HVAC Tutorial

Place Splits



PROCESS, POWER & MARINE

Version 2014





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SESSION 6

Place Splits

Objective

By the end of this session, you will be able to:

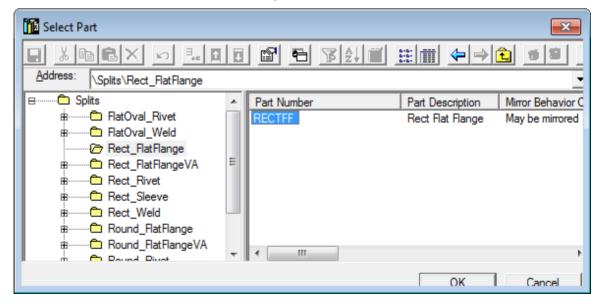
Place a split part at a specific position in an HVAC duct.

Before Starting this Procedure

- SP3D Overview
- SP3D Common Sessions
- Routing a Duct
- Placing Fittings

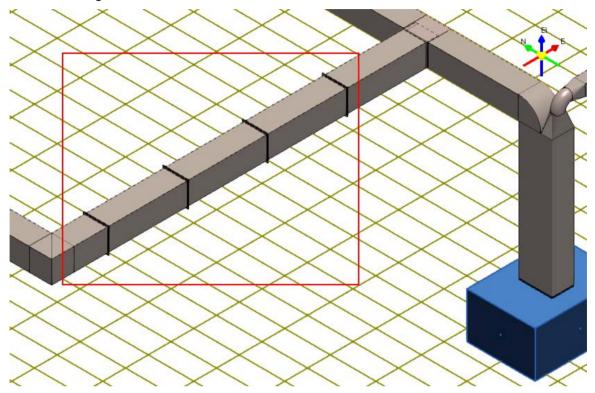
Overview

You can place splits in a duct run to divide the duct into sections that could be easily manufactured, assembled, and dismantled. You use **Insert Split** to cut a duct along a straight section into two straight duct features. You can then insert a split feature to connect the ends of the two ducts created by cutting the main duct. The split feature generates split parts. Examples of split parts are flange set, sleeve, and rivet joint. The split parts that you can place in a duct run are listed in the **Select Part** dialog box.



Insert Split Parts in a Duct Run

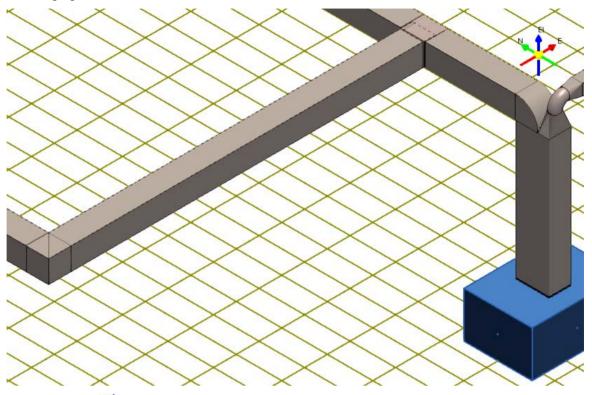
Insert four flange sets in the duct run of Unit **U06**.



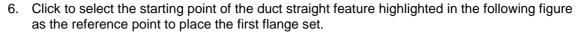
Before starting, make sure the objects are assigned to the appropriate permission group. If necessary, set the **Active Permission Group** to **HVAC**.

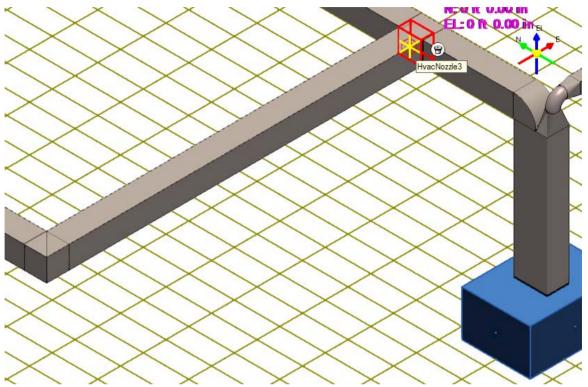
- 1. Define your workspace to include all objects located in Unit U06.
- 2. If you are not in the HVAC task, click Tasks > HVAC.

3. Click **Zoom Area** on the **Common** toolbar, and zoom into the area displayed in the following figure:



- 4. Click **PinPoint** on the **Common** toolbar to activate the **PinPoint** ribbon.
- 5. Click **Reposition Target** on the **PinPoint** ribbon. **Reposition Target** helps you define a reference point to place the split feature.





- 7. Click Insert Split on the vertical toolbar.
- 8. Select the duct straight feature highlighted in the previous figure.

The Part list on the Insert Split ribbon opens.

