

## INTRODUCTION

The following file described how to load the FlexLean robot studio library into Robot Studio. This is only applicable for Robot Studio versions later then 5.13

## INSTRUCTIONS

### Step 1

Download the Robot Studio FlexLean Package available here:

[http://abblibrary.abb.com/global/scot/scot300.nsf/veritydisplay/38207e75e564afe4482577d70022b671/\\$File/FlexLean%20Robot%20Studio%20Models.zip](http://abblibrary.abb.com/global/scot/scot300.nsf/veritydisplay/38207e75e564afe4482577d70022b671/$File/FlexLean%20Robot%20Studio%20Models.zip)

It is also available on any of the product pages:



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Industries and utilities > Automotive > Body-in-White > FlexLean > FlexTrack IRT 501-66

## FlexTrack IRT 501 - Track Motion

Overview Data Contacts

As customer requirements for **bodyshop flexibility** increase, another problem arises: how can sub-assemblies, or even a complete **car body**, be moved across the production line without restricting **flexibility**?

At present, conveyors use model-specific pallets or tooling to handle the parts during motion. These pallets have to be returned to the beginning of the conveyor system when empty. This return circuit is cumbersome, often requiring an aerial system located on a mezzanine. This makes it expensive. Moreover, the co-existence of several car models in production means several pallet types exist, each requiring different treatment.


Under such conditions, dealing with more than two car models in the same line becomes a logistical nightmare. Once again, the solution lies in **flexible tooling** using **three-axis robots** to position the part locators. This programmable jig is carried by a **linear track motion**, which like the robots, is driven by the **IRC5 controller**. **FlexTrack** was developed for applications where compactness, protection and **cost efficiency** are required. The compact width allows optimized layouts where the stationary **FlexPLPs** are close to the **linear track**. All internal

### Documentation and downloads

Show options for filtering result

**Brochure**  
[Brochure on the Product Range for BiW Applications](#)  
 English - 1.39 MB - pdf

**CAD Outline drawing**  
[3D CAD for BIW Products](#)  
 English - 163.45 MB - zip


 [Robot Studio FlexLean Library : FlexTrack, FlexPLP, FlexLifter](#)  
 English - 4.53 MB - zip

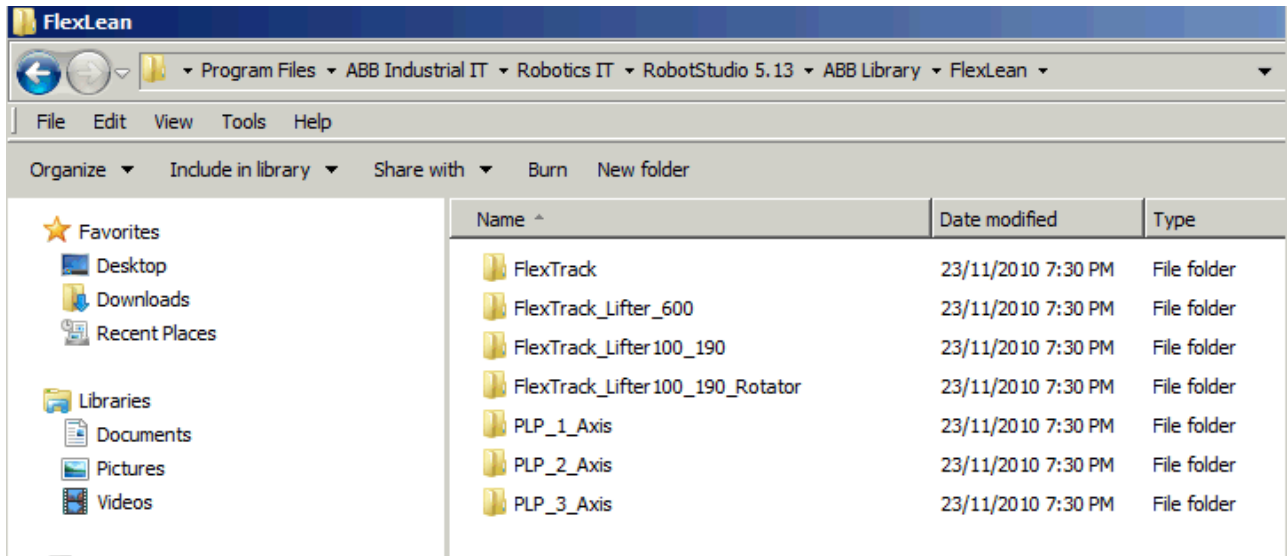
**Data sheet**

### Step 2

Extract the files to a known director (The location should be stable and not changed at a later date, otherwise the link will be lost)

