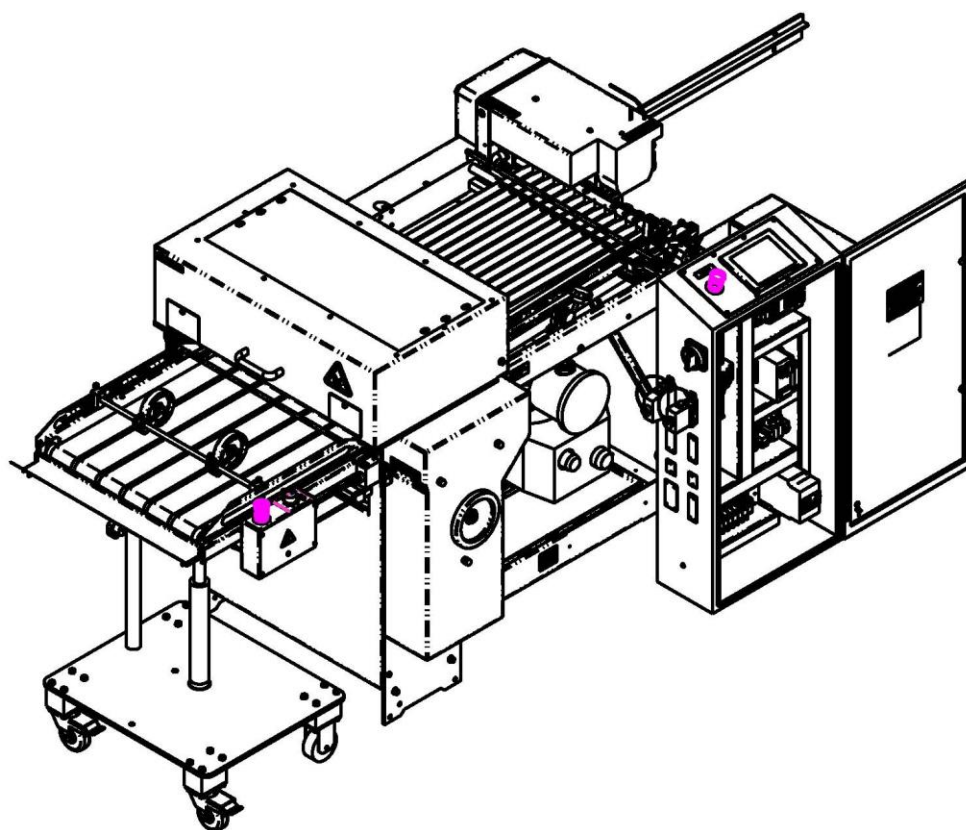


BAUM



BAUM 1620

VERSATILE FINISHING MODULE

INSTRUCTION MANUAL

2014 BAUMFOLDER CORPORATION

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Warning

- Do not operate this machine without all guarding in place.
- Do not make adjustments or perform maintenance on this machine with the power on.
- Keep the machine and work area clean and free of spills to prevent accidents.
- Be sure to replace any safety decals that may have been detached for any reason.

Baumfolder Corporation reserves the right to make changes in design or to make additions or improvements in its products without imposing any obligation upon itself to install them on its previously manufactured products. It is recommended that modifications to this equipment not be made without the advice and express written consent of Baumfolder Corporation.

20VFM-P-3, 20VFM-P-13,
20VFM-P-2, 20VFM-P-5,
20VFM-P-8, 20VFM-P-4

VFM IDENTIFICATION

MODEL NO: _____ SERIAL NO: _____

SALES AGENCY: _____

INSTALLED BY: _____ DATE: _____

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FUNDAMENTAL SAFETY INSTRUCTIONS!

The diagrams and descriptions used in these instructions are not necessarily applicable to the specification of the machine supplied. Modifications, made for reasons of technical or operational improvement, are embodied without notice.



FUNDAMENTAL SAFETY INSTRUCTIONS!

These operating instructions are designed to familiarize the user with the machine and its designated use.

The instruction manual contains important information on how to operate the machine safely, properly and most efficiently. Observing these instructions helps to avoid danger, to reduce repair costs and downtimes and to increase the reliability and life of the machine.

In addition to the operating instructions and to the mandatory rules and regulations for accident prevention and environmental protection in the country and place of use of the machine, the generally recognized technical rules for safe and proper working must also be observed.

1.0 Basic operation and designated use of the machine/plant

1.0.1

The machine /plant has been built in accordance with state-of-the art standards and the recognized safety rules. Nevertheless, its use may constitute a risk to life and limb of the user or of third parties, or cause damage to the machine and to other material property.

1.0.2

The machine/plant must only be used in technically perfect condition in accordance with its designated use and the instructions set out in the operating manual, and only by safety-conscious persons who are fully aware of the risks involved in operating the machine/plant. Any functional disorders, especially those affecting the safety of the machine/plant, should therefore be rectified immediately.

1.0.3

The machine/installation is designed exclusively for paper finishing of minimum and maximum sheet sizes (see corresponding operating instructions). Using the machine/installation for purposes other than those mentioned above is considered contrary to its designated use. The manufacturer/supplier cannot be held liable for any damage or injury arising from such misuse. The risk of such misuse lies entirely with the user.

Operating the machine within the limits of its designated use also involves observing the instructions set out in the operating manual and complying with the inspection and maintenance directives.

1.1 Organizational measures

1.1.1

The operating instructions must always be at hand at the place of use of the machine/plant, e.g. by stowing them in the tool compartment or tool-box provided for such purpose.

1.1.2

Personnel entrusted with work on the machine must have read the operating instructions and in particular the chapter on safety before beginning work. Reading the instructions after work has begun is too late. This applies especially to persons working only occasionally on the machine, e.g. during setting up or maintenance.

1.1.3

For reasons of security, long hair must be tied back or otherwise secured, garments must be close-fitting and no jewelry - such as rings - may be worn. Injury may result from being caught up in the machinery or from rings catching on moving parts.

1.1.4

Observe all safety instructions and warnings attached to the machine/plant.

1.1.5

See to it that safety instructions and warnings attached to the machine are always complete and perfectly legible.

1.1.6

In the event of safety-relevant modifications or changes in the behaviour of the machine/plant during operation, stop the machine/plant immediately and report the malfunction to the competent authority/person.

1.1.7

Never make any modifications, additions or conversions which might affect safety without the supplier's approval. This also applies to the installation and adjustment of safety devices and valves as well as to welding work on load-bearing elements.

1.1.8

Spare parts must comply with the technical requirements specified by the manufacturer. Spare parts from original equipment manufacturers can be relied to do so.

1.1.9

Report any accident that occurs due to a malfunction of the machine though all prescribed safety precautions were observed directly to our agency.

1.2 Selection and qualification of personnel - Basic responsibilities

1.2.1

Employ only trained or instructed staff and set out clearly the individual responsibilities of the personnel for operation, set-up, maintenance and repair.

1.2.2

Make sure that only authorized personnel works on or with the machine.

1.2.3

Work on the electrical system and equipment of the machine/plant must be carried out only by a skilled electrician or by instructed persons under the supervision and guidance of a skilled electrician and in accordance with electrical engineering rules and regulations.

1.2.4

Work on gas fueled equipment (gas consumers) may be carried out by specially trained personnel only.

1.3 Safety instructions governing specific operational phases

1.3.1 Standard operation

1.3.1.1

Avoid any operational mode that might be prejudicial to safety.

1.3.1.2

Take the necessary precautions to ensure that the machine is used only when in a safe and reliable state. Operate the machine only if all protective and safety-oriented devices, such as removable safety devices, emergency shut-off equipment, sound-proofing elements and exhausters, are in place and fully functional.

1.3.1.3

Check the machine/plant at least once per working shift for obvious damage and defects. Report any changes (incl. changes in the machine's working behaviour) to the competent organization/person immediately. If necessary, stop the machine immediately and lock it.

1.3.1.4

Before starting up or setting the machine/plant in motion, make sure that nobody is at risk.

1.3.2

Special work in conjunction with utilization of the machine/plant and maintenance and repairs during operation; disposal of parts and consumables.

1.3.2.1

Always press the emergency (Not-Stop) button first, if you stop the machine for adjustments or maintenance work which must not be done while the machine is in operation.

1.3.2.2

For extensive maintenance or repair work, turn off the main power supply.

1.3.2.3

After making adjustments or after doing maintenance or repair work, always make sure that all tools or other objects are removed from the machine. Otherwise they might fall into the machine, causing severe damage or injuries.

1.3.2.4

Keep the floor around the entire machine clean. Immediately clean any oil, grease or paint spills up off the floor. Remove tools, cleaning cloths or paper scraps from all work areas.

1.3.2.5

Never clean moving parts of the machine (rollers, shafts) or remove any test sheets, spoiled sheets or bits of paper in such areas.

1.3.2.6

Observe the adjusting, maintenance and inspection activities and intervals set out in the operating instructions, including information on the replacement of parts and equipment. These activities may be executed by skilled personnel only.

1.3.2.7

Brief operating personnel before beginning special operations and maintenance work, and appoint a person to supervise the activities.

1.3.2.8

If the machine/plant is completely shut down for maintenance and repair work, it must be secured against inadvertent starting by:

- locking the principal control elements and
- removing the ignition key and/or
- attaching a warning sign to the main switch.

1.4.1 Electric energy

1.4.1.1

Use only original fuses with the specified current rating. Switch off the machine/plant immediately if trouble occurs in the electrical system.

1.4.1.2

If provided for in the regulations, the power supply to parts of machines and plants, on which inspection, maintenance and repair work is to be carried out must be cut off. Before starting any work, check the de-energized parts for the presence of power and ground or short-circuit them in addition to insulating adjacent live parts and elements.



1.4.1.3

The electrical equipment of machines/plants is to be inspected and checked at regular intervals. Defects such as loose connections or scorched cables must be rectified immediately.

1.4.1.4

Necessary work on live parts and elements must be carried out only in the presence of a second person who can cut off the power supply in case of danger by actuating the emergency shut-off or main power switch. Secure the working area with a red-and-white safety chain and a warning sign. Use insulated tools only.

1.4.1.5

Only unplug or plug electrical connectors if the main switch has been disconnected.

1.4.1.6

Only connect the feeding units and no machines of other brands to the existing connectors. Any electrical connection of our feeding machines with other brands needs our express consent.

1.4.1.7

For electrical connection, observe the prescribed admissible voltage and frequency.

1.4.1.8

Keep switch cabinets closed.

1.4.1.9

The socket outlet shall be installed near the feeder and shall be easily accessible.

1.4.2

Oil, grease and other chemical substances


1.4.2.1

When handling oil, grease and other chemical substances, observe the product-related safety regulations.

1.5 Description and definition of the safety labels and pictographs on the machine

Replace damaged pictographs by new ones. The corresponding reference numbers are indicated.

For Labels See page 19



GRUNDLEGENDE SICHERHEITS- HINWEISE!

Die in diesen Hinweisen verwendeten Diagramme und Beschreibungen gelten nicht notwendigerweise für die gelieferte Maschine. Änderungen, die aus technischen Gründen oder für einen verbesserten Betrieb durchgeführt wurden, werden ohne Vorankündigung übernommen.



GRUNDLEGENDE SICHERHEITSHINWEISE!

Die vorliegende Bedienungsanleitung dient dazu, dass sich der Anwender mit der Maschine und deren Einsatzzweck vertraut macht.

Die Bedienungsanleitung enthält wichtige Informationen über den sicheren, bestimmungsgemäßen und wirkungsvollen Betrieb der Maschine. Bei Beachtung dieser Anweisungen werden Gefahren vermieden, Reparaturkosten und Stillstandszeiten verringert sowie die Zuverlässigkeit und die Lebensdauer der Maschine erhöht.

Zusätzlich zur Bedienungsanleitung und den verbindlichen Vorschriften und Bestimmungen zur Verhinderung von Unfällen sowie im Hinblick auf den Umweltschutz in dem Land, in dem die Maschine eingesetzt wird, sind ebenfalls die allgemein anerkannten technischen Vorschriften für sicheres und korrektes Arbeiten zu beachten.

1.0

Grundlegender Betrieb und Einsatzzweck der Maschine/Anlage

1.0.1

Die Maschine/Anlage wurde in Übereinstimmung mit den neuesten Normen und anerkannten Sicherheitsvorschriften hergestellt. Trotzdem kann ein Risiko für das Leben oder die Gliedmaßen des Anwenders oder Dritter gegeben sein, oder eine Beschädigung der Maschine und anderer Gegenstände verursacht werden.

1.0.2

Die Maschine/Anlage darf nur in technisch einwandfreiem Zustand in Übereinstimmung mit dem Einsatzzweck und den in der Bedienungsanleitung dargelegten Anweisungen und nur durch Personen bedient werden, die sich der mit dem Betrieb der Maschine/Anlage verbundenen Risiken bewusst sind. Jegliche Funktionsstörungen, besonders diejenigen, welche die Sicherheit der Maschine/Anlage betreffen sind daher sofort zu beheben.

1.0.3

Die Maschine/Anlage wurde ausschließlich für die Verarbeitung von Bögen mit bestimmten Mindest- und Höchstformaten konstruiert (siehe die entsprechende Bedienungsanleitung). Wird die Maschine/Anlage für andere, als die zuvor aufgeführten Zwecke verwendet, wird dies als im Gegensatz zum Einsatzzweck stehend angesehen. Der Hersteller/Lieferant kann für Schäden oder Verletzungen, die sich aus solch einem Missbrauch ergeben, nicht haftbar gemacht werden. Das Risiko solch eines Missbrauchs trägt allein der Anwender.

Ein Betrieb der Maschine innerhalb der Grenzen des Einsatzzwecks beinhaltet ebenfalls die Einhaltung der in der Bedienungsanleitung enthaltenen Anweisungen sowie der Inspektions- und Wartungsrichtlinien.

1.1 Organisatorische Schutzmaßnahmen

1.1.1

Die Bedienungsanleitung muss am Aufstellungsort der Maschine/Anlage stets zur Hand sein, z.B. indem diese im Werkzeugfach oder in dem für diesen Zweck vorgesehenen Werkzeugkasten aufbewahrt wird.

1.1.2

Die mit der Arbeit an der Maschine beauftragten Personen müssen die Bedienungsanleitung und insbesondere das Kapitel über Sicherheit vor Arbeitsbeginn durchgelesen haben. Wird die Anleitung erst nach Arbeitsbeginn durchgelesen, ist dies zu spät. Dies gilt besonders für Personen, die nur gelegentlich an der Maschine arbeiten, wie z.B. während des Einrichtens oder während Wartungsarbeiten.

1.1.3

Aus Sicherheitsgründen langes Haar hochbinden oder auf andere Weise schützen, eng anliegende Kleidung und keinen Schmuck, wie z.B. Ringe, tragen. Verfängt sich das Haar in der Maschine, oder geraten Ringe in beweglichen Teilen, kann dies zu Verletzungen führen.

1.1.4

Alle an der Maschine/Anlage angebrachten Sicherheitshinweise und Warnungen beachten.

1.1.5

Darauf achten, dass an der Maschine angebrachte Sicherheitshinweise und Warnungen stets vollständig und gut lesbar sind.

1.1.6

Bei sicherheitsrelevanten Modifizierungen oder Änderungen im Verhalten der Maschine/Anlage während des Betriebs, die Maschine/Anlage sofort anhalten und die Störung der hierfür zuständigen Person melden.

1.1.7

Ohne Zustimmung des Lieferanten nie Modifizierungen, Zusätze oder Umbauten vornehmen, welche die Sicherheit beeinflussen könnten. Dies gilt ebenfalls für den Einbau und die Einstellung von Sicherheitsvorrichtungen und Ventilen sowie für Schweißarbeiten an lasttragenden Elementen.

