

MultiFlex is a standard system for automatic feeding of unsorted parts using vision guided robotics. The equipment can separate and feed most part types, such as untrimmed solids, machined sheet steel parts, included geometrically complex shapes.

Applications (see back page):

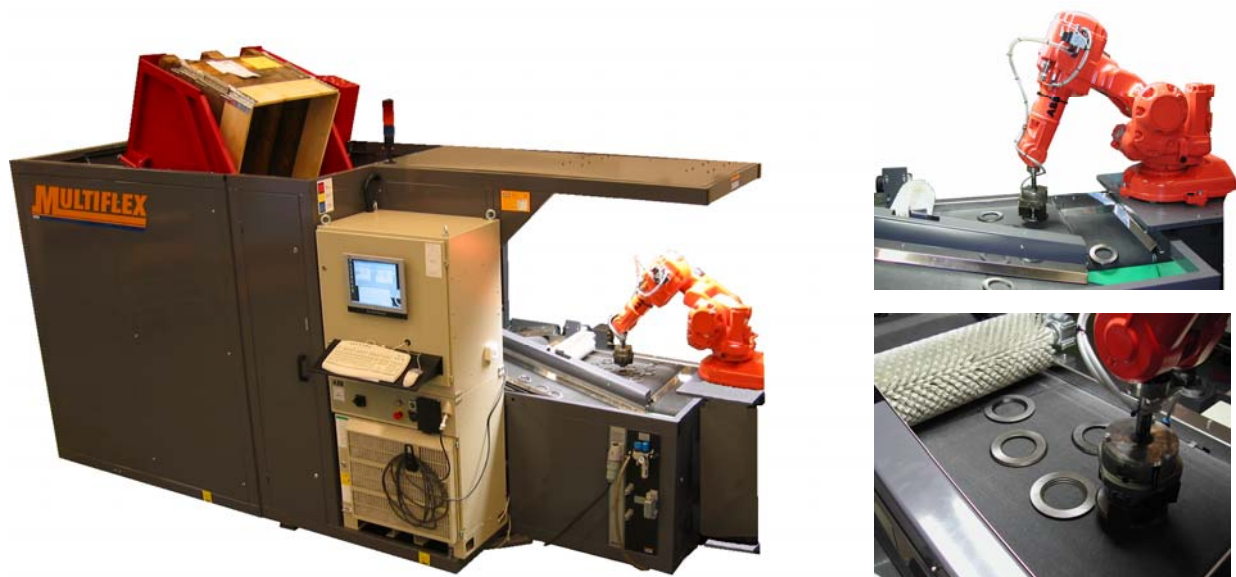
- Transfer machine (raw parts for valves, couplings, connections, etc)
- Assembly (feeding parts to fast assembly systems)
- Trimming press (untrimmed parts from casting or hot stamped)
- Multi-operation machines (most types of material)
- Resistance welding (sheet steel fixing part welding)
- Stacking (before next processing or handling operation)

A pallet of parts is loaded into the pallet tipper of the MultiFlex and via various transport stages the parts are separated to pick on the last conveyor belt, where the camera registers the orientation of the part. The robot picks up a part from the belt and places it in the tool or fixture of the machine. MultiFlex alerts the operator when feed parts are low and when finished parts need emptying.

Resetting between different parts takes about five minutes. No mechanical resetting is needed. The robot can even be used for value added additional processes, such as deburring, packing or checking.

MultiFlex can be fitted with small or large six-axis robots.

See the MultiFlex datasheet for further information about variants, options and performances.



MultiFlex equipped with ABB robot, type IRB-140T

Examples of profitable MultiFlex installations

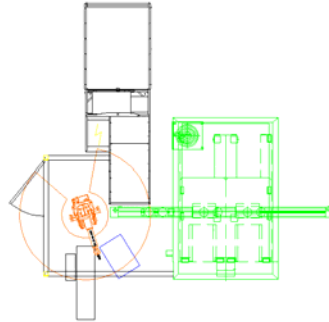
Transfer machines



MF-R washing, weighing, sorting and deburring.
Trimmed brass part
Cycle time 3-15 seconds



CNC machining centres

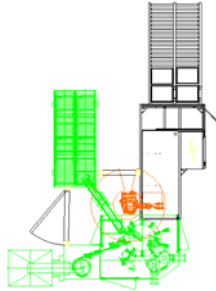


MF-R measuring and deburring
Trimmed steel part
Cycle time 10 seconds

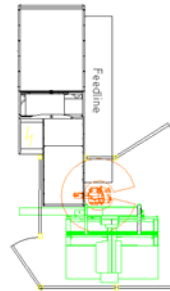
Assembly



MF-LTH. without pallet tipper.
Turned brass part with O-ring
Cycle time 2,5 seconds



Resistance welding

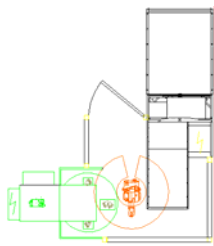


MF-RTF
Plates and nuts
Cycle time 3-5 seconds

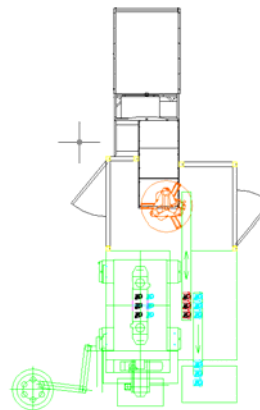
Trimming press



MF-LT
Untrimmed brass part
Cycle time 2,5 seconds



Stacking/Draw broach



MF-RCT
Precision-punched sheet steel
Cycle time 0,8 seconds