



M301-S

NID
THE STARCH MOULDING SPECIALIST

● M301-S MOGUL ●

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The latest NID M301-S Mogul is the result of over six decades of innovation and development which permits production speeds of up to 25 trays per minute, 24 hours per day, 7 days a week.

This Mogul line offers the ultimate combination of productivity and versatility by fully integrating the Feeder, starch section, Depositor, Stacker and pallet transport.

The NID M301-S Mogul offers unsurpassed flexibility and is ideally suited to situations where production demands a wide variety of different articles to be produced within a very short period of time.

The design of the depositing tools and accessories make the Mogul especially suited to fast product changeovers which can be carried out within minutes, with five or more product changeovers per day being easily achievable by one operator.

The overall operating concept and construction of the Mogul is kept as simple as possible for the easy understanding of both operators and maintenance personnel alike which greatly reduces downtime.

The NID M301-S Mogul can be supplied in two basic versions to suit standard 820 mm long trays or the 1200-1218 mm long range of trays. These Moguls are commonly termed Maxi Moguls and also have a production speed of up to 25 trays per minute.

PURPOSE

For all starch moulded products such as:
Gums, Jellies, Marshmallows, Fondant Creams,
Liquorice and Crusted Liqueur.

The above product masses can be deposited in a wide variety of shapes and combinations such as:

- Single colour, single layer ■ Two colour side-by-side
- Two colour starlight ■ Two colour centre-in-shell.

All of the above can have a second layer of marshmallow/aerated mass or any other product mass overlay.



FEEDER & STACKER

The M301-S Feeder and Stacker are optimised for fast, reliable operation and can be built to specific heights and tray sizes to maximise yields.

The NID multi tray sub-stack arrangement permits high speed production yet low speed stack movement into the Feeder and out of the Stacker. As an option both Feeder and Stacker can be equipped with servo drives instead of electric motors. Empty pallets are automatically carried under the Mogul from the Feeder to the Stacker.

STARCH BUCK

NID's unique maintenance free walking beam tray transport guarantees accurate tray placement for perfect printing at any speed.

When emptying trays, the servo driven tipper arms take care of consistently dislodging adhering products and starch by a controlled tray fall release mechanism.

The NID special combination of tray starch filling, levelling and printing ensures high resolution, high quality mould impressions. The servo driven printer table is equipped with a vibrating system that breaks the vacuum in the starch impression. This allows deep printing mould shapes with vertical sides and therefore more impressions per tray.

DEPOSITOR

The Depositor is normally supplied with two pumps, each swinging on a pendulum-like suspension that allows double layer and many other varied articles to be deposited. The swinging pump design allows the use of small, lightweight and economical pumps that can deposit at a rate of up to 25 trays per minute.

All parts and assemblies above the trays, and the top of Depositor frame are manufactured from stainless steel.

All depositing settings such as piston stroke are servo driven and changed on the simple and easy to use touch screen. This is located next to the Depositor so "real time" adjustments can be made based on observations of the actual depositing characteristics.

The Depositor construction is simple and robust giving excellent visual and 'hands on' accessibility.

"NID has optimised Feeder and Stacker to provide fast and reliable operation."



“Over six decades of innovation and development”

M301-S Depositor Hopper & Pump Arrangement

INTEGRATION, VARIATIONS AND EXECUTIONS

The NID M301-S Mogul is unsurpassed for flexibility when it comes to the production of many different articles of varied styles and shapes.

It can be equipped with a wide variety of pumps and depositing accessories to provide tailored solutions to special customer requirements.

It can be equipped with one, two, or three depositing pumps in any combination or configuration depending on product requirements.

The basic range of pumps includes:

- Side-by-side pump
- Foam or aerated product mass pump
- Centre-in-shell (CIS) pump.

In addition to the above, depositing accessories can be provided to deposit starlight products.

A cherry dropper can also be provided between the first and second pump to provide a cherry embedded inside the article.

NID supplies a range of depositing accessories in the form of mouldboards and nozzle plates allowing a range of different article configurations.

NID technical staff work with customers to provide design and advice on the most economical solutions that will result in the highest productivity in selecting mouldboards and nozzle plates.

FEATURES

Continuously moving tray conveyors in Feeder and Stacker
Proven five-tray sub-stack system for ultra-smooth tray and stack transfer
Unique maintenance free walking beam (chainless) tray transport through starch section
Minimum number of moving parts
Baked powder coated surfaces, resistant to abrasion, water and acid
Starch sifter included with starch section
Full use of stainless steel in the Depositor section, particularly above the trays and including the top surfaces of the Depositor frame
Small, light weight and economical depositing accessories
Simplicity of design
Operator friendly with good visual accessibility to all critical process areas of the machine
Overload protection on all motor drives
Ethernet connection for remote NID technical support 24 hours per day, 7 days per week
Automation – fully-wired integrated electrical system with PLC and ‘one point’ touch screen for total process control
PLC storage of all servo and motion parameters including printer and Depositor pump for each product
Direct connection to the NID Starch Conditioning system
Direct connection to the product finishing machines
Full integration with the automatic pallet transport system.