- 1.1.8 Ersatzteile müssen die vom Hersteller festgelegten technischen Anforderungen erfüllen. Stammen Ersatzteilen von OEM-Herstellern, kann davon ausgegangen werden, dass diese Anforderungen erfüllt werden.

1.1.9

Unserer Vertretung jeglichen Unfall sofort melden, zu dem es aufgrund einer Störung der Maschine gekommen ist, obwohl alle vorgeschriebenen Sicherheitsmaßnahmen beachtet wurden.

1.2 Auswahl und Qualifikation des Personals - Grundlegende Verantwortung

1.2.1

Nur entsprechend geschulte oder ausgebildete Personen einsetzen und die jeweilige Verantwortung dieser Personen im Hinblick auf den Betrieb, die Einrichtung, Wartung und Reparatur eindeutig festlegen.

1.2.2

Sicherstellen, dass nur dazu berechnigte Personen an oder mit der Maschine arbeiten.

1.2.3

Arbeiten an elektrischen Systemen oder Vorrichtungen der Maschine/Anlage dürfen nur von einem erfahrenen Elektriker oder von Personen unter Aufsicht und Anleitung eines erfahrenen Elektrikers sowie in Übereinstimmung mit den elektrotechnischen Vorschriften und Bestimmungen durchgeführt werden.

1.2.4

Arbeiten an gasbetriebenen Geräten (Gasverbraucher) dürfen nur von hierfür besonders geschulten Personen durchgeführt werden.

1.3 Sicherheitsanweisungen bezüglich spezieller Betriebsphasen

1.3.1 Standardbetrieb

1.3.1.1

Jegliche Betriebsart vermeiden, die die Sicherheit gefährden könnte.

1.3.1.2

Die erforderlichen Sicherheitsmaßnahmen ergreifen, um sicherzustellen, dass die Maschine nur dann eingesetzt wird, wenn sie sich in einem sicheren und zuverlässigen Zustand befindet. Die Maschine nur betreiben, wenn alle Schutz- und Sicherheitsvorrichtungen, wie z.B. abnehmbare Sicherheitsvorrichtungen, Not-Aus-Vorrichtungen, Schallschutzelemente und Entlüfter, angebracht und funktionsfähig sind.

1.3.1.3

Die Maschine/Anlage mindestens ein Mal pro Arbeitsschicht auf offensichtliche Schäden und Defekte überprüfen. Jegliche Änderungen (einschl. Änderungen im Arbeitsverhalten der Maschine) sofort den hierfür zuständigen Personen melden. Falls erforderlich, die Maschine sofort anhalten und verriegeln.

1.3.1.4

Bevor die Maschine/Anlage angefahren oder in Betrieb genommen wird, ist sicherzustellen, dass niemand gefährdet ist.

1.3.2

Besondere Arbeiten in Zusammenhang mit der Nutzung der Maschine/Anlage sowie Wartungs- und Reparaturarbeiten; Entsorgung von Teilen und Verbrauchsmaterial.

1.3.2.1

Stets zuerst die Not-Stopp-Taste drücken, falls die Maschine für Einstellungs- oder Wartungsarbeiten angehalten wird, die nicht während des Betriebs der Maschine durchgeführt werden dürfen.

1.3.2.2

Für umfangreiche Wartungs- oder Reparaturarbeiten die Hauptstromversorgung ausschalten.

1.3.2.3

Wurden Einstellungen vorgenommen oder Wartungs- oder Reparaturarbeiten durchgeführt, anschließend stets sicherstellen, dass alle Werkzeuge oder Gegenstände von der Maschine entfernt wurden. Diese können sonst in die Maschine fallen und schwere Schäden oder Verletzungen verursachen.

1.3.2.4

Den Boden um die gesamte Maschine herum sauber halten. Öl-, Fett- oder Farbflecken sofort vom Boden aufwischen. Werkzeuge, Reinigungstücher oder Papierschnitzel aus allen Arbeitsbereichen entfernen.

1.3.2.5

Nie sich bewegende Teile der Maschine (Walzen, Wellen) reinigen, oder Justagemittel, beschädigte Bögen oder Papierschnitzel in diese Bereiche mit sich bewegenden Teilen entfernen.

1.3.2.6

Die Einstell-, Wartungs- und Inspektionsmaßnahmen und -intervalle beachten, die in der Bedienungsanleitung angegeben sind, einschließlich Informationen über den Austausch von Teilen und Ausrüstungsteilen. Diese Maßnahmen dürfen nur von erfahrenen Personen durchgeführt werden.

1.3.2.7

Das Bedienungspersonal vor Beginn besonderer Bedienungs- oder Wartungsarbeiten einweisen und eine Person benennen, die diese Maßnahmen überwacht.

1.3.2.8

Wird die Maschine/Anlage für Wartungs- und Reparaturarbeiten vollständig stillgelegt, diese gegen ein unbeabsichtigtes Starten durch folgende Maßnahmen absichern:

- Verriegeln der Hauptsteuerelemente und Abziehen des Schlüssels bzw.
- Anbringen eines Warningschildes am Hauptschalter.

1.4.1 Elektrische Energie

1.4.1.1

Nur Original-Sicherungen mit der angegebenen Nennleistung verwenden. Die Maschine/Anlage sofort ausschalten, falls es zu Störungen im elektrischen System kommt.

1.4.1.2

Ist dies in den Vorschriften angegeben, die Stromzufuhr zu den Teilen der Maschinen und Anlagen abschalten, an denen Inspektions-, Wartungs- und Reparaturarbeiten durchgeführt werden sollen. Bevor mit den Arbeiten begonnen wird, überprüfen, ob die abgeschalteten Teile noch stromführend sind und diese zusätzlich zur Isolierung angrenzender stromführender Teile und Elemente erden oder kurzschließen.

1.4.1.3

Die elektrischen Ausrüstungsteile von Maschinen/Anlagen in regelmäßigen Abständen untersuchen und überprüfen. Defekte, wie z.B. lockere Anschlüsse oder durchgeschmorte Kabel sofort reparieren.

1.4.1.4

Erforderliche Arbeiten an stromführenden Teilen und Elementen dürfen nur in Anwesenheit einer zweiten Person durchgeführt werden, die die Stromzufuhr im Gefahrenfall durch Betätigen des Not-Aus-Schalters abschalten kann. Den Arbeitsbereich mit einer rotweißen Sicherheitskette und einem Warnschild absichern. Nur isolierte Werkzeuge verwenden.

1.4.1.5

Stecker nur ziehen oder einstecken, wenn der Hauptschalter ausgeschaltet wurde.

1.4.1.6

Nur die Zufuhr und keine Maschinen anderer Marken an die vorhandenen Stecker anschließen. Jeder Anschluss unserer Zufuhr an Maschinen anderer Marken bedarf unserer ausdrücklichen Zustimmung.

1.4.1.7

Beim elektrischen Anschluss die vorgeschriebene zulässige Spannung und Frequenz beachten.

1.4.1.8

Schaltschränke geschlossen halten.

1.4.1.9

Die Steckdosen müssen neben der Futterer angebracht und leicht zugänglich sein.

1.4.2

Öl, Fett und andere chemische Substanzen

1.4.2.1

Beim Umgang mit Öl, Fett und anderen chemischen Substanzen die produktbezogenen Sicherheitsvorschriften beachten.

1.5 Beschreibung und Definition der Sicherheitsaufkleber und Piktogramme auf der Maschine

Beschädigte Piktogramme durch neue ersetzen. Die entsprechenden Referenznummern sind angegeben.

Sieh Seite 19



INSTRUCCIONES FUNDAMENTALES DE SEGURIDAD

Los diagramas y descripciones que se utilizan en estas instrucciones no son necesariamente aplicables a la especificación de la máquina suministrada. Las modificaciones hechas con el fin de introducir mejoras técnicas o de funcionamiento se incorporan sin aviso.

INSTRUCCIONES FUNDAMENTALES DE SEGURIDAD

Estas instrucciones de funcionamiento están diseñadas para que el usuario se familiarice con la máquina y su uso indicado.

El manual de instrucciones contiene información importante sobre cómo manejar la máquina de manera segura, correcta y eficaz. La observación de estas instrucciones contribuirá a evitar peligros, reducir el coste de las reparaciones y los tiempos de inactividad, y aumentar la fiabilidad y la vida útil de la máquina.

Además de las instrucciones de funcionamiento y de las reglas y normas obligatorias para la prevención de accidentes y la protección del medio ambiente vigentes en el país y lugar en que se utilice la máquina, también deben observarse las reglas técnicas generalmente aceptadas para un trabajo seguro y correcto.

1.0 Funcionamiento básico y uso indicado de la máquina/planta

1.0.1

La máquina/planta está diseñada de acuerdo con normas avanzadas y reglas de seguridad reconocidas. No obstante, su uso puede constituir un peligro para la vida y un riesgo de amputación para el usuario o terceros, u ocasionar daño a la máquina y a otra propiedad material.

1.0.2

La máquina/planta sólo debe utilizarse si se encuentra en perfecto estado técnico, conforme a su uso indicado y de acuerdo con las instrucciones descritas en el manual de funcionamiento, y únicamente deberán manejarla personas adiestradas en seguridad que sean plenamente conscientes de los riesgos involucrados en el manejo de la máquina/planta. Los problemas funcionales, especialmente los que afectan a la seguridad de la máquina/planta, deberán por consiguiente rectificarse inmediatamente.

1.0.3

La máquina/instalación está diseñada exclusivamente para el acabado mecánico de hojas de papel de tamaño mínimo y máximo (ver las instrucciones de funcionamiento correspondientes). El uso de la máquina/instalación para fines distintos a los mencionados más arriba se considera contrario a su uso indicado. El fabricante/proveedor no es responsable de los daños o lesiones que se produzcan como consecuencia de un uso incorrecto. El riesgo que implica un uso incorrecto es total responsabilidad del usuario.

El manejo de la máquina dentro de los límites de su uso indicado implica también la observación de las instrucciones descritas en el manual de funcionamiento y el cumplimiento de las directivas de inspección y mantenimiento.

1.1 Medidas de organización

1.1.1

Las instrucciones de funcionamiento deben tenerse siempre a mano en el lugar donde se va a utilizar la máquina/planta; por ejemplo, pueden guardarse en el compartimiento de las herramientas o en la caja de herramientas suministrada para tal efecto.

1.1.2

El personal encargado del manejo de la máquina debe haber leído las instrucciones de funcionamiento, especialmente el capítulo sobre seguridad, antes de empezar a trabajar. Leerlas una vez comenzado el trabajo es hacerlo demasiado tarde. Esto se aplica especialmente a personas que trabajan sólo ocasionalmente en la máquina; por ejemplo, durante la instalación o las tareas de mantenimiento.

1.1.3

Por razones de seguridad, el pelo largo debe llevarse sujeto atrás o recogido de alguna otra forma, debe llevarse ropa ceñida y no deben usarse joyas, como anillos. Es posible que se produzcan lesiones al engancharse la ropa o el cabello en la maquinaria o los anillos en las piezas móviles.

1.1.4

Observe todas las instrucciones y advertencias de seguridad de las etiquetas adheridas a la máquina/planta.

1.1.5

Compruebe que las etiquetas con instrucciones y advertencias de seguridad en la máquina estén siempre completas y puedan leerse sin problemas.

1.1.6

Si se producen modificaciones o cambios relevantes para la seguridad en el comportamiento de la máquina/planta durante su funcionamiento, pare la máquina/planta inmediatamente e informe del funcionamiento incorrecto a la persona/autoridad competente.

1.1.7

Nunca realice modificaciones, adiciones o conversiones que puedan afectar a la seguridad sin la aprobación del proveedor. Esto se aplica también a la instalación y ajuste de dispositivos de seguridad y válvulas, así como al trabajo de soldadura en elementos que soportan carga.

1.1.8

Las piezas de repuesto deben cumplir con los requisitos técnicos especificados por el fabricante. Se da por entendido que éste es el caso con las piezas de repuesto de fabricantes de equipos originales.

1.1.9

Notifique directamente a nuestra agencia cualquier accidente que se produzca debido a un mal funcionamiento de la máquina, pese a haberse observado todas las precauciones de seguridad prescritas.

1.2 Selección y cualificación del personal – Responsabilidades básicas

1.2.1

Emplee únicamente personal entrenado o instruido y exponga claramente las responsabilidades individuales del personal en cuanto al manejo, instalación, mantenimiento y reparación.

1.2.2

Asegúrese de que sólo personal autorizado trabaje en o con la máquina.

1.2.3

El trabajo en el equipo y sistema eléctrico de la máquina/planta debe llevarlo a cabo únicamente un electricista cualificado o personas adiestradas en el manejo de la máquina bajo la supervisión y guía de un electricista cualificado y de acuerdo con las reglas y regulaciones de ingeniería eléctrica.

1.2.4

El trabajo en equipos accionados mediante gas (consumidores de gas) debe realizarlo sólo personal especialmente entrenado.

1.3 Instrucciones de seguridad que rigen fases operativas específicas

1.3.1 Funcionamiento estándar

1.3.1.1

Evite los modos de funcionamiento que puedan ser perjudiciales para la seguridad.

1.3.1.2

Tome las precauciones necesarias para asegurar que la máquina se utilice únicamente de manera segura y fiable. Utilice la máquina sólo si todos los dispositivos de protección y los diseñados con fines de seguridad, como dispositivos de seguridad desmontables, equipo de parada de emergencia, insonorizadores y aspiradores, están en su lugar y en estado óptimo de funcionamiento.

1.3.1.3

Revise la máquina/planta por lo menos una vez por turno de trabajo para ver si hay daños o defectos obvios. Notifique inmediatamente cualquier cambio (inclusive cambios en el funcionamiento de la máquina) a la persona/organización competente. Si es necesario, detenga la máquina inmediatamente y ciérrela con candado.

1.3.1.4

Antes de arrancar o poner en marcha la máquina/planta, asegúrese de que nadie corra peligro.

1.3.2

Trabajo especial junto con la utilización de la máquina/planta y el mantenimiento y las reparaciones durante su funcionamiento; eliminación de piezas de desecho y productos consumibles.

1.3.2.1

Pulse siempre primero el botón de emergencia (Not-Stop - Parada de emergencia) si detiene la máquina para realizar ajustes o tareas de mantenimiento, ya que este tipo de trabajo no debe hacerse con la máquina en funcionamiento.

1.3.2.2

Para un mantenimiento o trabajo de reparación más amplio, apague el interruptor principal de la alimentación eléctrica.

1.3.2.3

Después de realizar los ajustes o después de terminar las tareas de mantenimiento o el trabajo de reparación, compruebe siempre que se han apartado de la máquina todas las herramientas u objetos. Esto evitará que caigan en la máquina y causen daños o lesiones graves.

1.3.2.4

Mantenga limpio el suelo alrededor de toda la máquina. Limpie inmediatamente los derrames de aceite, grasa o pintura del suelo. Retire las herramientas, los trapos para limpiar o los trozos de papel de todas las áreas de trabajo.

1.3.2.5

Nunca limpie piezas móviles de la máquina (rodillos, ejes) ni quite hojas de prueba, hojas manchadas o trozos de papel en dichas áreas.

1.3.2.6

Observe las actividades de ajuste, mantenimiento e inspección y los intervalos establecidos en las instrucciones de funcionamiento, así como la información sobre la sustitución de piezas y equipo. Estas actividades debe realizarlas únicamente personal cualificado.