C:\Program Files\ABB Industrial IT\Robotics IT\RobotStudio 5.13\ABB Library\FlexLean\

Type des.	Part no.					
Prep.	BIW Products / Alan Stapelberg	03-12-2010	Doc. kind	Work Instruction	No. of p.	
Appr.	BIW Products / Alan Stapelberg	03-12-2010	Title	How to load custom made libraries into Robot Studio	6	
Resp. dept	BIW Products	Approved	Doc. no.	Lang.	Rev. ind.	Page
	ABB Engineering (Shanghai) Ltd			en	A	1

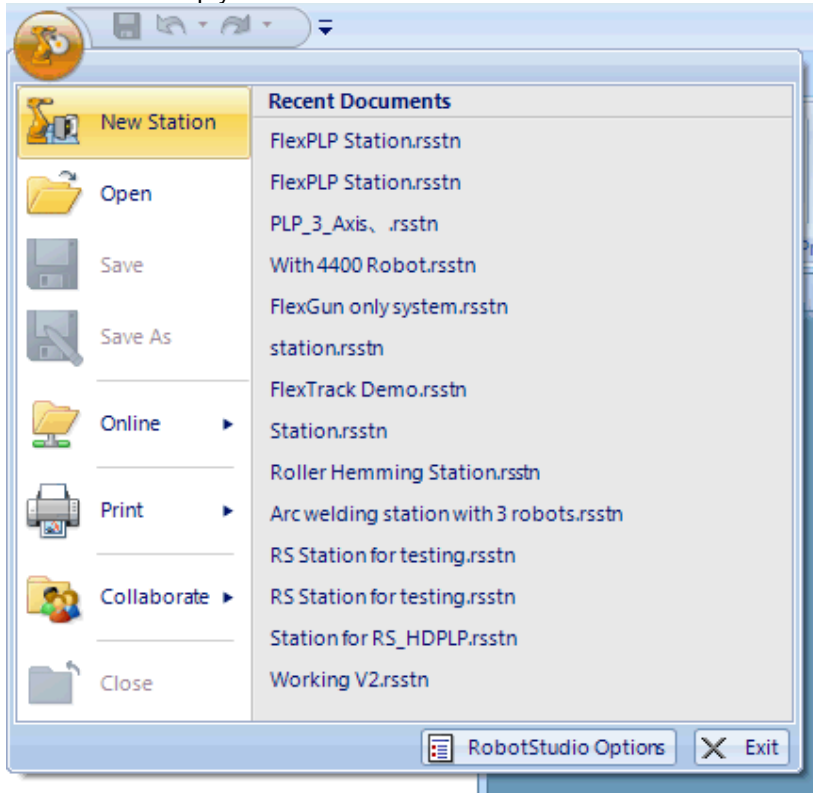


### Step 3

Start Robot Studio

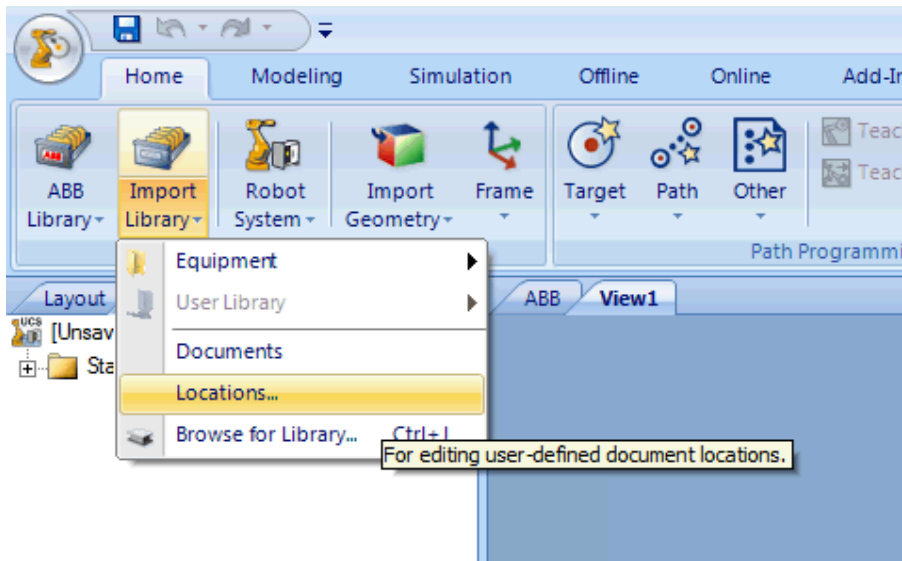
### Step 4

Create a new empty station

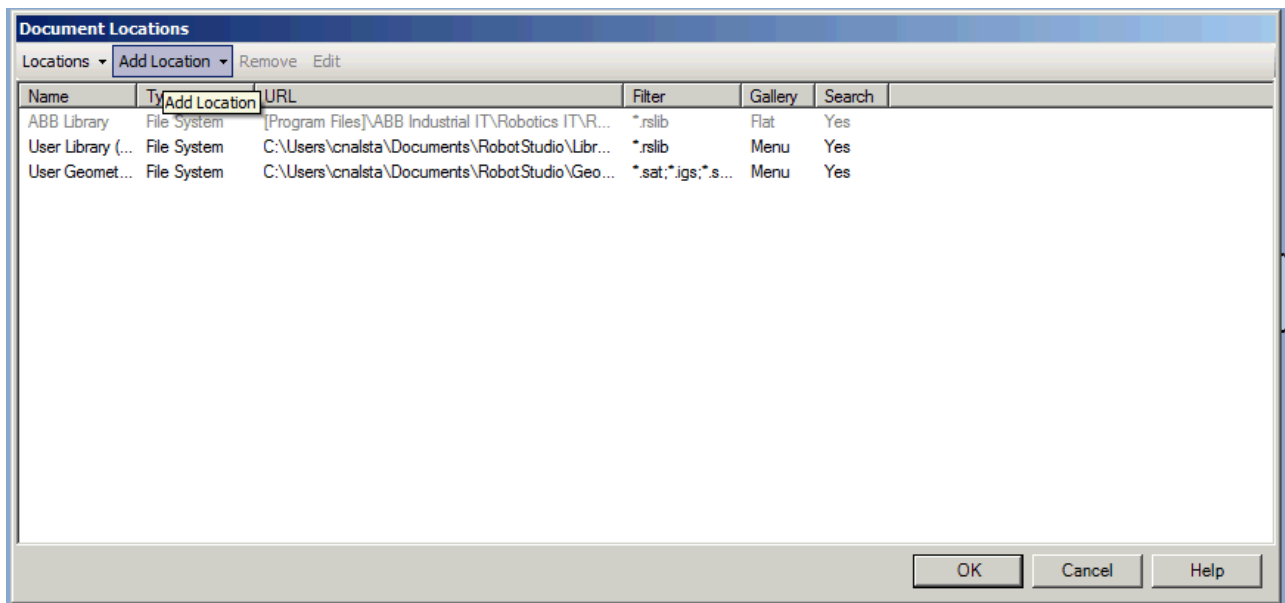


### Step 5

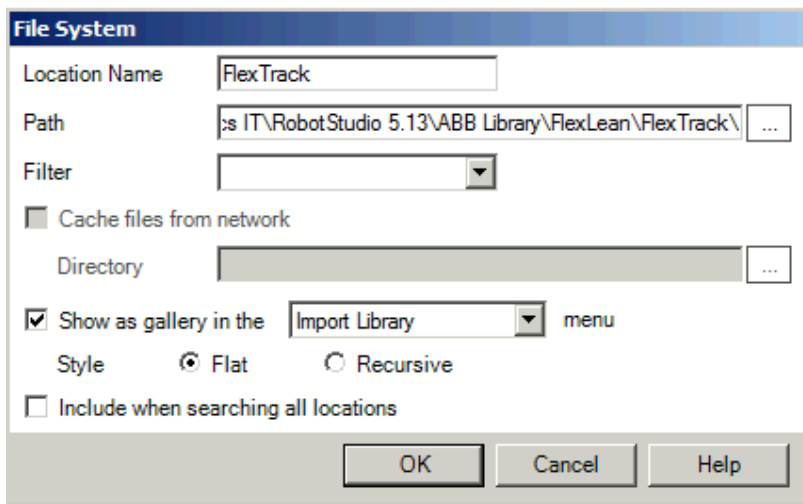
Click "Location....."



**Step 6**  
Click "Add Location"



**Step 7**  
Enter the location Name: FlexTrack  
Choose the appropriate path: C:\Program Files\ABB Industrial IT\Robotics IT\RobotStudio 5.13\ABB Library\FlexLean\FlexTrack\



as well as tick "Show as gallery in the" Import Library"  
Style = Flat

### Step 8

Repeat steps for :

Location Name: FlexTrack\_Lifter\_600  
Path: C:\Program Files\ABB Industrial IT\Robotics IT\RobotStudio 5.13\ABB Library\FlexLean\FlexTrack\_Lifter\_600

Location Name: FlexTrack\_Lifter\_100\_190  
Path: C:\Program Files\ABB Industrial IT\Robotics IT\RobotStudio 5.13\ABB Library\FlexLean\FlexTrack\_Lifter100\_190