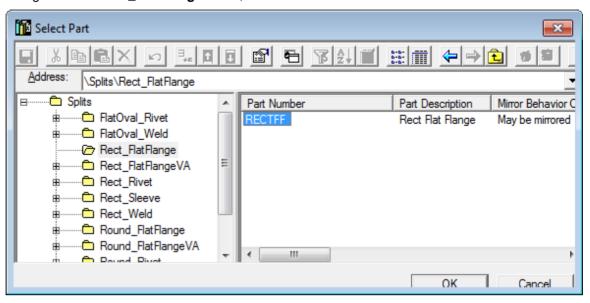
9. Select More from the Part list to select the split parts to place.



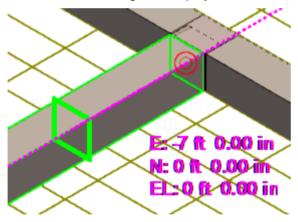
The Select Part dialog box displays.

The **Select Part** dialog box displays a list of the available split parts that you can place in a duct run. These split parts are already defined in the Catalog.

10. Navigate to the Rect_FlatFlange folder, and select RECTFF.



- 11. Click **OK** to close the **Select Part** dialog box.
 - You can preview the split parts you are going to place by clicking **Preview .**An outline of the flange set displays in the model.

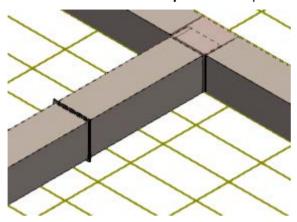


- 12. Set the Split Mode to Single Split on the Insert Split ribbon.
- 13. Click the **Position** button on the **Insert Split** ribbon.
- 14. Type **-7** ft in the **E** box on the **PinPoint** ribbon to place the flange set at a distance of 7 feet in the West direction from the starting point.

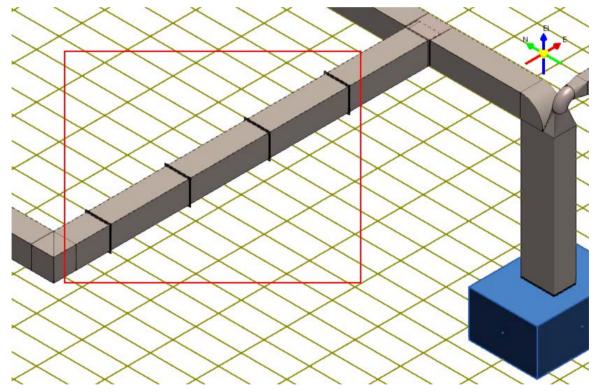


15. Click in the graphic view to define the active placement point of the flange set.

16. Click Finish on the Insert Split ribbon to place the flange set.

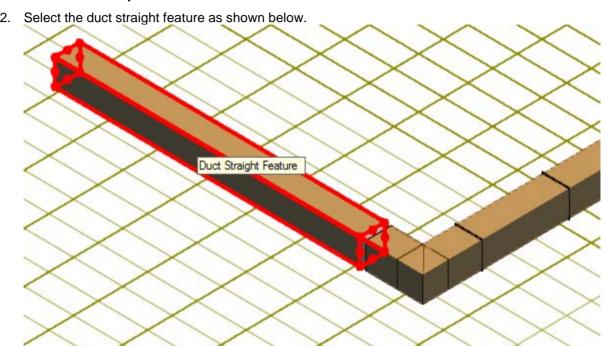


17. Repeat the previous steps to place three more flange sets at distances of **14 ft**, **21 ft**, and **28 ft** from the starting point of the duct straight feature.

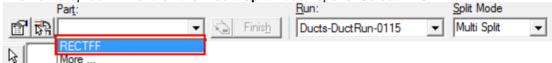


Insert Multiple Splits in a Duct

1. Click the **Insert Split =** command on the vertical toolbar.



3. The Part drop-down menu on the Insert Split ribbon opens. Select RECTFF

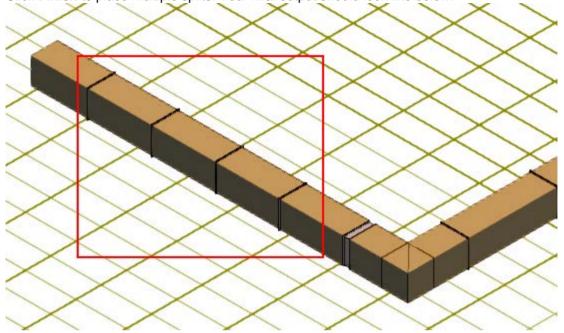


- 4. On the ribbon bar, change the Split Mode to Multi-Split
- 5. Enter 5 ft in the Duct Length field



6. In the **Reference** field, select **End**. Notice that the splits are now placed from the other end of the straight feature.

- 7. In the Reference field, select Start.
- 8. Click **Finish** to place multiple splits. Your final output should look like below.



For more information related to inserting splits in a duct run, see *Insert a Split* in the H**VACUsersGuide.pdf** file.