1.3.2.7

Dé instrucciones a los operadores antes de empezar las operaciones y trabajo de mantenimiento especiales, y designe a una persona para supervisar las actividades.

1.3.2.8

Si la máquina/planta se apaga completamente para mantenimiento y trabajo de reparación, deben tomarse las medidas siguientes para evitar su puesta en marcha accidental:

- cerrar con llave o candado los principales elementos de control y quitar la llave de ignición y/o
- poner un signo de advertencia en el interruptor principal.

1.4.1 Energía eléctrica

1.4.1.1

Utilice únicamente fusibles originales con la corriente especificada. Apague la máquina/planta inmediatamente si tiene problemas con el sistema eléctrico.

1.4.1.2

Si así se dispone en las regulaciones, deberá cortarse el suministro eléctrico a los componentes de las máquinas y plantas en los que se va a llevar a cabo trabajo de inspección, mantenimiento o reparación. Antes de iniciar cualquier trabajo, revise los componentes energizados para detectar la presencia de corriente en ellos y establezca una conexión a tierra o cortocircuito además de aislar los elementos y partes activas adyacentes.

1.4.1.3

El equipo eléctrico de máquinas/plantas debe inspeccionarse y controlarse a intervalos regulares. Los defectos como conexiones sueltas o cables quemados deben corregirse inmediatamente.

1.4.1.4

El trabajo necesario en los elementos y partes activas debe realizarse únicamente en presencia de una segunda persona que pueda cortar la alimentación eléctrica en caso de peligro, accionando el cierre de emergencia o el interruptor principal. Proteja el área de trabajo con una cadena de seguridad roja y blanca, y un signo de advertencia. Utilice únicamente herramientas aisladas.

1.4.1.5

Enchufe o desenchufe conectores eléctricos sólo si el interruptor principal se ha desconectado.

1.4.1.6

Conecte únicamente unidades de alimentación a los conectores existentes. No conecte a ellos ninguna máquina de otras marcas. Cualquier conexión eléctrica de nuestras máquinas de alimentar con otras marcas necesita contar con nuestra autorización expresa.

1.4.1.7

Para la conexión eléctrica, observe el voltaje y frecuencia admisibles prescritos.

1.4.1.8

Mantenga los armarios de interruptores cerrados.

1.4.1.9

La toma eléctrica con el enchufe debe instalarse cerca de la alimentador de manera que sea fácil acceder a ella.

1.4.2

Aceite, grasa y otras sustancias químicas

1.4.2.1

Al manejar aceite, grasa y otras sustancias químicas, observe las normas de seguridad relacionadas con el producto.

1.5 Descripción y definición de las etiquetas y pictogramas de seguridad en la máquina

Cambie los pictogramas deteriorados por otros nuevos. Se indican los números de referencia correspondientes.

Ver la página 19



INSTRUCTIONS FONDAMENTALES SUR LA SÉCURITÉ

Les schémas et les descriptions utilisés au cours de ces instructions ne sont pas nécessairement applicables aux spécifications de la machine fournie. Les modifications, réalisées pour des motifs techniques ou d'amélioration du fonctionnement sont intégrées sans avis préalable.



INSTRUCTIONS FONDAMENTALES SUR LA SÉCURITÉ

Ces instructions de fonctionnement sont conçues afin de familiariser l'utilisateur avec la machine et l'utilisation pour laquelle elle a été conçue.

Le manuel d'instruction contient d'importantes informations sur la manière de faire fonctionner la machine en toute sécurité, correctement et le plus efficacement possible. L'observation de ces instructions permet d'éviter les dangers, de réduire les coûts de réparation et la durée d'indisponibilité, et d'augmenter la fiabilité et la durée de vie de la machine.

Outre les instructions de fonctionnement et les règles et règlements impératifs destinés à éviter les accidents et à protéger l'environnement dans ce pays et sur le lieu d'utilisation de la machine, les règles techniques généralement reconnues relatives à la sécurité et à des conditions de travail adéquates doivent être observées.

1.0 Fonctionnement de base et utilisation prévue de la machine/de l'installation

1.0.1
Cette machine/installation a été construite conformément à des normes ultramodernes et à des règles de sécurité reconnues. Son utilisation peut néanmoins constituer un risque grave, voire mortel, pour l'utilisateur ou un tiers, ou provoquer des détériorations sur la machine ou sur d'autres matériels.

1.0.2
La machine/installation ne doit être utilisée que dans des conditions techniques parfaites conformément à l'utilisation prévue et aux instructions portées sur le manuel de fonctionnement, et uniquement par des personnes qui sont, en toute conscience, totalement averties des risques qu'implique le fonctionnement de la machine/de l'installation. Tous défauts

fonctionnels, particulièrement ceux pouvant affecter la sécurité de la machine/l'installation, doivent être de ce fait immédiatement réparés.

1.0.3
La machine/installation est conçue exclusivement pour le finissage d'un papier aux dimensions de feuilles minimales et maximales (reportez-vous aux instructions de fonctionnement correspondantes). L'utilisation de cette machine/installation pour des objectifs autres que ceux mentionnés ci-dessus est considérée comme étant contraire à l'usage auquel elle est destinée. Le fabricant/fournisseur ne peut en aucun cas être tenu pour responsable d'aucun dommage ou blessure découlant d'un tel mésusage. Le risque d'un tel mésusage repose entièrement sur l'utilisateur.

L'exploitation de cette machine dans les limites définies lors de sa conception implique aussi l'observation des instructions présentées dans le manuel de fonctionnement ainsi que le respect des directives de maintenance et d'inspection.

1.1 Mesures organisationnelles

1.1.1
Les instructions de fonctionnement doivent toujours être à portée de main sur le lieu d'exploitation de la machine/d'installation, par exemple en les rangeant dans le compartiment des outils ou dans une boîte à outils fournie à cet effet.

1.1.2
Le personnel à qui la machine a été confiée doit avoir lu les instructions d'exploitation et en particulier le chapitre sur la sécurité avant de commencer un travail. La lecture des instructions après le démarrage d'un travail est trop tardive. Ceci s'applique spécifiquement aux personnes ne travaillant qu'occasionnellement sur la machine, c'est à dire pendant les réglages ou la maintenance.

1.1.3
Pour des raisons de sécurité, les cheveux longs doivent être attachés et protégés, les vêtements doivent être ajustés et les bijoux, comme des bagues ou des anneaux, doivent être proscrits. De sérieuses blessures peuvent survenir si les cheveux sont happés par la machine ou si un anneau se trouve pris par des pièces en mouvement.

1.1.4
Conformez-vous à toutes les instructions de sécurité et aux avertissements apposés sur la machine/installation.

1.1.5
Assurez-vous que les instructions de sécurité et les avertissements apposés sur la machine sont complets et parfaitement lisibles.

1.1.6
En cas de modifications pertinentes sur la sécurité ou de modifications du comportement de la machine/de l'installation pendant son fonctionnement, arrêtez immédiatement cette dernière et avisez la personne compétente de ce mauvais fonctionnement.

1.1.7

Ne procédez jamais à aucune modification, ajout ou transformation qui pourrait affecter la sécurité sans l'approbation du fournisseur. Ceci s'applique aussi à l'installation et au réglage des dispositifs et des vannes de sécurité ainsi que des soudures sur les éléments porteurs.

1.1.8

Les pièces détachées doivent être conformes aux spécifications techniques publiées par le fabricant. Les pièces détachées d'origine des fabricants de l'équipement peuvent être utilisées en toute confiance.

1.1.9

Veillez fournir un rapport à notre agence si un accident s'est produit en raison d'un mauvais fonctionnement de la machine même si toutes les précautions de sécurité prescrites ont été observées.

1.2

Sélection et qualification du personnel – Responsabilités essentielles

1.2.1

Utilisez seulement un personnel instruit et formé, et définissez clairement les responsabilités individuelles de chacun lors du fonctionnement, des réglages, de la maintenance et des réparations.

1.2.2

Assurez-vous que seul un personnel autorisé travaille sur cette machine.

1.2.3

Les travaux sur le système et l'équipement électriques de la machine/de l'installation doivent être effectués uniquement par un électricien compétent ou par des personnes formées sous la supervision et les conseils d'un électricien et conformément aux règles et règlements du génie électrique.

1.2.4

Les travaux sur des équipements alimentés en essence (consommateurs d'essence) ne peuvent être réalisés que par un personnel spécialement formé.

1.3 Instructions de sécurité concernant les phases opérationnelles spécifiques

1.3.1 Fonctionnement standard

1.3.1.1

Évitez tout mode de fonctionnement qui irait à l'encontre de la sécurité.

1.3.1.2

Prenez les précautions nécessaires afin de vous assurer que la machine est utilisée uniquement lorsqu'elle se trouve dans un état de fiabilité et de sécurité normales. Faites fonctionner la machine seulement si les dispositifs de protection et de sécurité, tels que des dispositifs de sécurité amovibles, un équipement d'arrêt d'urgence, des éléments d'insonorisation et des extracteurs d'air sont en place et en état de fonctionnement.

1.3.1.3

Vérifiez au moins une fois la machine/l'installation lors de chaque changement de poste à la recherche de détériorations et de défauts. Signalez immédiatement toute modification (y compris les changements du comportement de travail de la machine) à la personne ou au service compétent. Au besoin, arrêtez la machine immédiatement et verrouillez-la.

1.3.1.4

Avant de démarrer ou de mettre la machine en mouvement, assurez-vous que personne n'est en danger.

1.3.2

Travaux spéciaux conjointement à l'utilisation de la machine/de l'installation, et à la maintenance et aux réparations pendant le fonctionnement ; mise au rebut des pièces et des consommables.

1.3.2.1

Vous devez toujours appuyer d'abord sur le bouton d'urgence (Pas d'arrêt), si vous arrêtez la machine pour des réglages ou une maintenance qui ne doivent pas être réalisés pendant que la machine est en fonctionnement.

1.3.2.2

Pour une maintenance ou des réparations importantes, l'alimentation secteur doit être interrompue.

1.3.2.3

Après avoir procédé au réglage, à la maintenance ou aux réparations, assurez-vous toujours que la machine est libre de tous les outils et autres objets utilisés. Dans le cas contraire, ils pourraient tomber dans la machine et provoquer des détériorations ou des blessures graves.

1.3.2.4

Le sol tout autour de la machine doit être propre. Nettoyez immédiatement toutes taches d'huile, de graisse ou de peinture. Nettoyez les zones de travail des outils, des chiènes ou des morceaux de papier qui pourraient s'y trouver.

1.3.2.5

Ne nettoyez jamais des pièces en mouvement de la machine (rouleaux, axes), ni ne retirez aucune feuille de test, feuille maculée ou morceau de papier dans de tels emplacements.

1.3.2.6

Observez les périodes de réglage, de maintenance et d'inspection conformément aux intervalles définis sur les instructions d'exploitation, y compris les informations de remplacement de pièces et d'équipements. Ces tâches doivent être entreprises uniquement par un personnel dûment formé.

1.3.2.7

Veillez informer le personnel d'exploitation avant de commencer des opérations spéciales ou de maintenance, et désignez une personne pour surveiller ces activités.

1.3.2.9

Si la machine/l'installation est totalement à l'arrêt pour une maintenance et des réparations, elle doit être verrouillée afin d'éviter tout redémarrage intempestif de la manière suivante :

- verrouillage des éléments de contrôle principaux et retrait de la clef de démarrage et/ou
- apposition d'un avis sur le commutateur principal du secteur.

1.4.1 Énergie électrique

1.4.1.1

Utilisez uniquement des fusibles d'origine correspondant à la tension et au courant nominaux. Mettez immédiatement hors tension la machine/l'installation si des problèmes apparaissent au niveau du système électrique.

1.4.1.2

Si les règlements le stipulent, l'alimentation des pièces de la machine et de l'installation, sur lesquelles une inspection, une maintenance et des réparations doivent avoir lieu, doit être interrompue. Avant de commencer un travail quelconque, vérifiez l'absence de tension sur les pièces dont l'alimentation a été interrompue, et mettez-les à la masse ou en court-circuit en plus de l'isolation des pièces et des éléments adjacents sous tension.

1.4.1.3

L'équipement électrique des machines/des installations doit être inspecté et vérifié à intervalles réguliers. Des défauts tels que des connexions desserrées ou des câbles brûlés doivent être immédiatement corrigés.

1.4.1.4

Les travaux nécessaires sur des pièces et des éléments sous tension doivent être uniquement conduits en présence d'une deuxième personne pouvant interrompre l'alimentation électrique en cas de danger en déclenchant le disjoncteur d'urgence ou le commutateur secteur. La zone de travail doit être protégée par une chaîne de couleur rouge et blanche accompagnée d'un panneau d'avertissement. N'utilisez que des outils isolés.

1.4.1.5

Ne connectez ou déconnectez des connecteurs électriques que si le commutateur principal est hors service.

1.4.1.6

Connectez seulement les unités de alimentationet aucune autre machine de marque différente aux connecteurs existants. Toute connexion électrique de nos plieuses avec des alimentation d'autres marques nécessite notre accord exprès.

1.4.1.7

Observez les tensions et fréquences prescrites et admissibles lors de la connexion électrique.

1.4.1.8

Les armoires des commutateurs doivent être fermées.

1.4.1.9

La prise d'alimentation sera installée à proximité de la alimenteur et sera facilement accessible.

1.4.2

Huiles, graisses et autres substances chimiques

1.4.2.1

Observez les réglementations de sécurité a?érentes aux produits lors de la manutention des huiles, des graisses et d'autres substances chimiques.

1.5 Description et définition des étiquettes de sécurité et des pictogrammes sur la machine

Remplacez les pictogrammes endommagés par de nouveaux. Les numéros de référence correspondant sont indiqués.

Voir la page 19

↳

Caution	Hazardous moving parts. Do not operate machine without guard in place.	Danger	Pièces dangereuses lorsqu'en mouvement. Ne pas se servir de la machine sans la garde de protection en position.
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Caution	Hazardous moving parts. Do not operate machine without guard in place.
Danger	Pièces dangereuses lorsqu'en mouvement. Ne pas se servir de la machine sans la garde de protection en position.