Location Name: FlexTrack\_Lifter\_100\_190\_Rotation  
Path: C:\Program Files\ABB Industrial IT\Robotics IT\RobotStudio 5.13\ABB Library\FlexLean\FlexTrack\_Lifter100\_190\_Rotator

Location Name: PLP\_1\_Axis  
Path: C:\Program Files\ABB Industrial IT\Robotics IT\RobotStudio 5.13\ABB Library\FlexLean\PLP\_1\_Axis

Location Name: PLP\_2\_Axis  
Path: C:\Program Files\ABB Industrial IT\Robotics IT\RobotStudio 5.13\ABB Library\FlexLean\PLP\_2\_Axis

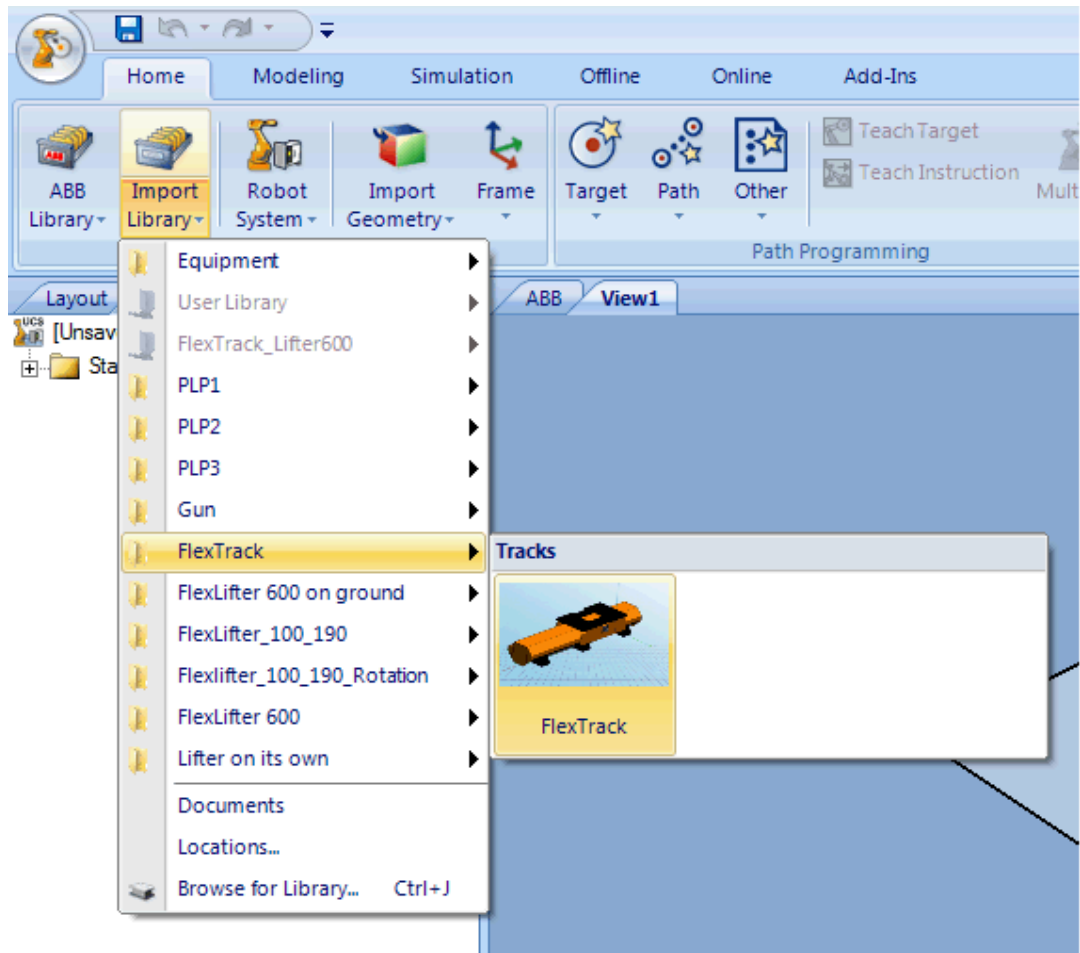
Location Name: PLP\_3\_Axis  
Path: C:\Program Files\ABB Industrial IT\Robotics IT\RobotStudio 5.13\ABB Library\FlexLean\PLP\_3\_Axis

### Step 9

OK to save the locations

### Step 10

Add the mechanical unit using the "Import Library" tab



**REVISION**

Rev. ind.	Page (P) Chapt. (C)	Description	Date Dept./Init.