# NOVA Packaging

The **Model HFFS-30** by NOVA PACKAGING offers industry leading design features that add up to proven bottom-line results. Our engineering team knows that any automatic bagging system must run with minimal operator interface in order to assure maximum production up time and the shortest possible R.O.I. The **Model HFFS-30** addresses these key performance criteria by utilizing rugged, simplistic construction combined with state-of-the-art controls and diagnostic messaging. Best of all, these industry leading features come standard on most HFFS-30 systems. Because at NOVA PACKAGING, we know that consistent performance is a demand, not an option.

Optional film perforation system offers unique 3section design that can be programmed per the application directly from the MMI screen Precision film delivery system with automotive style disc brake assures reliable, high-speed bag indexing

Open architecture design with full length polycarbonate doors allow for ease of inspection and maintenance

Bag fill station can be equipped with 1 or 2 settling stations which enhance both bag density and fill speed

### Industry Leading Features That Deliver Bottom Line Results!!!

- Standard features include overfilled bag detection, bag jam detection, broken bag detection, double top seal, easy-thread film feed, and venture air cooling system – these necessary features are optional, or not available, on most competitive systems
- Off-the-shelf parts with manufacturer and part number noted in the O & M manuals
- Consistently delivers up to 10% greater up-time versus the competition – That equals up to 1,400 more filled bags per shift



NOVA offers a complete line of scales and volumetric fillers for all types of products and applications



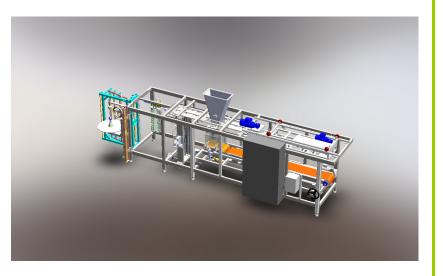
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## Model HFFS-30 Automatic Horizontal Form Fill & Seal Bagging System

The Model HFFS-30 is designed to form bags using roll stock poly films. The bags are made by center folding the film to form a seamless bottom and then heat sealing the sides and top. Air blades cool the top seal after filling to facilitate both speed of operation and seal integrity.

NOVA's engineering team has focused on building rugged mechanical assemblies coupled with reliable, easily understood control systems to insure ease of daily operation and maximum throughput.

The HFFS-30 can be supplied or integrated with all types of fillers and scales and interfaces easily with new or existing downstream bag handling and palletizing systems.



| •                                 |  |  |  |
|-----------------------------------|--|--|--|
| Materials of Construction:        | 4" tubular carbon steel structure – Type 304 stainless steel product contact parts   |  |  |
| Top Bag Seal:                     | Double seal with knurl wheels with automatic pressure release system   |  |  |
| Top Seal Cleaning:                | High efficiency air scrubber   |  |  |
| Top Seal Cooling:                 | Venturi air blade-60% greater cooling capacity with 70% less air consumption   |  |  |
| Film Carriage:                    | Vertical (horizontal optional)   |  |  |
| Bag Width Range:                  | 11" to 26"   |  |  |
| Bag Length Range:                 | Up to 42"  |  |  |
| Bag Weight Range:                 | Up to 100 lb. (depending on film construction)   |  |  |
| Bagging Rate:                     | Up to 34 BPM with standard secondary pre-seal staging station (rate varies by application)   |  |  |
| Film Gauge Capacity:              | 2 mil to 6 mil (based on film composition)   |  |  |
| Bag Settling/Shaking:             | Single shaker standard (dual shaker and settling drive optional)   |  |  |
| Standard Run Sensors:             | Broken film; broken bag, transition spout jam, over-filled bag, low air pressure & low sealer temp   |  |  |
| Operator Interface::              | 6" color touch screen with operations, diagnostic and preventative maintenance screens   |  |  |
| Control Enclosure:                | NEMA 12 standard   |  |  |
| Switches & Sensors:               | 24 VDC with quick disconnect   |  |  |
| Control Components:               | Allen-Bradley (std.) with Allen-Bradley VFD's (std.)   |  |  |
| Utilities:                        | 460V, 60Hz, 3Ph @ 30 amps and 80 PSI compressed air @ 15 CFM   |  |  |
| Metal Finish:                     | Sandblasted, primed and painted with gray industrial enamel standard   |  |  |
| Safety & Guarding:                | Safety guards, and advisory, caution, warning and operational labels   |  |  |
| Optional Equipment & Accessories: | Additional bottom shaker; bag side settler; scale or volumetric filler; horizontal film carriage; dual film carriage assemblies. adjustable 3-section hole punch assembly; bag top coder; master MMI interface (common control for bagger, palletizer and wrapper), film lift assist; gusset forming, bag corner miters; powder coated frame |  |  |



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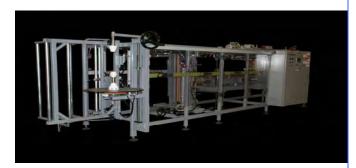


#### HFFS-30 Horizontal Form Fill and Seal

This Horizontal Form Fill & Seal bagging system is designed to form bags using a folded poly film, once the bags are formed and filled, a hot air sealer will seal the bags, cooling air knives are used to cool the seal prior to discharging the bags.

