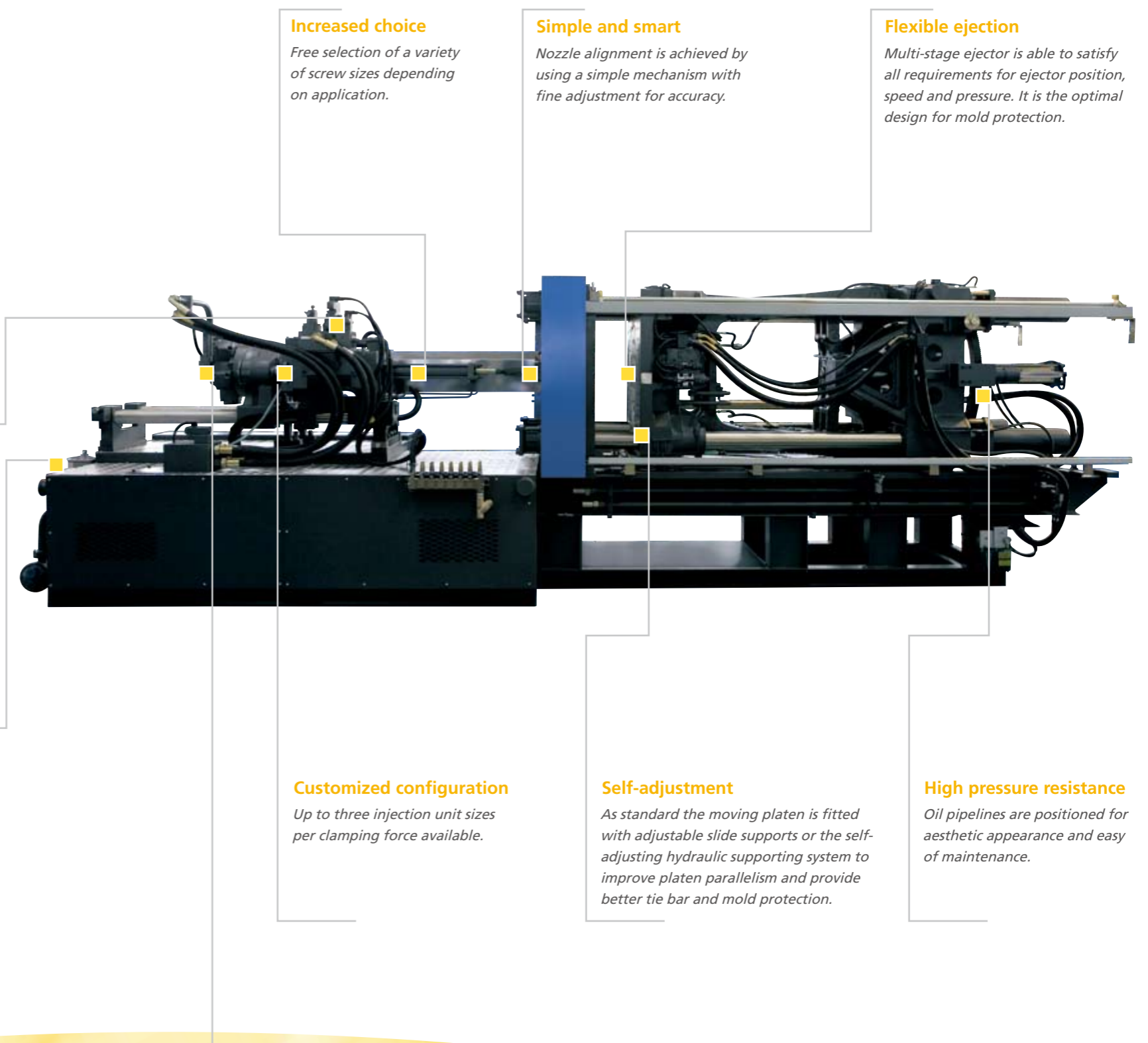
Powerful and stable

Fixed pump system provides stable output, quick response, powerful strength.



Low servicing costs

Permanent fine filtration of the oil in the by-pass increases oil quality in time and the intervals between oil changes.



Increased choice

Free selection of a variety of screw sizes depending on application.

Simple and smart

Nozzle alignment is achieved by using a simple mechanism with fine adjustment for accuracy.

Flexible ejection

Multi-stage ejector is able to satisfy all requirements for ejector position, speed and pressure. It is the optimal design for mold protection.

Customized configuration

Up to three injection unit sizes per clamping force available.

Self-adjustment

As standard the moving platen is fitted with adjustable slide supports or the self-adjusting hydraulic supporting system to improve platen parallelism and provide better tie bar and mold protection.

High pressure resistance

Oil pipelines are positioned for aesthetic appearance and easy of maintenance.

Uniform control

The latest technology from KEBA.