<u>WARNING</u>	GUARD MISSING DO NOT OPERATE
<u>AVERTISSEMENT</u>	GARDE DE PROTECTION MANQUANTE NE PAS UTILISER



INTRODUCTION OVERVIEW

The 1620 VFM pile feeder contains the following main components (Figure 1):

1. VFM Assembly
2. Pile Feeder Assembly
3. Register 20" Assembly
4. Touchscreen (HMI)
5. Double Sheet Detector (Caliper)
6. Sucker wheel Assembly
7. Electrical Enclosure
8. Vacuum Pump (mounted on Assembly)
9. Stacker Assembly

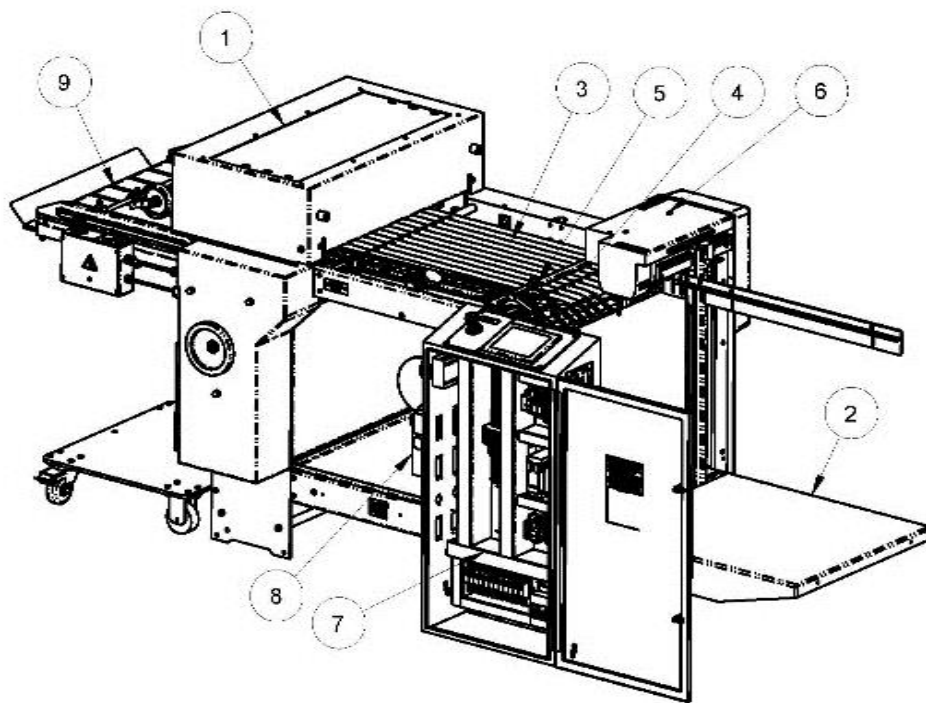


Figure 1

TRANSPORTATION/INSTALLATION

As soon as you receive your new VFM, and before removing the machine from the skid, check carefully for any damage to the shipments. If any damage is found, promptly contact your Baumfolder sales representative.

To lift the VFM from the skid, place the fork lift rails under the lower rails as shown in figure 2. Note that the fork lift must have at least a 1500lb. capacity.

Remove all rust protection coating after unpacking the VFM.



Figure 2

SQUARING THE MACHINE

It is essential that this folding machine is square in order for it to work properly. To square the machine, you should measure diagonally across the corners from the feeder frame to the VFM frame. (Figure 3) Dimensions shown are approximate. Be sure that the measurements are identical to within 1/16 inch. If the machine is out of square, shift the frame in the direction needed until the machine is square.

1009.8mm = 39.76 inches

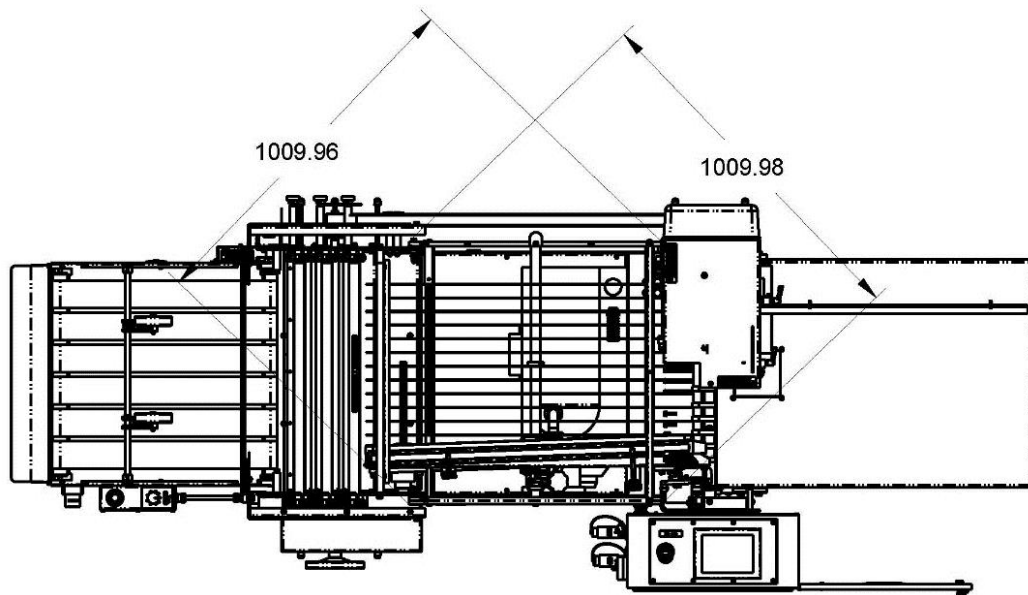


Figure 3

ELECTRICAL CONNECTIONS

1.0 Wiring the Pump(1620/3 phase/230V/50 or 60 HZ)

Connect the pressure/vacuum pump at the pump junction box (Figure 4) using the attached cable.

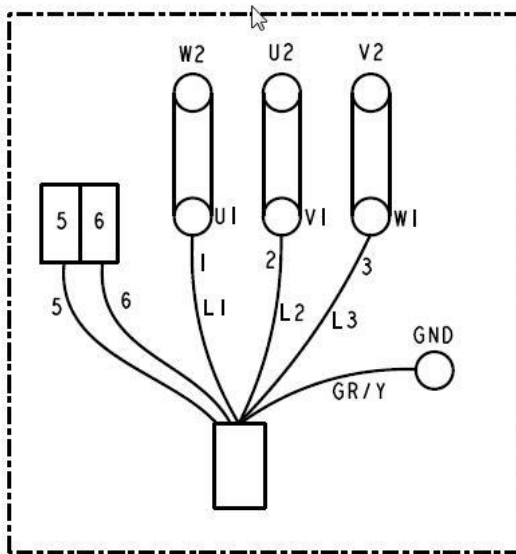


Figure 4

Check pump rotation:

Turn the main power switch to the “On” position. The Touchscreen will briefly display a Baumfolder Information screen and then automatically change the display to a production screen. Turn the pump on and then off quickly to check the pump rotation. Locate the green “Pump Start” button on the lower part of the screen toward the center. Press this button once to turn on the pump. The button will change to a “Pump Stop” button. Immediately press it a second time to turn the pump off. Check the rotation of the fan blade with respect to the arrow on the pump casing. If the rotation is backwards flip any two phases. (Instead of U1-1, V1-2, W1-3 Use U1-1, V1-3, W1-2 to change direction)

2.0 Wiring for the Pump (1620/1/230/60)

Connect the pressure/vacuum pump at
The pump junction box (Figure 5) using the attached cable.

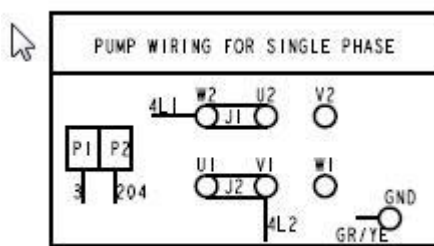


Figure 5

Check pump rotation:

Turn the main power switch to the "On" position. The Touchscreen will briefly display a Baumfolder Information screen and then automatically change the display to a production screen. Turn the pump on and then off quickly to check the pump rotation. Locate the green "Pump Start" button on the bottom of this screen in the center. Press this button once to turn on the pump. The button will change to a "Pump Stop" button. Immediately press it a second time to turn the pump off. Check the rotation of the fan blade with respect to the arrow on the pump casing. If the rotation is backwards rotate J1 and J2 to become vertical jumpers (J1 from W2 TO U1 AND J2 from U2 to V1).

3.0 OTHER CONNECTIONS: Refer to the serial number plate for electrical requirements.

The serial plate is located on the non-operator side of the register on the inside of the frame. The serial number plate notes the voltage, phase configuration, frequency, minimum time delay fuse, full load amperage draw, and minimum wire conductor size for the main power connection. The main power is connected directly to the line side of the main power switch. In a single phase unit use L1 and L2 only. All electrical connections are to be made by a certified electrician. Refer to local building electrical codes for proper and safe connections. For details, refer to Figure 6. Run a power cable from your distribution box to the main control box on the pile feeder. Turn the main power switch to off. Using the appropriate tool, open the latches on the control box door and open the door.

NOTE: The door is connected to the main box by a ground wire that should not be removed.

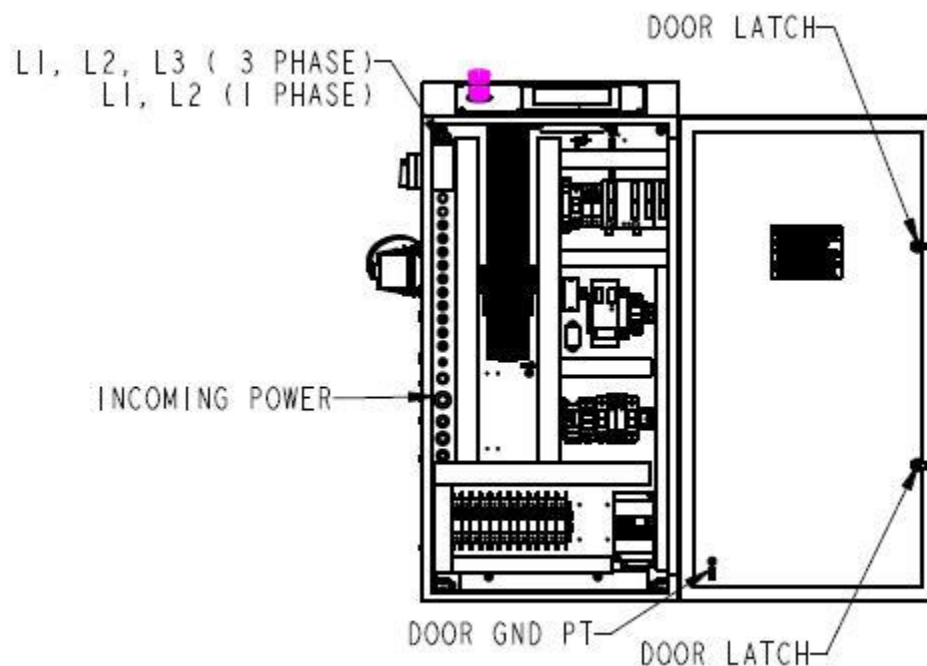


Figure 6

Pump Connections

Connect the air hoses to the pump. The small diameter hose is connected to the vacuum side of the pump just past the filter can. Route the second end across to the non-operator side frame, then up under the sucker wheel assembly cover, and finally to a 90 degree barbed fitting on the register side of the manifold block.

Refer to figure 7.

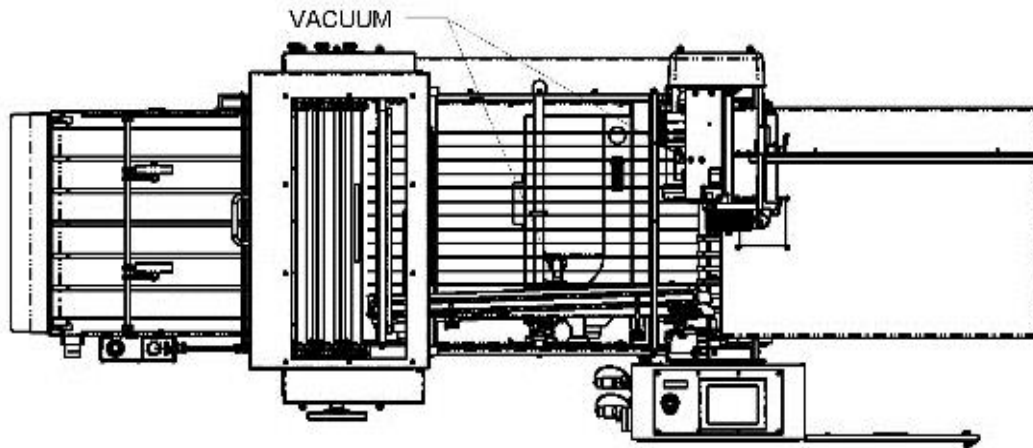


Figure 7

Connect the larger diameter hose to the remaining outlet port on the pump (labeled blow). The second end of the blow hose should run under the register to the non-operator side frame to a 90 degree connector against the side frame just under the register. See Figure 8.

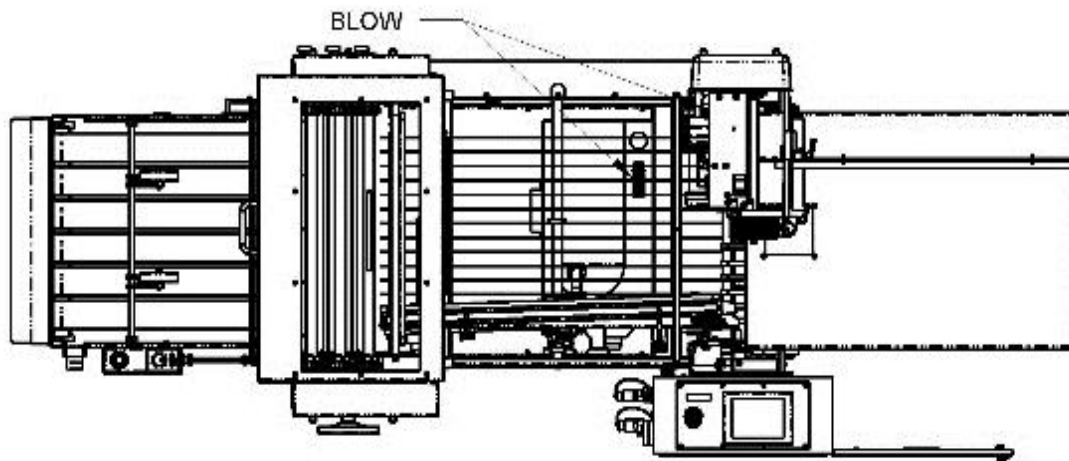


Figure 8

VI. OPERATING INSTUCTIONS

TURNING THE MAIN SWITCH ON

The main disconnect is located on the left side of the control box. Rotate this switch ¼ turn clockwise to turn the machine on. “On” will now be display through the cutout of the switch.

The display will start at a **Baumfolder information screen**. This screen will list the display the program versions currently loaded into the machine. After several seconds the machine display will automatically change to the **home** screen.

The **home screen** is one of two screens that will be used to run jobs. The home screen is best for setting up the machine because it has vacuum control adjustment, **sheet gap** adjustment and **feeder setup** easily available.

Speed display is at the top left.

Machine start is the lower left button.

Pump start is the lower center button.

Batch counter, job number, single sheet/ continuous mode, count reset,

Vacuum setting, sheet gap, table raise, table lower, previous screen, and a Main menu buttons are all available on this screen. Note that the number in the upper right corner is the current job count. This is the number that will reset when the **Count Reset** is used.

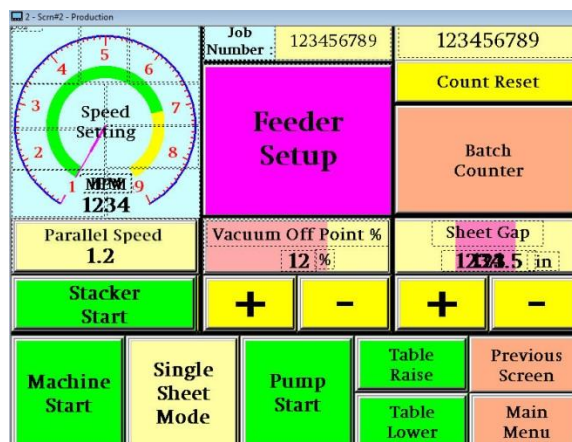


Figure 9

RAISING AND LOWERING THE PILE FEEDER LIFT TABLE

To lower the table to manually load paper, use the **Table Lower** button. You need to hold the button briefly to initiate movement. See figure 9. The table will continue down until it makes the lower limit switch or you may choose to press “**Stop table**” before it gets to the lower limit.

The **Table Raise** button works the same way. Note that the table raise button will be “**grayed out**” if the table is at its highest position. Likewise, the lower table button will be “grayed out” if the table is already at the lowest position. The green background on the raise and lower button shows that option is available.