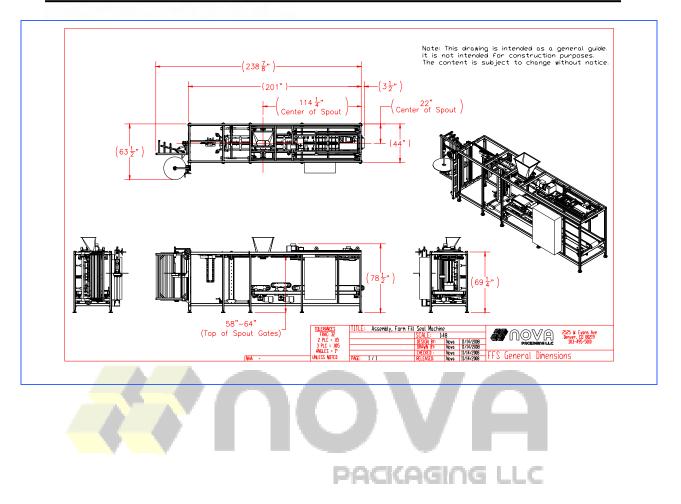
The bags discharge in the up-right position.

The system is built with Heavy structural Tube Framing.



| General Specifications                  |                                   |   |  |
|---|-----------------------------------|---|--|
| Bag Width                               | From 11" to 26"                   |   |  |
| Bag Length                              | Up to 42"                         |   |  |
| Film Thickness                          | From 2 mil to 8 mil               |   |  |
| Bag Sealer Hot Air Sealer (double seal) |                                   |   |  |
| Rate 🦲                                  | Up to 32 BPM                      | Product and bag size dependant  |  |
| Construction                            | Structural Steel Tubing           |   |  |
| Power <mark>Supp</mark> ly              | 460V, 60Hz, 3 Ph, 30<br>Amps      |   |  |
| PLC                                     | Allen-Bradley                     | SLC-503   |  |
| Operator<br>Interface                   | 6" Colored Touch Screen           | All operation functions and adjustment, fault conditions<br>and corrective action, preventive maintenance schedule                |  |
| Control Panel                           | Nema 12                           |   |  |
| Motors                                  | TEFC                              | Controlled by Allen-Bradley Power Flex 4 VFD's  |  |
| Sensors                                 | 12 VDC with Quick<br>Disconnect   |   |  |
| Film Holder                             | Vertical (Optional<br>Horizontal) |   |  |
| Product<br>Contacts                     | Stainless Steel 304               | A unique and innovative design for the bag guide path to increase the contact area, approximate center to center dimension are 1" |  |
| Hole Punch<br>Assembly                  | Pneumatically operated mechanism  | Number and size of holes, are adjustable  |  |
| Product Shaker                          | Optional                          | Up to Two stations are available (one under the filling station, the second between the filling station and the sealing station)  |  |
| General Drawing Information             |                                   |   |  |







#### **HFFS-30 Main Components**

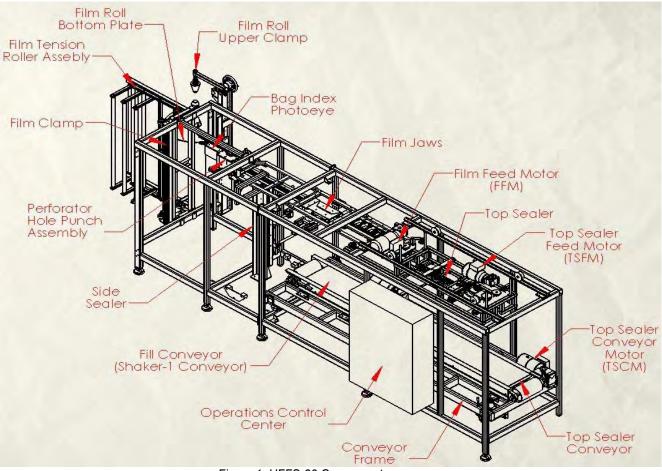


Figure 1: HFFS-30 Components

A typical HFFS-30 Horizontal Form/Fill/Seal System. This drawing is intended to act as a general guide for the components for quotation purposes and is subject to change without notice.