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- 1. Large multi-directional, touchscreen HMI interface.
- 3. Over 4 tons of reducing force.

- 2. Large front opening protected by light curtains, enable the operator to gain easy access into the machine.
- 4. Fully integrated Fanuc robotic arm.

The FTM-1 is a multi-process machine that incorporates tube straightening, cutting, forming, and bending processes into one machine. The operator interfaces with the FTM-1 through an HMI, where values such as part length and degree of bend can be selected for tube processing. Tubing is received from a coil via the payoff. Upon receiving the tubing from the coil, the tubing is pulled through a series straightening rollers via the feed mechanism. After being straightened, it will then cut the tube to length and enter an end-former where both ends of the tube will be reduced. Upon exiting the end-former, the tubing will be picked and moved by a fully integrated robotic arm. The robot will transition the tubes, two at a time, to a bender. After the bending operation is complete, parts will be dropped down into a catch area where they can then be removed from the machine.

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The FTM-1 is guarded with both hard guarding and a light curtain array. The use of light curtains enables the operator to gain easy access into the machine when needed and provides optimum operator observation while the machine is running in auto-mode. There are multiple e-stops provided, including at the HMI, robot teach pendant and robot controller. The robot itself is tied into the safety circuit of the FTM-1, so if a fault occurs (such as light curtain being blocked or HMI e-stop being activated), the robot will come to a controlled stop and robot servo power will then be dropped. The robot cannot be moved while the light curtain is blocked, or the machine is e-stopped.



FEATURES	SPECIFICATIONS	
• 5MM TO 1/2 INCH TUBE CAPACITY.		
PASSIVE OR ASSISTED UNSPOOLING.	COLORS	- KAL
SERVO CONTROLLED HITCH FEED.	WEIGHT	- 3 500LBS
OVER FOUR TONS OF REDUCING FORCE.		0,00020
ROBOT FACILITATED PART MOVEMENT.	• HEIGHT	- 96" INCHES
• 0 -TO-90 DEGREE BEND ANGLE.		
SERVO ADJUSTED BEND LOCATOR	• FOOTPRINT	- 9 X 14
• 5 USER-CONTROLLED PARAMETERS.		
PRODUCES 30 PARTS PER MINUTE.	• BASE	- CAN BE BOLTED DOWN