STARTING PRODUCTION

To start the folder drive and pump use the **Machine Start** button in the lower left corner of the **production screen**. Press and hold this button for a second to start the machine. Please note after pressing either the Pump Start or Machine Start buttons, they become the Stop button. Therefore the first time a button is pressed it turns the function on and the second time the same button is pressed it turns the function off.

To turn the machine off press the **Machine Stop** button or press the emergency stop button. The Single Sheet Mode toggles back and forth between single sheet and continuous mode when pressed.

TUTORIALS

Tutorials are available on various topics using the touchscreen.

1. From the **Production screen** press the **Main screen button** in the lower right corner of the screen.
2. From this **Main Menu** screen press the **Set up Tutorials** button in the lower left corner to see the available topics.

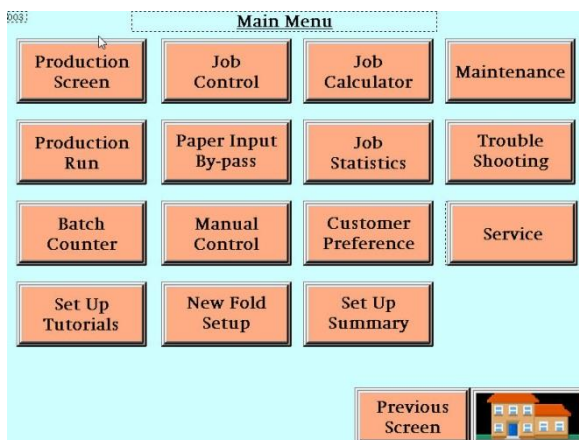


Figure 10

3. Setup tutorial choices are as follows:

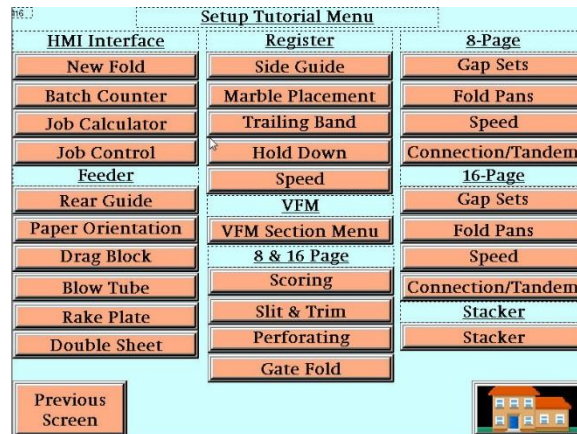


Figure 11

Each tutorial shows the step by step process needed with pictures to illustrate.

SETTING UP A NEW FEEDER

Since there are no fold heads on the Independent Pile feeder, the choices for **Paper Length** Control or **New fold Setup** (in an 8 pg) are the two choices.

The **New Fold Setup** button will be unavailable from the Main menu unless it is “turned on”. To do this:

1. Start from the **Production Screen** and press the purple **Feeder Setup** button on the top of the screen towards the center of the screen.
See Figure 9.
2. Now from the Feeder/Folder Setup Summary screen pick the yellow **Turn Fold Selection On** button on the center of the screen just above the **Sheet Size Setting** button.

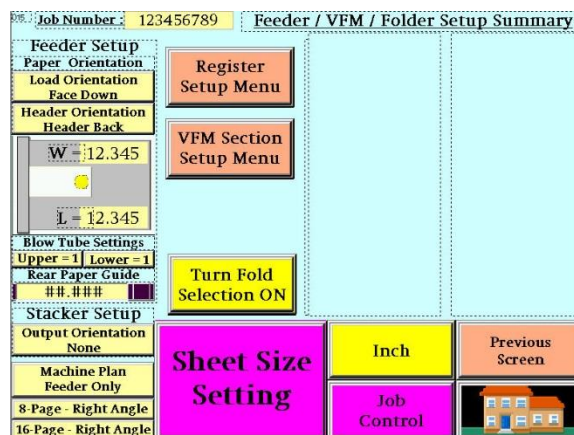


Figure 12

- This selection changes the **Sheet Size Setting** to a **New Fold Setup** button on this screen. Now the New Fold setup can be accessed from either the Main Menu or the Feeder/Folder Setup summary. Note that the New Fold Setup will normally have a preview of the active fold in the background of the New Fold Setup Button with the name of the active fold listed at the bottom of the button. The 8page-Right Angle and 16page-Right angle buttons shown in the left column will only be visible if these options are available.

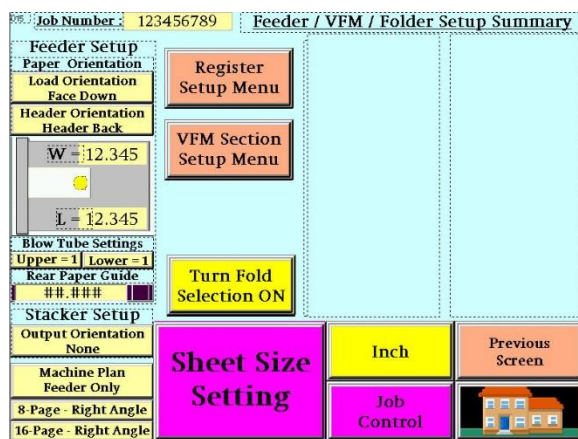


Figure 13

- Press the **New Fold Setup** button to start the fold selection process.

SETTING UP A NEW FOLD

- From the **home** screen, press the center top button with the image of the current fold. See figure 14. If the home screen has a purple **Feeder Setup** button instead of the current fold image, see the previous section **Setting up a new Feeder** to Turn Fold Selection ON.

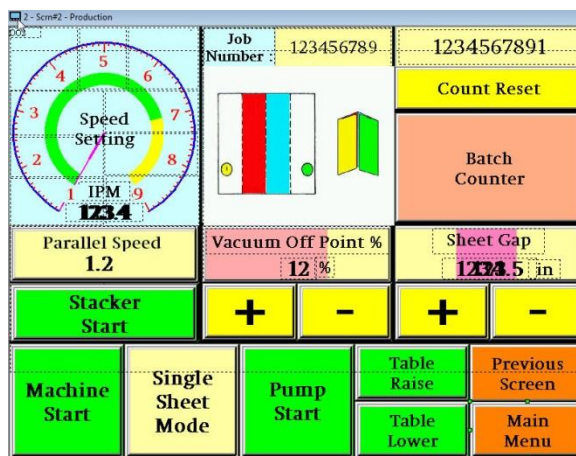


Figure 14

2. Press a **purple button selection with a preview**, press the orange **8 page folds**, or pick the orange **16 page folds** to select a fold.

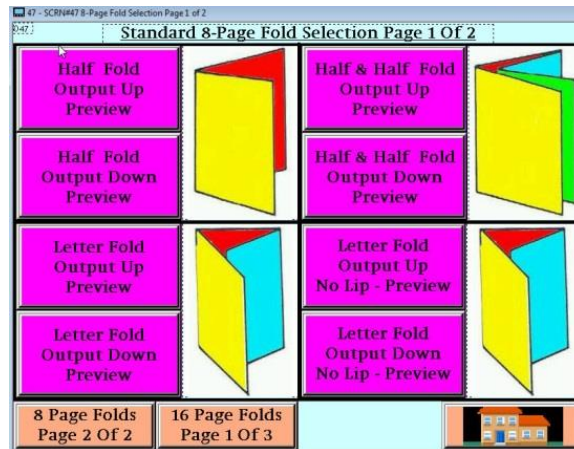


Figure 15

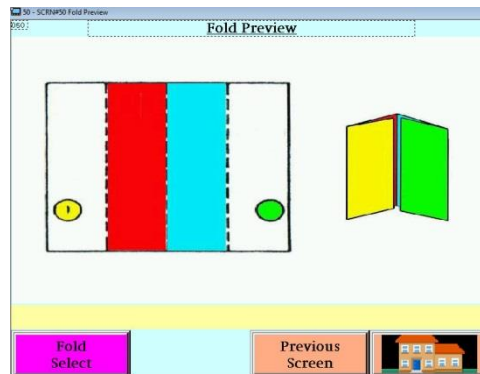


Figure 16

3. From the preview screen hit the purple **Fold Select** button on the bottom left if it is the right choice. If not, use the **previous** or **home icon** button.
4. After selecting the fold, the display changes to a **Paper Size Selection Screen**. From this screen pick a **standard paper size** from the choices at the top of the screen. The choice will change from yellow to green when activated and the values will move to the numeric display at the bottom. If your paper size is not available **use direct entry by pressing the numeric display instead**. The direct entry values are located under the **WIDTH and LENGTH INPUT** labels near the bottom of the screen. Press the appropriate black box beside the numeric value you would like to change to get a keypad and enter your values, as needed. See figure 17.
5. From the same screen pick **orientation** using the yellow button on the bottom left corner. It toggles back and forth between landscape and portrait each time this button is pressed.

6. Press the **Unit Format Decimal (Inch)** at the bottom of screen towards the center to change units if needed. It will toggle between metric and English units each time the button is pressed.
7. **8-Page Orientation Right Angle / Tandem** button toggles between right angle and tandem orientation. This button shall reflect the first folder station orientation as it relates to the VFM station before it, so that the paper size dimensions for the folds can be calculated correctly.
8. Press either the Purple **Enter & Go To Summary** button or the purple **Enter & Go To Tutorials** button when done with your selections to activate the fold and initiate the calculations for fold lengths and gapsets. If **Enter & Go To Tutorials** button is chosen the display will show the first feeder setup point and will step you through each step one at a time. If you choose not to activate this fold, you may use the **Go Back To fold Selection** to pick a different choice. See Figure 16

Paper Size Selection			
American Standard Selection		ISO Standard Selection	
5.5 X 8.5" (140 X 216mm)	8-Page Orientation Right Angle	105 X 152mm (4.13 X 6")	Go Back To fold Selection
8.5 X 11" (216 X 279mm)		148 X 210mm (5.83 X 8.27")	
8.5 X 14" (216 X 356mm)		210 X 297mm (8.27 X 11.69")	
11 X 17" (279 X 432mm)		297 X 420mm (11.69 X 16.54")	
17 X 22" (432 X 559mm)		420 X 594mm (16.54 X 23.39")	
WIDTH Input	LENGTH Input	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> L Portrait </div> <div style="text-align: center;"> W </div> </div>	
##.###	##.###	Enter & Go To Summary	
Orientation Portrait	Unit Format Decimal (Inch)	Enter & Go To Tutorials	

Figure 17

9. After pressing the **Enter & Go To Summary**, the **Feeder/Folder Setup Summary** Screen will now display the numeric settings for each 8 page fold pan. Manually move the pans to the length settings and the gapsets to the numeric references given on this screen before running production. Greater detail and additional help screens are shown in the 8pg/16pg setup section, access these screens by pressing the 8-page Setup Column. Please see the details for that screen in Figure 29. If a fold is setup for a 16pg, the details would show a column to the right of the 8-page Setup shown below. Use the **home Icon** in the lower right corner to return to the Home screen.

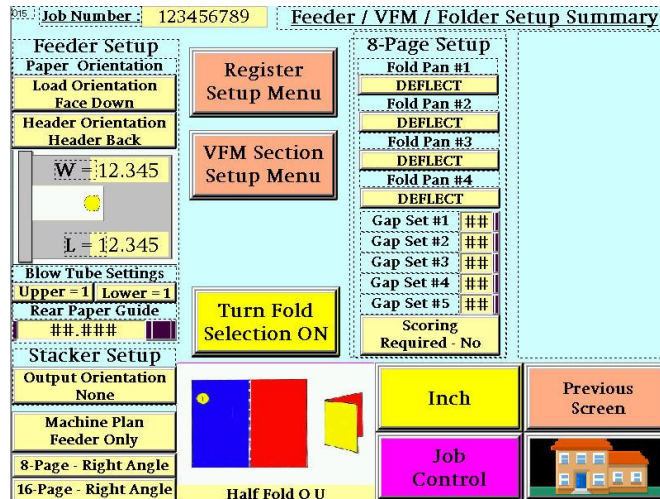


Figure 18

SETUP WITHOUT A FOLD

1. To feed paper without selecting a fold, start from the **production** screen. Press the purple **Feeder Setup** button toward the center of the screen.
2. On **Setup Summary** screen without the fold selection button turned on the display show a Sheet Size Setting button toward the center of the screen. (If the center of the screen displays a **New Fold Selection**, press the **Turn Fold Selection off** button on the right side of the Setup summary screen.) See figure 12.
3. Pressing **Sheet Size Setting** option from the setup summary screen skips the fold choice options and goes directly to the **Paper Size Selection** screen instead.
4. On the Paper Size Selection Screen pick a **standard paper size** from the choices at the top of the screen. The choice will change from yellow to green when activated and the values will move to the numeric display at the bottom. If your paper size is not available **use direct entry by pressing the numeric display instead**. The direct entry values are located under the width and length labels at the bottom of the screen.
5. From the same screen pick **orientation** using the yellow button on the bottom left corner. It toggles back and forth between landscape and portrait each time this button is pressed.
6. Units can also be changed on this screen. The units will toggle back and forth between English and Metric each time the button is pressed. See figure 17.
7. Press the Purple **Enter & Go To Summary** button when done with your selections to go to the **Feeder/Folder Setup Summary** screen.

PRODUCTION SCREEN

The second screen that can be used to run jobs is the **production screen**. (The first screen was the **home screen**). To access the **production screen** start from the **home screen** and press the current count numeric value in the upper right corner. See figure 9.

The display will change to the following screen layout for the production screen.

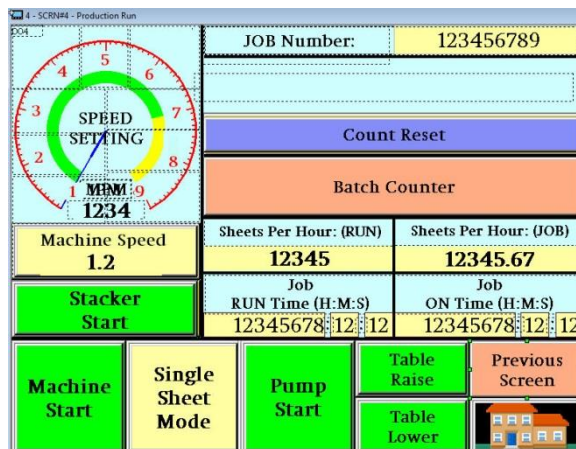


Figure 19

This screen has **Sheets per Hour: (RUN)**, **Sheets Per Hour: (Job)**, **Run time**, and **Job time** available. The current count numeric value is displayed larger and moved down a row. In figure 19 this area is shown blank, but in the real screen, it will have the current count number. To change back to the home screen you can press the current count numeric value on this screen.

The number displayed in the upper right corner is the **job number**. If you press this number you can see the collected run data associated with this job number.

The **Count Reset** will reset the current count numeric value in the second line. To reset the current count you need to press this button. It will change to a **yes?** Or **No?** option. Confirm by pressing **Yes** to reset.

Batch Counter button is a short cut to the batch counter setup.

TO START FEEDING

1. Start from either the **home** or **production screen**. See figure 9 for home or figure 19 for production screen.
2. Press and hold the **machine start** button for half a second to start the main drive and the pump. Once the machine starts the pump start button will change to a **sheet start** button.

3. Press the **sheet start** button in the bottom of the screen in the center. The paper should begin feeding.

TO STOP FEEDING

To stop the paper from feeding press the **sheet stop** button in the bottom center of the screen. Note that once the paper starts to feed, the **sheet start** button changes into a sheet stop button.

