



MINIFLEX



MiniFlex is available in the following variants.

- MINI:** Standard machine equipped with robot ABB IRB-140.
- MINI-T:** "Turbo"; MiniFlex equipped with robot ABB IRB-140T. Capable of a shorter cycle time.
- MINI-2:** MiniFlex with a twin in feed system, making it possible to pick two different parts with one robot.

MiniFlex can also be equipped with other robots from the ABB product range. In this case the robot will be mounted on a separate mount beside the MiniFlex.

MiniFlex is designed to replace manual feeding and other types of feeding equipment. The equipment is compact and built on a common base plate.

The MiniFlex system is designed with flexibility in mind for handling multiple components through the use of vision guided robotics. Parts with various geometry, can be fed in any random orientation to the MiniFlex and be picked and placed without any mechanical changes to the machine, resulting in quick changeover times.





MINIFLEX DATASHEET

1. Physical dimensions

Length	1 900	mm	excl. robot
Width	1 180	mm	
Height	2 095	mm	
Weight	1 300	kg	

2. Supply

Supply voltage	400/50	V/Hz	
Fuse	16	A	
Air	6	bar	

3. Performance of ABB robot

IRB 140 **IRB 140T**
6-axis **6-axis**

Max. handling weight	5	5	kg	incl. gripper
Reach	810	810	mm	
Robot control system	IRC5	IRC5		
Shortest cycle time ^{1, 2}	3,5	3	sec	Part-dependent

4. Ambient environment

Temperature	5-40	°C	
Interface to parent machine	Yes		Digital signals (Option: Profibus)
Windows interface to the vision system	Yes		

5. Parts

Type of belts	White, green or black		Choose based on products to be handled
Size of parts ²	< 55	mm	part-dependent

6. Other

Colour code, frame	RAL 7015	Slate grey
Colour code, ABB robot	ABB-orange	Orange
Changeover time	Approx. 5 min	Incl. grippers

¹ Definition of cycle time: Average time for 200 parts with a transport distance of 1000 mm and with the robot picking up and putting down the part. The maximum time for picking up or putting down is 0.2 seconds.

² Subject to the geometry of the parts. The parts will not stick together and leaves excess material.