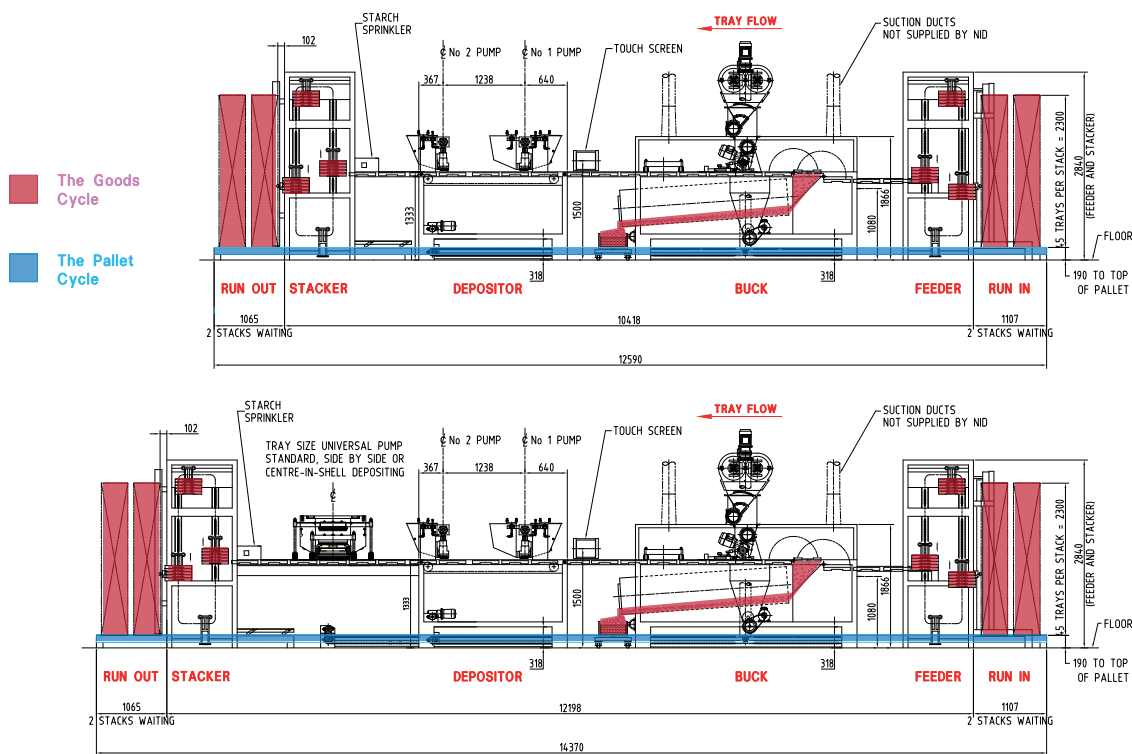
BENEFITS

- ✦ Faster product changeover
- ✦ Economical to stock a large range of depositing accessories
- ✦ Continuous and reliable production at 25TPM
- ✦ High Quality Confectionery
- ✦ Production of a wide variety of articles
- ✦ High degree of hygiene and sanitation
- ✦ Easy operation and maintenance
- ✦ Reliability
- ✦ High resolution printing
- ✦ Designed around your existing tray size
- ✦ One point operator touch screen for reduced operator fatigue.

**Maximise
Productivity**

**Minimise
Downtime**

**Optimise
Profitability**



NID is a specialist manufacturer of starch moulding machinery. We have been serving the confectionery industry for over 60 years. Our machines are based on simple, functional design, driven by constant innovation and integration with new technology. Well known as the most robust and user-friendly starch moulding machinery in the world, over 600 moguls have been supplied and installed across the globe, with some in operation for over 40 years. NID's use of PLC and servo drive motors allows remote diagnostic support 24/7.

NID'S RANGE OF EQUIPMENT INCLUDES:

- Moguls
- Laser Candy Cleaners
- Turbo Sugar Coaters
- Turbo Oilers
- Starch Conditioners
- Printer Depositors
- Universal Depositors
- Overhead / Oscillating Head Depositors
- Depositing Pumps and Accessories
- Metal Mouldboards and Moulds
- Starch Trays
- Spare Parts
- Upgrades and Modifications for Existing Equipment