CHANGE THE SPEED OF THE VFM DRIVE

There are three ways to change the speed. The easiest way is to press the tachometer display on the upper left of the home or production screen. See figure 20. The speed will change to the numeric value that was pressed. The speed of the main folder drive can also be changed using either the **+** or **–** buttons below the Parallel Speed button to gradually adjust the speed or use direct entry. To use direct entry press the light yellow **Parallel Speed Button** and enter a number between 1 and 9. The sample below shows the home screen when it is running.

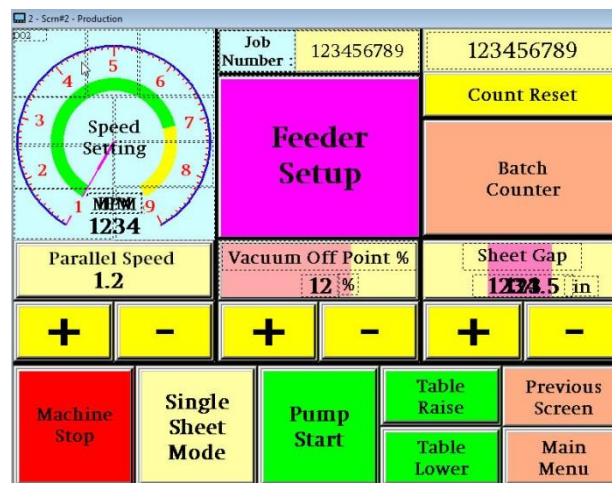


Figure 20

BATCH COUNTING SETUP

1. To setup batch count start from either the **home screen** or the **production screen**. See figure 9 for home screen or figure 19 for the production screen.
2. Press the orange **Batch Counter** button.

3. There are two types of batches. The top part of the **Batch Count** screen is for a fixed number in each batch. To activate that type of batch, press the red **Batch Counter Off** button in the top left part of the screen. This will change the button to a green button that says **Batch Counter On** and activate several other options.

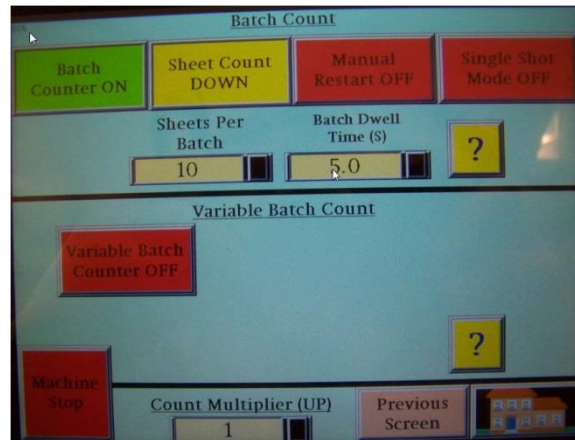


Figure 21

4. **Sheet Count Down** means that each batch would start with the current count at the batch number and descend numerically with each sheet until zero. Pressing this button will toggle it to **Sheet Count UP**. Up would mean the current count for each batch would start at 0 and ascend numerically until the batch number is met. Pick either UP or Down.
5. The **Batch Dwell Time** can be entered with a keypad. It is the time the machine waits in between batches.
6. **Manual Restart ON** stops the production after each batch until a button is pushed by the operator.
7. With **single shot ON** the machine runs one sheet, waits the designated dwell time, runs one sheet and repeats.
8. The **Batch Dwell Time** can be entered with a keypad. It is the time the machine waits in between batches.
9. The yellow **?** button will change the display to the built in tutorial for the batch count for more help.
10. The **home icon** in the lower right corner changes the display back to the Home screen.

VARIABLE BATCH COUNTING SETUP

1. To setup batch count start from either the **home screen** or the **production screen**. See figure 9 for home screen or figure 19 for the production screen.
2. Press the orange **Batch Counter** button.

- There are two types of batches. The top part of the **Batch Count** screen is for a fixed number in each batch. To activate a variable type of batch, press the red **Variable Batch Counter Off** button in the middle left part of the screen. This will change the button to a green button that says **Variable Batch Counter On** and activate several other options.

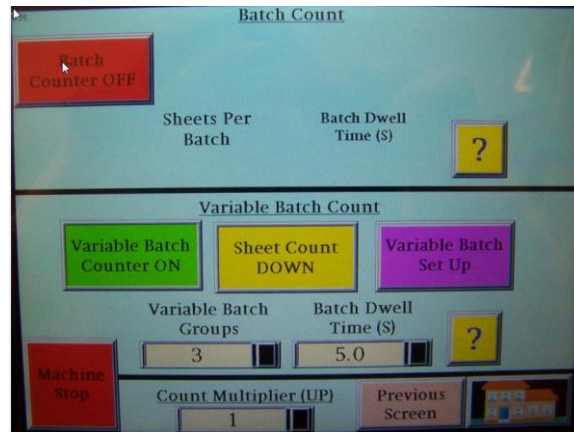


Figure 22

- Sheet Count DOWN** means the current count will start at the batch count and descend down to zero. **Sheet Count UP** means that the current count will start at zero and ascend up to the batch count.
- Variable Batch Groups** activates data entry for that many different groups of numbers to be entered in the Variable Batch Set Up. Data entry for each group will request a total to be run for that group and a quantity in each batch. Enter this value before pressing the Variable Batch Setup button to activate the right number of data entry positions. Variable Batch Groups are available up to 30.
- The **Batch Dwell time** is the time between batches.
- The **?** button is a shortcut to the tutorial for the Variable Batch Count for more help.
- After selecting **Sheet Count Up or Down, Quantity for Variable Batch Groups and Batch Dwell Time**, press the purple **Variable Batch Set Up** to enter the actual batch numbers.

Variable Batch Count Set Up								
Group #	Sheets Total	Sheets Per Batch	Group #	Sheets Total	Sheets Per Batch	Group #	Sheets Total	Sheets Per Batch
01	20	10	11			21		
02	30	10	12			22		
03	20	5	13			23		
04			14			24		
05			15			25		
06			16			26		
07			17			27		
08			18			28		
09			19			29		
10			20			30		
Clear All Variable Batch Inputs			Update V-Batch		?	Previous Screen		

Figure 23

9. Above is the Variable Batch Count Set Up for 3 Variable Batch groups.
The first group has a sheet Total of 20 with 10 sheets per batch so that will be 2 batches.
The second group has a Sheet Total of 30 with 10 sheets per batch so that will be 3 batches. The third group has a Sheet Total of 20 with 5 sheets per batch so that will be 4 batches.
10. The **Clear All Variable Batch Inputs** button clears all the data values except the first group. This group must have values other than zero in the first group in order for batch to work correctly. If you want to change the values in the first group, use direct entry.
11. The **Update V-Batch** button must be pressed after the values have been changed to update the internal registers to the new numbers.
12. After entering the values needed for the active groups, press the **home icon** in the lower right corner to return to the home screen.

TO TURN OFF BATCH COUNT

1. From the **production screen** or **home screen** press the orange **Batch Counter** button.
2. Check the top section and the middle section of the **Batch Count screen** for a green button. If it is in batch mode one of these buttons should be green, either the **Variable Batch Counter On** in the middle section or the **Batch Counter On** in the top section. To exit batch mode press whichever of these buttons that is green. See figure 21.
3. Now both of these buttons should be red and read **Batch Counter Off** and **Variable Batch Counter Off**.
4. The machine is now out of batch mode. Exit this screen by pressing the **home icon** in the lower right corner.

SLITTER COUNT MULTIPLIER

If each sheet passing through the feeder is to be slit into several pieces, use the multiplier to correct the current count to reflect the finished number of pieces.

1. Start from either the **home screen** or the **production screen**. See figure 9 for the home screen or figure 19 for the production screen.
2. Press the orange **Batch Counter** button. The HMI now displays the **Batch Count** screen.
3. This screen has three sections divided by two dark stripes. The lowest section has the **Count Multiplier (UP)** numeric entry. Press the white box to get a keypad. See figure 21.
4. Enter the number of pieces each sheet will become after slitting. This multiplier will then be used to multiply the active count so the current count display will now show the finished number of sheets after the slitting process is complete.
5. Use the home button in the lower right corner to return to the **home screen**.
6. Please remember to change this number back to one when the slitting job is complete to return the count to a normal one to one ratio.

Job Control

Use Job Control to assign a number to a new job, save a new job, reload values from a saved job, or delete a saved job.

1. To access one of the **job control** screens start from the **home** screen (figure 9) and press the **main menu** button in the lower right corner.
2. From the **main menu** (figure 10) press the **job control** button.
3. There are 80 different storage positions available to save jobs. Each job control screen has 10 available positions. There are 78 different parameters saved for each job.
4. You may choose a storage position by pressing the yellow **Select** button associated with the row of your choice or use the orange buttons at the bottom of the screen to scroll through the other job control screens (figure 24). If a job number is associated with any row, there is job data already stored in that location. Be aware of which location you are choosing because you are able to overwrite the existing data.



Figure 24

5. After pressing the appropriate **Select** button, a numeric entry keypad will appear. Enter a unique **Job Number** you would like to use to identify your current job. Any non-zero number 9 digits or less will work. Your first job can be one.
6. After identifying the row with a unique job number, press the yellow **Save** button associated with that location to save the current values into memory.
7. Later if you come back to this screen and instead of the Save you use **Retrieve**, the values from memory will overwrite whatever values were current and the display will change to the Setup screen with the selected memory ready to run.
8. The **Delete** button associated with each line will clear the data saved in the location.

Job Calculator

1. To access the **job calculator** start at the **home** screen (figure 9) and press the **main menu** button in the lower right corner.
2. From the main menu (figure 10) press the **job calculator** button.
3. In the **Job Calculator** screen, the current job values automatically move into this screen. Current job values include the current sheet separation, sheet length, and machine speed. This screen thus starts in **current job mode**.
4. To stay in **current job mode** enter the **Total-Job Count** only. This needs to be entered in order for current job duration to be calculated.
5. If any of the other values are changed on this screen (sheet separation, sheet length, or machine speed), the mode will change to **future job mode**. Total-Job Count still needs to be entered to calculate future job duration.

Manual Mode including Inch Mode

1. From the **home screen** (figure 9) press the **main menu** button in the lower right corner.
2. From the main menu (figure 10) press **manual control**

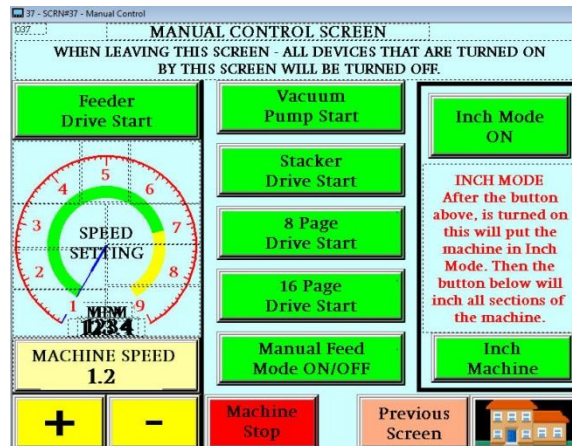


Figure 24

3. Please note that the **Stacker Drive Start**, **8 Page Drive Start** and the **16 Page Drive Start** will be unavailable if those components are not connected.

Stacker Setup

Plug the Stacker 2x2 connector into the 1x2 receptacle on the side of the electrical enclosure. There are start and stop delays available on the stacker to help shingle the finished product.

1. Start at the **home screen** (figure 9) press the **main menu** button in the lower right corner.
2. Press the **Set Up Summary** button on the **main menu** (figure 10) lower right button just above **previous screen** button.
3. From the Set Up Summary button screen look at the first column on the left.

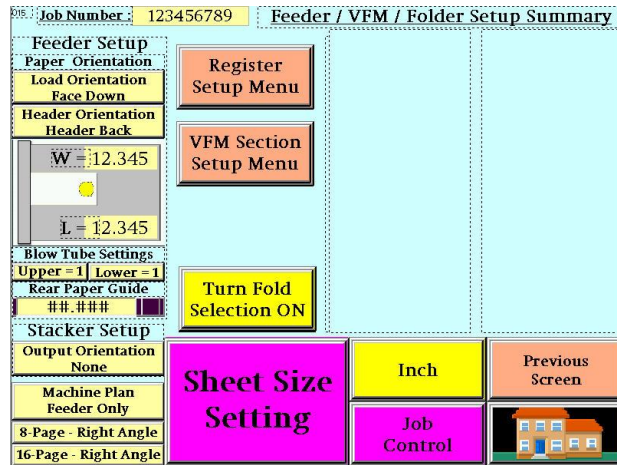


Figure 25

4. There is an “invisible button” in the blue area in the lower part of the left column that says **Stacker Setup**. Press Stacker Setup. The display should change to the **Stacker Setup** screen.

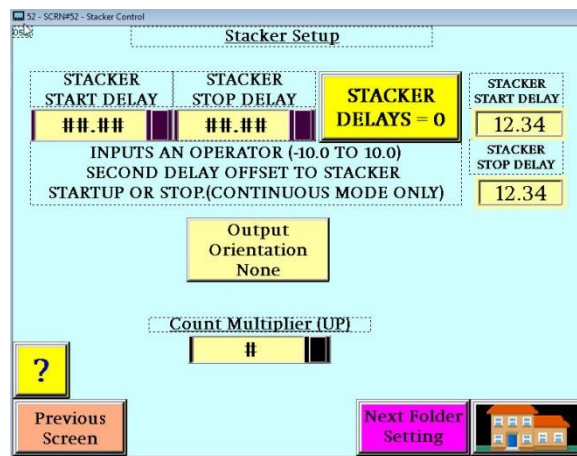


Figure 26

5. Press the black box by either the **Stacker Start Delay** or **Stacker Stop Delay** to popup a keypad and enter a numeric value. These values are set by speed and fold calculations by the PLC. If the shingle on the finish product isn't right other factors including static or humidity may be affecting the paper. You may change the timing on the start and stop delay to compensate. You can enter delays between **-10 and 10 seconds** on both of these delays.
6. The yellow ? button is a shortcut to a help screen for this Stacker Setup.

7. The **Next Folder Setting** changes the display to the **Trailing Band information Screen**. The **home icon** takes you back to the **home screen**. The **previous screen** should take you back to the **Feeder/Folder Setup Summary** Screen
8. The **Count Multiplier (Up)** is the same Count multiplier (Up) from the **batch count screen** (figure 21). It is used only when slitting. Enter the number of pieces each sheet will become after slitting. This will multiply the current count by that number to show the finished total number of sheets after slitting. It does not matter which screen this value is entered. It will write to the same address either way. The last value entered will be the one that is used.

Feeder Setup

1. Start at the **home screen** (figure 9) press the **main menu** button in the lower right corner. You can also access the feeder Setup from the summary Screen (figure 25) by pressing the Feeder Setup button in the top section of the first column.
2. Press the **Set Up Summary** button on the **main menu** (figure 10) lower right button just above **previous screen** button.
3. From the Set Up Summary button screen look at the first column on the left (figure 25) There is an “invisible button” in the blue area in the upper part of the left column that says **Feeder Setup**. Press Feeder Setup. The display should change to the **Feeder Setup** screen.