The Haitian Saturn Series uses the latest control technology from KEBA. This high-performance control system provides the ideal communication between the injection molding machine and the operator. The uniform operating concept and logical, clear structure of the functions make machine operation easy and user-oriented.

Model 1075 is suitable for standard applications, while model 4030 lends itself to more complex injection molding processes. Both versions are currently delivered in 15 languages.

Because of the large quantity of units required per year, Haitian is given high priority by their European partner. Haitian experts work closely with the KEBA development team, positively influencing the development and expansion of hardware and software as well as the reliable services provided.

Both versions – 1075 and 4030 – have USB and Ethernet interfaces to enable the quick transfer of machine data for software updates and for connections to external printers.

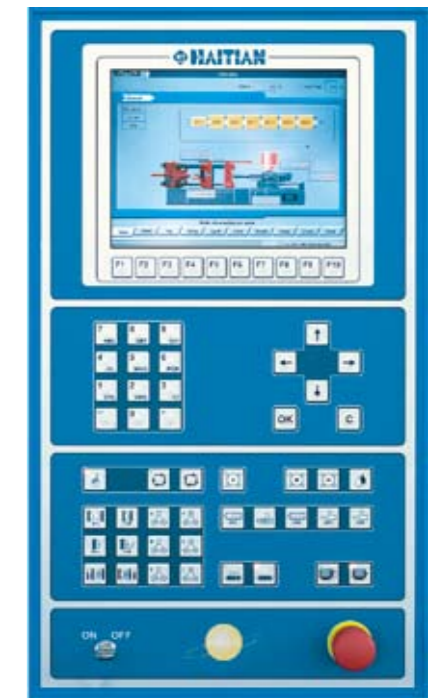
The graphical temperature displays for hot runner systems and heating equipment help to make controlling, monitoring and document machine processes easy and clear. This makes life easier for operators.



1075 system

Special features.

- » Keyboard operated 10.4" color screen
- » Temperature display for up to 12 hot runners
- » Easy-to-use injection, holding pressure and dosing settings for the specified profile
- » Cascade control injection valve gate up to 6 pneumatic or hydraulic
- » USB interfaces for the external backup of mold data and for connecting printers
- » Ethernet interface



4030 system

Special features.

- » 12" touch screen monitor for easy and ergonomic use
- » Temperature display for up to 40 hot runners
- » Easy-to-use injection, holding pressure and dosing settings for the specified profiles
- » Cascade control injection valve gate up to 12 pneumatic or hydraulic
- » USB interfaces for the external backup of mold data and for connecting printers
- » Ethernet interface
- » RS232 and RS485 interfaces



Options & Customization

Tailor-made and cost effective.

Options

- » Customized injection unit depending on application
- » Closed-loop control system with the help of Moog valve
- » Temperature controller for mold heating
- » Core pull function parallel to mold opening/closing
- » Spring shut-off nozzle
- » Accumulator assisted injection
- » Air valve
- » Additional core puller
- » Heat insulating board for platen
- » Flow meter
- » Variable pump
- » 3 color alarm light
- » E67 robot interface
- » Mold opening/closing controlled by proportional valve
- » Mold fixing pad
- » Autoloader
- » Hopper dryer
- » Magnet frame in hopper dryer
- » Dehumidifier
- » Chiller
- » Compressor
- » Conveyor belt
- » CE certification
- » CSA certification



Shorten your cycle time:

The hydraulic shut-off nozzle will allow to reduce cycle time by permitting the mold to operate during charging and plasticising, when used in conjunction with electric screw drive.



Higher efficiency with lower energy consumption:

Electric screw drive is used for increased plasticizing and high precision with the benefits reducing the energy consumption in charging duration.



Up to your choice:

A wide variety of screw designs for different polymer processing requirements are available.



Be clear at one glance:

Equipped with the flow meter, the level of cooling water will be clear at even one glance. It also allows to adjust the flowing volume and pressure for each melt of cooling water separately.



Increased injection speed:

By installing an accumulator the injection speed will be improved significantly, which is recommended in the production of mass flow rate components.

Function packages

The opportunity to process the following special materials by the Haitian Saturn Series machine is possible by adding the following upgrade packages:

Functional package PVC

Optimized special PVC screw design prevents the melt from being exposed to excessive friction and thereby ensures that the treatment process is ideally suited to the material.

Functional package PET

Optimized special L/D 25:1 screw, requiring a longer machine base, is driven by a high output motor for dramatically improving the plasticizing of the PET material to ensure the quality of the PET pre-form. Increased ejector force consistently ensures the finished parts are automatically ejected.

Functional package thermosetting material

A special bimetal screw reduces corrosion, with an accurate melt zone prevents the melt from overflowing, which prolongs the service life of the machine. The heating distribution is ensured by the special heat resistant sheet to improve plasticizing. The air release function is implemented to ensure the quality of the finished part.

Notes :

The selection of options requires pre-sales communication. We reserve the right to make alterations to the content in this brochure without notification.