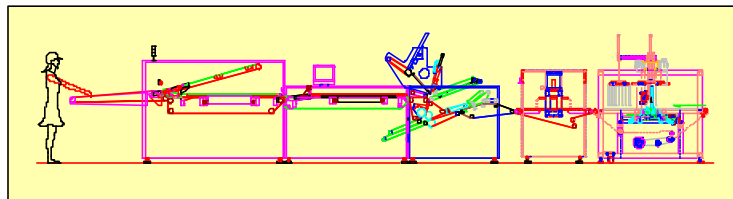


ORION

Fitted Sheet Folding System



The Orion folds fitted sheets of various material types including poly/cotton, sateen and flannel. Sheet sewing pattern can be length for length or width for length. A cardboard can be inserted in the 2nd crossfold. Our *Pressing Unit* presses down folded items, enhancing package quality.



- **Advanced Design**
- **Precise Folds**
- **High Speed Operation**
- **Jam Prevention System**
- **Reduced Maintenance**

ORION FITTED SHEET FOLDING SYSTEM

Specifications

- Machine will fold fitted sheets of various material types including poly/cotton, sateen, and flannel.
- Folding Capabilities:
 - Final folded size range: 6" x 8" to 14" x 14", depending on sheet size. A folded size smaller than 9" x 8" requires our **Fold-N-Stack** unit which makes an additional crossfold, and stacks the item.
 - Minimum sheet size: Twin; Maximum sheet size: King
 - Sheet Sewing Pattern: length for length or width for length
 - 4 lateral folds + 4 crossfolds
 - Capacity: up to 11 sheets per minute, depending on sheet length and feeding speed
- Items will be manually fed into the folder. A vacuum suction unit is built into the inlet conveyor to improve the quality of manual feeding.
- 1st crossfold is accomplished with a reverse conveyor and air blast assistance
1st, 2nd, 3rd and 4th lateral folds by mechanical blades over adjustable skies
2nd and 3rd crossfolds by reverse conveyors and blades assistance
4th crossfold by an advanced **reverse conveyor**
- All drive motors are controlled by **frequency inverters**, eliminating the use of brake motors. The inverters have built-in computers that start and stop the motors with a soft motion, creating minimal shock and stress to the drive systems. The use of these inverters reduces maintenance, downtime and prolongs the life of the machine (not used in stacker index conveyor motor).
- The lateral fold blades are moved to their correct folding position by motors and timing belts controlled by frequency inverters. This advanced design increases folding speed while providing accurate folds. It also reduces the maintenance, wear & tear and downtime associated with the traditional use of cylinders and solenoid valves to move the blades.
- Cardboard unit can insert a cardboard into the sheet at 2nd crossfold (optional).
- 1st and 2nd quality sheets will be stacked by a **Pickup & Place** stacker with (2) index conveyors. This unit uses a robotic arm to pick up each folded sheet, and stack it on the assigned index conveyor (optional).
- The **Fold-N-Stack** unit enables a final folded size of 6" x 8" to 14" x 14". It makes an additional crossfold by mechanical arms with knife assistance. As the last fold is accomplished, the item is stacked vertically on one of two troughs. 1st quality items are stacked on the 1st trough, and 2nd quality items are stacked on the 2nd (optional).
- Pressing unit presses down each folded item to enhance package quality (optional).
- 2nd & 3rd quality sorting is made by the operator using push-buttons on the inlet conveyor. 2nd quality sheets will be stacked on the 2nd stacker index conveyor. 3rd quality sheets will be folded, bypass the stacker and exit the folder.
- Machine is equipped with (3) lights and an audio alarm: Production Speed Monitor (green/red), Cardboard Unit Monitor (yellow), Machine Jam (red + audio alarm).
- Machine is controlled by a high speed computer (PLC) with up to (70) folding programs. Operator interface is a 10.4" color active matrix touch screen which displays trouble shooting messages and allows for output tests. The PLC can be linked to an office computer for data collection (optional).