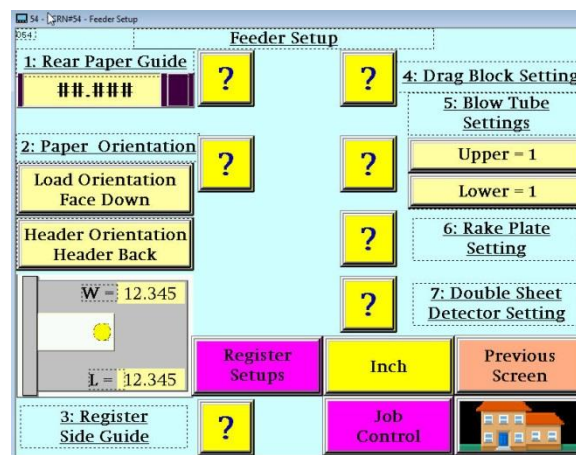


Figure 27

4. Each yellow ? is a help screen to explain element.

8 page / 16 page Setup

If an 8 page or 16 page is connected, you have 8page/16page setup options available. If they are not connected the associated setup buttons will not display.

Plug the 8 page connector 2x1 to the main enclosure 1x1 receptacle assembly.

Plug the 16 page connector 2x3 to the main enclosure 1x3 receptacle assembly.

Note that the 16page main enclosure receptacle assembly is now an option and must be wired into the enclosure. As an option, the 16page must be “turned On” in the logic as well. See Customer Preferences (figure 29). Press the Orange **Options** button on the bottom of the screen left of the Home Icon. Turn On the 16page option from the option screen (figure 30).

1. Start at the **home screen** (figure 9) press the **main menu** button in the lower right corner.
2. Press the **Set Up Summary** button on the **main menu** (figure 10) lower right button just above **previous screen** button.
3. If the 8 page and 16 page are connected then the **Setup Summary Screen** will have visible buttons for each in the left corner at the bottom (figure 25)
4. Press the **8 page- Right Angle** button or the **16 page- Right Angle** button to see setup options. Both screens are similar. Below is the 8 page screen. The numeric values listed by each pan are the lengths calculated for the current fold. The Gapset numbers by each gapset are also thicknesses calculated for the current fold. Please manually set pan lengths and gapsets to the correct value before running production.

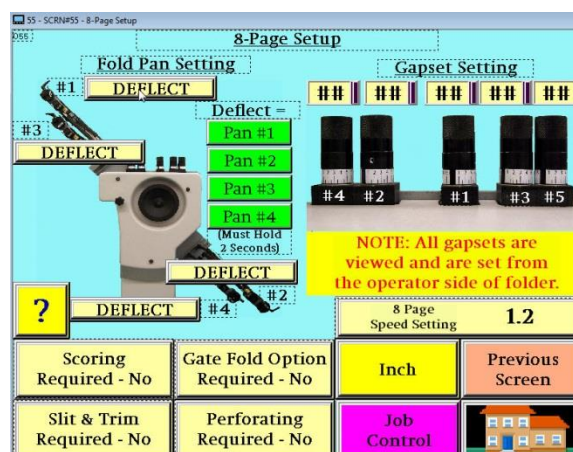


Figure 28

5. The yellow **?** button is a shortcut to help screens to assist with the settings of all the elements on this page.

CUSTOMER PREFERENCES

Customer Preferences screen is available by entering a password. This is where the Language choice, HMI calibration, Time and Date, HMI contrast, Pump OFF delay, Reset Counters lock out, and alternate password setup are set on this screen.

1. From the **Home screen** (figure 9) press the **main screen** icon in the lower right corner to access the main screen.
2. From the **main screen** (figure 10) press the **Customer Preference** button.
3. This screen is password protected. After pressing this button the keypad entry will appear. The correct password must be entered to access this screen. The default password for the Customer Preference is “2”.

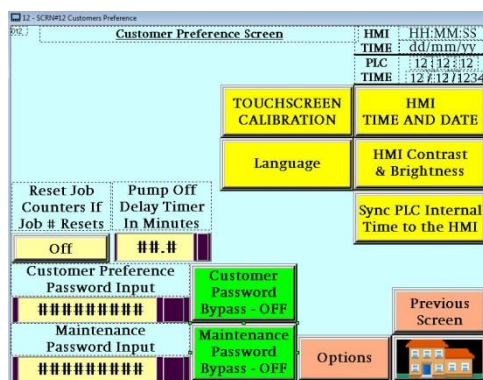


Figure 29

4. Password Options

- A. You may **leave the passwords at the defaults**. Customer “2” and Maintenance “1”. This means the touchscreen will continue to require these exact numbers to access this screen and the maintenance screen.
- B. You may **turn off the passwords** once you have accessed this screen by pressing the green button **Customer Password Bypass-OFF** or **Maintenance Password Bypass-off**. If either one is pressed, it should turn red and turn on. It will say Customer Password Bypass-ON. In the red state it will turn off the password protected access to this screen. From the main screen, it will go directly to these screens without data entry. You may bypass either one or both.

- C.** You may change the password. Be very careful with this option. **You can lock yourself out if you forget the numbers you selected.** To change the password, press the black box beside the password that you would like to change and use the keypad to change it to another number. Keep a record of the new number if you change it. If the record is lost, a dealer can reset the passwords using the service screens.

OPTIONS SCREEN

1. Start from the Customer Preferences screen (figure 29).
2. Pick the orange **Options** button to access the OPTIONS screen. This is where the options added to the basic machine must be “turned ON” in the logic in order to have them activated. The Options include 16 page, 8-page jam detection, 16-page jam, remote control, Stahl option, ergonomic pile, kicker, and Single contact start options.
3. The red state shows that an option is OFF. Press the button associated with an option to change the background to green and turn it on. This example shows the 16-page Option Off. It is located in the center of the top row. All options require a password to activate. The dealer will set these options to match to the requirements of your machine.



Figure 30

MAINTENANCE SCREEN

1. From the **Home screen** (figure 9) press the **main screen** icon in the lower right corner to access the main screen.
2. From the **main screen** (figure 10) press the **maintenance** button in the upper right corner.

3. This screen is password protected. After pressing this button the keypad entry will appear. The correct password must be entered to access the maintenance screen. The default password for the Customer Preference is "1".
4. For password options, see Customer Preferences in the previous section.
5. Below is the maintenance screen. Please use the reset buttons on the left to clear the maintenance messages. These messages will automatically appear on the touchscreen when the appropriate count or runtime has occurred.
6. Each yellow ? button links to an information screen associated with that count.



Figure 31

INSTALLING STACKER

The stacker is now a roll around unit.

1. Manually position it at the exit of the unit.
2. The stacker has a C14 with plug 2x2 which needs to be plugged into the receptacle 1x2 on the left side of the main electrical enclosure.
3. When running the independent pile feeder without the stacker, the dummy plug 3x2 must be engaged into the 1x2 receptacle.

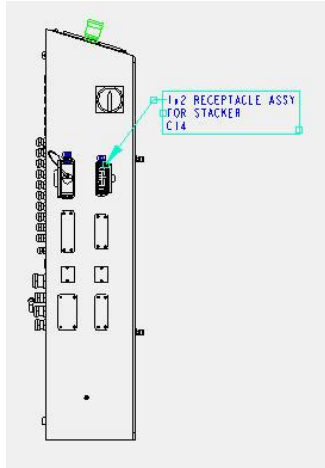


Figure 32

OPERATOR CONTROL

The main operator control is now the touchscreen. (See figure 1). Operation instruction is available in the Quick Start instructions in the previous section.

1.0 Setting Folding Speed

The speed of the fold rollers is set using the touch screen from either the Home screen or the production screen. See Quick Start figure 19.

2.0 Setting Stacker Belt Speed

An infinite speed range between high and low is set by turning a control knob. See figure 33. The speed control knob is the black knob on the right.

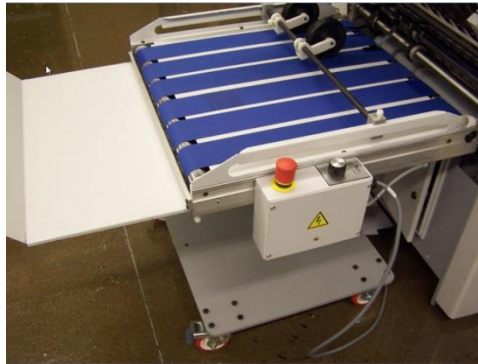


Figure 33

3.0 Emergency Stop Button

The emergency stop buttons are large red mushroom shaped buttons. They are push-pull style. Press to stop. Pull to release. There is one on the main electrical control enclosure to the left of the touchscreen. (See figure 1). There is a second on the stacker. It is to the left of the speed control knob. (See figure 33). The stacker will only stop the main unit if it is connected to the main electrical box with plug 2x2 inserted into receptacle 1x2 in the side of the control box.

When pressed the emergency stop will stop all motion:

- Sheet feed-stops
- Folder drive-stops
- Pile lift-stops
- Stacker belt-stops
- Pump-stops

The touchscreen will change its display to indicate that an E-stop is activated. The screen will have a red background and the message across the screen will say Emergency Stop with the location of the activated E-stop.

TROUBLESHOOTING/ DIAGNOSTICS

When the independent pile feeder detects an error, it will activate an error screen with a red background unique for that error. There will be an description of the error and also be a blue **Trouble shooting** button. When pressed the trouble shooting button will link to the help screen for that error.

The “live” inputs for each PLC input are available. This is helpful to check that sensors activate “on” and “off” when expected.

1. To access the PLC I/O, start at the **home** screen (figure 9) and press the **main screen** button in the lower right corner.
2. From the **main screen** (figure 10), pick the **Trouble Shooting** button on the right side in the center.
3. From the **Troubleshooting-Main Menu** pick the **PLC A2-Inputs** button second down in the left column.

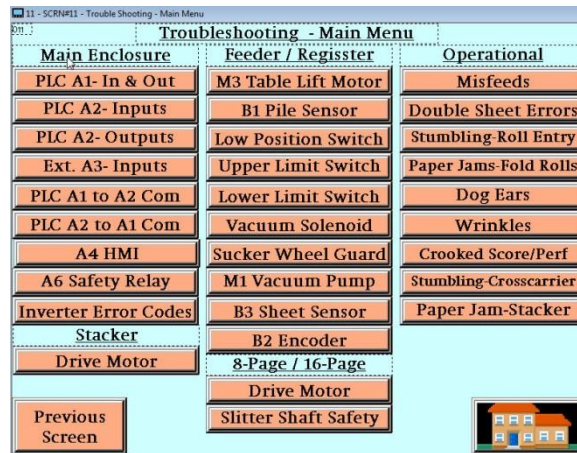


Figure 34

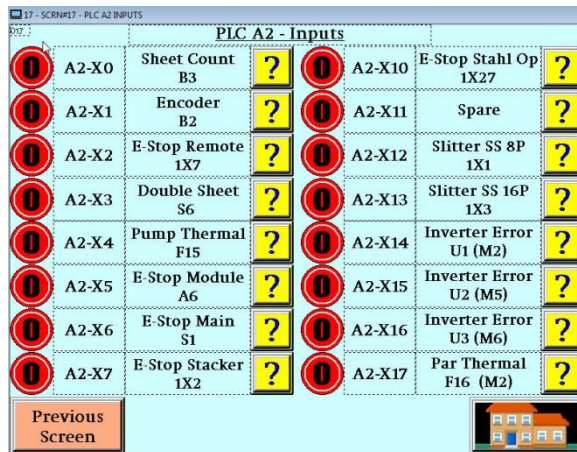


Figure 35

- Each input is labeled with a description and a reference designator. Refer to the schematic to trace individual inputs and outputs. The reference designator matches the schematic. Note that there are two PLCs, A1 and A2. For this example B3, the sheet sensor, is above the register, looking down, mounted under the guarded sucker wheel assembly. It is monitoring for paper just past the pile feed stack as it passes just past the guard.

The red state (figure 35) indicates OFF. When the paper passed under the sensor, the top left icon will change from red to green. **Green indicates the ON state.**

PILE FEEDER OPERATION

1.0 Loading the Pile Feeder

See Figure 36 for picture.

See Figure 37 for numeric reference numbers.

Set the right side guide, 1, to half the sheet using the scale, 2, located just under the sucker wheel guard. The side guides are the long aluminum right angle pieces shown below on the left and right side of the paper. The vacuum wheel is now in the center of the sheet. Lock the guide in place using the lever, 3, shown toward the center of the scale.

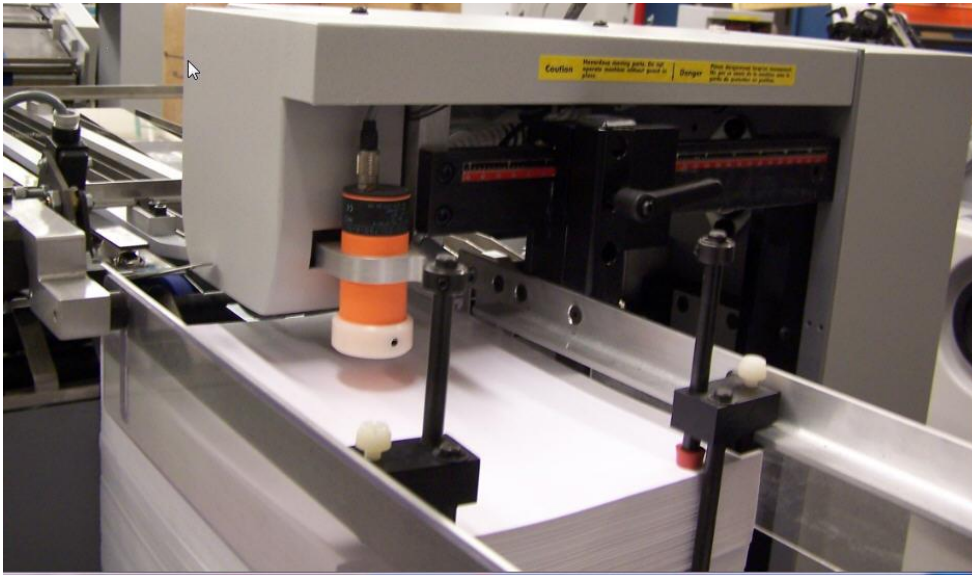


Figure 36

Remove the left hand guide, 4, from the feeder. Move the sheet drag guide block, 5, on the right hand guide to the rear of the paper stock. The sheet drag guide block is the black rectangular block with two threaded posts mounted to it.

Press the Table Lower button (figure 9). The table will lower until it reaches the table lower limit switch. Load the paper against the front and right hand guides.

After loading, press the Table Raise Button. The table will lift the paper until it triggers the pile height sensor, 6. During operation the top sheet of the pile should be approximately $\frac{1}{2}$ " under the vacuum wheel and the $\frac{5}{8}$ " under the orange pile height sensor. This is with the pile up and the pump off. The pile sensor is a non-contact sensor.

Reinstall the left hand guide. Slide the register guide, 7, (the silver stepped block on the left side of picture) inward until the see-through left hand guide is approximately 1/16" away from stock.

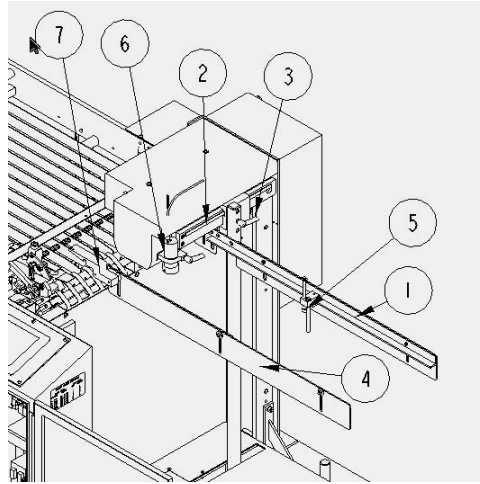


Figure 37

2.0 Hold-down Locations

Set the sheet hold-downs so the rubber bumpers rest on the top to the sheet pile and prevent double sheets from being pulled into the sucker wheel. Correct setting of the rubber bumpers depends on the characteristics of the paper stock.

