

FeedLine is a module based material handling robot cell and can handle a great variety of components:

- Simple geometry such as axles and square parts
- Sensitive parts, when the part must be handled carefully
- Complex parts, such as complex geometry, nesting parts, large parts, heavy parts or when any other forms of automated feeding has proved difficult.
- Parts that require manual inspection prior to loading

The FeedLine system is very flexible. It takes only a few minutes to teach a new part into the system, and there is no mechanical adjustment or change of fixtures. The standard FeedLine consists of conveyor belt, vision system (PickVision) and a six-axle robot. The robot can even be mounted onto a transverse rail providing a useful 7th axle, enabling one robot to work several machines.

The FeedLine system is intended to serve a wide range of machines across many different industries, with cycle times upwards of ten seconds. It is also possible to integrate additional processes into the FeedLine cycle; such as deburring, cleaning washing, inspection and packing to name just a few, often without any reduction in overall cycle time, adding value to the operation without the need for any additional operators.

The operator places the part on a conveying belt that works as a buffer. The camera located above the conveyer belt reads the parts, determining position. Parts can be unsorted on the conveyor without need to separate the parts on the belt; this ensures that the operator can quickly load a maximum of parts onto the belt without the need to carefully positioning them. The camera guides the robot to the right grip position with great accuracy. When all the parts below the camera are picked, the conveying belt will move forward until a new part is in sight of the camera. The length of infeed conveyor is designed to suit the required application. The FeedLine could also be equipped with an extra conveyor belt and camera for longer running time or handling of multiple components.