3.0 Air and Vacuum Settings

The blow settings are still completely mechanical settings.

1. Start from the **home screen** (figure 9).
2. Press the **Pump Start** button.
3. Use the two blow tube angle levers and the air bleed off valve cover to adjust the air to lift the paper on the top of the stack. The top four to five sheets are to be lifted by the top blow tube. The bottom blow tube should lift approximately ½" of paper underneath the first four to five sheets. The bottom blow tube provides separation to send sheets up to the top to be fed. See Figure 38 and Figure 39.
4. Do not adjust the air angle flow too high into the sheets. The top sheets should be in a humped pattern as seen through the side guide for approximately 75% of the sheet length.

Lifted paper and “humped pattern”:

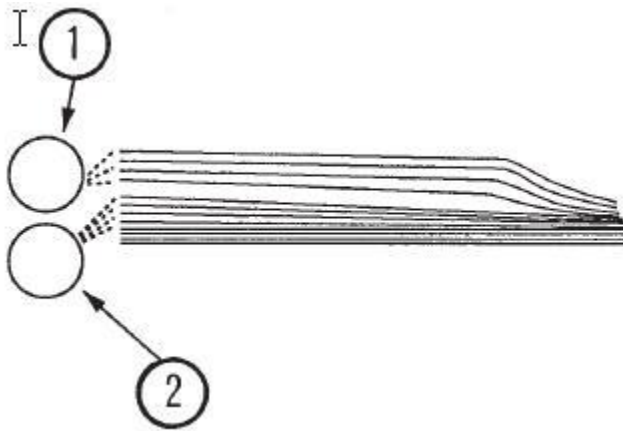


Figure 38

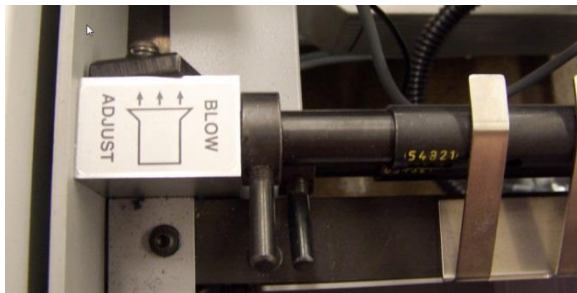


Figure 39

5. First determine what sheet width is to be run. Then use the FRONT BLOW SETTINGS CHART (Figure 40) to set the detents settings for each tube. The numbers on the top detent can be seen in Figure 39.

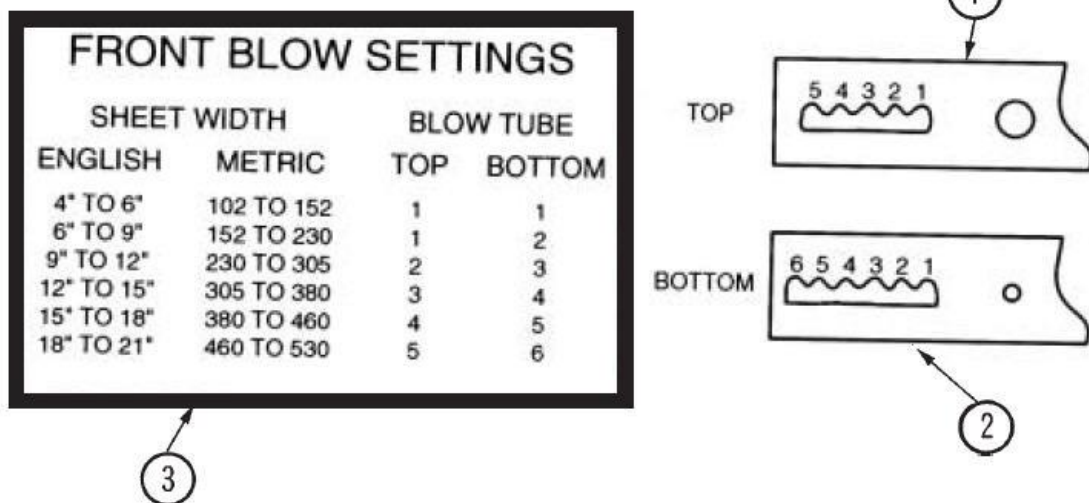


Figure 40

6. Vacuum adjustment is made using the touchscreen. From the **home screen (figure 9)** use the **+** and the **-** buttons underneath the **Vacuum off point %**. Adjust vacuum high enough to draw a single sheet into the sucker wheel assembly. Reduce the vacuum if the pull draws more than one sheet into the sucker wheel assembly.

REGISTER OPERATION

1. Use the fluted knob, 1, to slide the side guide, 2, with the marble holder, 3, so that it is 1/16" away for the stack of loaded paper. See figure 41.
2. Move the sheet support, 4, to the right hand side of the sheet.
3. Place the steel and/or plastic marbles into the marble holder, 3. It is recommended to have at least two steel marbles in the first four to six positions closest to the pile feeder end.
4. Position the rest of the marbles further away from the pile feeder with steel or plastic marbles depending on the stiffness of the paper. For registering oblong sheets it is recommended to have at least 50% steel and 50% plastic marbles alternating in the marble holder.
5. Clip-on sheet hold-downs, 5 and 6, placed across the register table prevent the sheets from rising away from the paper path. The hold-down with the angle-formed end, 5, is to be placed in front of the vacuum wheel.

6. The fluted knob, 7, provides micro-adjustment of the side guide, 2. Knurled knobs, 8, provide bias adjustment for the side guide for adjusting sheets that are not square.

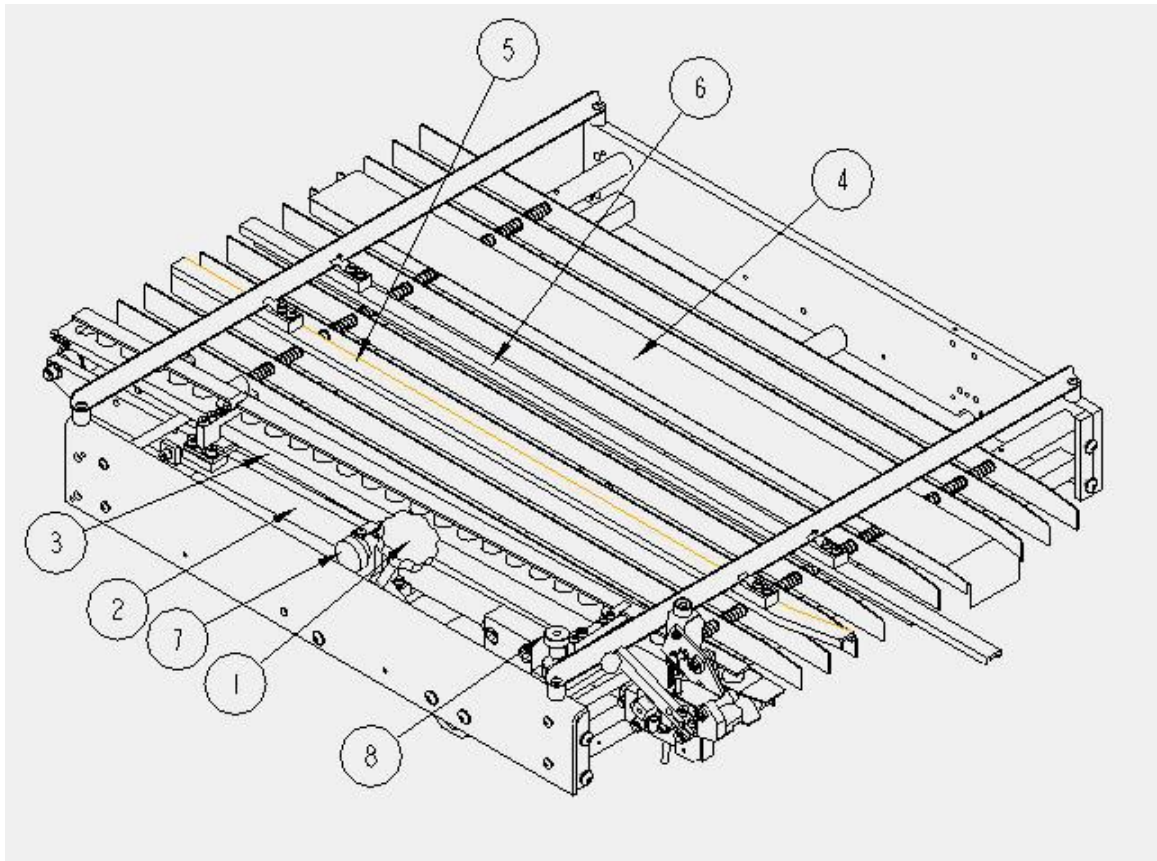


Figure 41

7. The **double sheet control** is adjusted to the thickness of the paper being fed by pulling up the lever, 1, and manually inserting two paper strips in the clip at the back of the lever, 2. The feeler segment remains inoperative when a single sheet is passing through. When double sheets are fed through, the feeler segment is pulled against a micro-switch and the double sheet is stopped. Sheet feeding is stopped and the touchscreen will display a double sheet feed screen. The message remains until the double sheet is removed manually. Raise the lever to remove the double sheet.

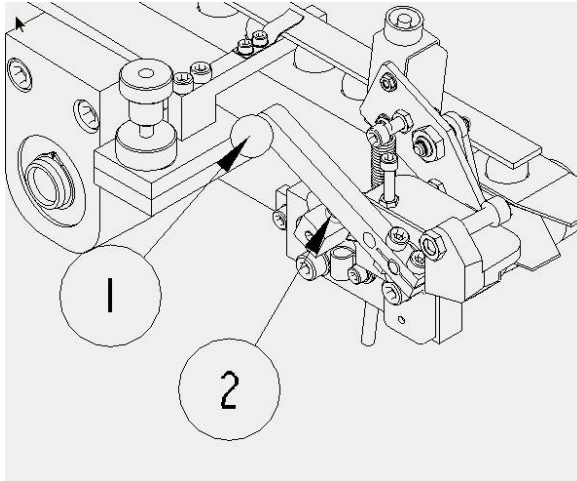


Figure 42

LUBRICATION/MAINTENANCE

Pile Feeder

Vacuum Solenoid Valve (on vacuum wheel)

The vacuum at the suction wheel is controlled by a solenoid valve.

1. To access the solenoid first remove the two screws on the top of the sucker wheel assembly guard. Use a number 4 metric Allen wrench to loosen these screws.

2. Slide the guard about two inches toward the operator side so the slot in the guard clears the mounting block that holds the orange paper height sensor as shown below.

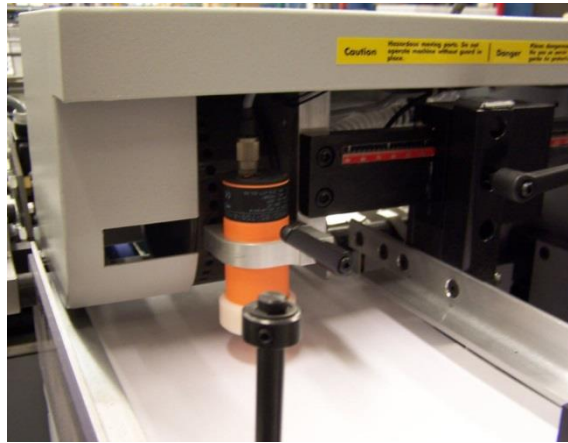


Figure 43

3. Once the slot in the guard is clear, lift the guard up and away from the machine.
4. Without the guard covering the sucker wheel assembly, loosen two spring clamps, one on each side of the solenoid. The solenoid is the silver cylindrical part with the C4 mounted into a right angle black connector. The black spring clamps hold the solenoid to the manifold block. See figure 44.

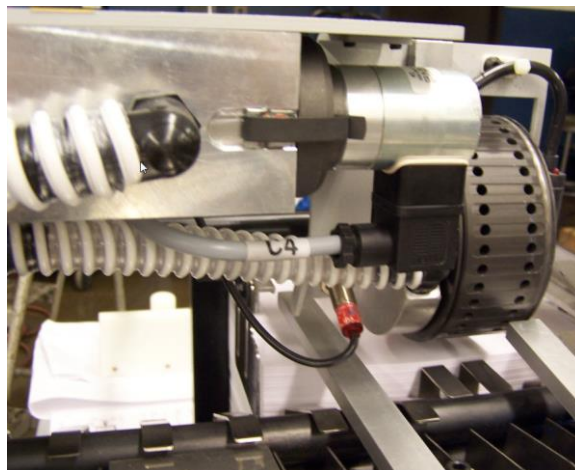


Figure 44

5. Slide the piston out and wipe with a clean cloth.

Vacuum Pump

Loss of vacuum and blow can be caused by clogged filters. Check periodically. Check vanes for wear after 15,000 hours of service. Refer to parts manual for ordering parts.

Register

Flat Belt Drive Shaft

Check for wear periodically. Lubricate with Baum Lubricant “W” Lithium based grease or equivalent periodically.

Support Bars

Lubricate the three support bars on which the register guide slides periodically using Lithium based grease.

VFM

Hand wheel

Lubricate bi-annually with commercial grade lubricating oil

Gear Drive

The helical gear drive is lubricated by an automatic grease dispenser located inside the left-hand guard. Use the label on the left-hand guard to record lubrication change date. (It should be changed every 9 months.) To activate the dispenser, screw the eye bolt, 3, into the lid, 2, of the dispenser until the ring, 3, comes off. Shake the canister when installing to insure that it rattles, signifying that it has been activated. See parts manual for replacement dispensers.

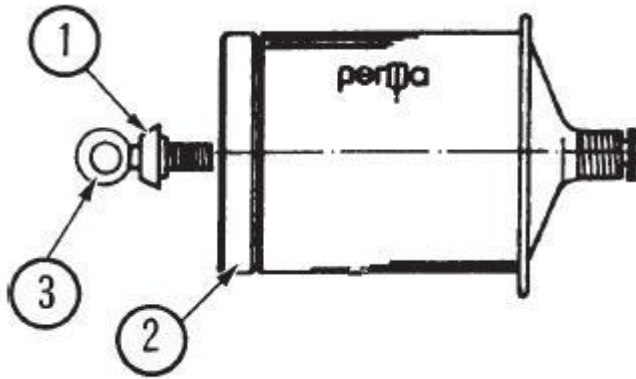


Figure 45

Warning: Never open the grease dispenser. Even when empty, the container remains under pressure. If damaged, caustic liquid may leak out. If contact is made with skin, flush repeatedly with water.

Pullout Tires

Check periodically for wear, uneven tires can cause the sheet to twist.

TECHNICAL SPECIFICATIONS

1620-VFM

Maximum sheet size	20.5" x 31" (52 x 78.7 cm)
Minimum sheet size	4" x 6" (10.1 cm x 15.2 cm)
Maximum folder speed	8200 ipm (208m/min)
Maximum pile height	25" (63.5cm)
Minimum fold length	1.57" (40mm)
Maximum fold length	20.5" (52cm) for parallel folder
Slitter shaft diameter	1 1/8" (28.6mm)

Electrical

1620-VFM-3	220/400/3/60	22.2A
1620-VFM-13	220/400/1/50	24A
1620-VFM-2	220/1/60	27A
1620-VFM-5	220/400/3/50	22.2A
1620-VFM-8	400/3/50/60	22.2A
1620-VFM-4	220/1/50	24A

See serial Plate on folder.

ACCESSORIES:

Jam Detectors	Kicker Option	Remote Control
8-page folder		
Ergonomic Pile Sensor	16-page folder	