HOW TO DETERMINE AVAILABLE DIE LIFTER RAIL OPTIONS

1. List out die sizes and weights. Calculate die load per foot, per pair of lift rails. **(W=WIDTH IN FEET)**



 Die 1 Weight ______ ÷ W = _____ lbs./ft./pair

 Die 2 Weight ______ ÷ W = _____ lbs./ft./pair

 Die 3 Weight ______ ÷ W = _____ lbs./ft./pair

Determine heaviest die per foot. Heaviest die density lb./ft./pair =

- 2. Measure T-Slot or Rectangular channel throat. If A = .800 to 1.000, use Narrow Rails If A = 1.000 to 1.25, use Wide Rails If A = <.800 or >1.25, contact PFA
- For the heaviest die, check the number of available slots under the die: Number of available slots = _____ (See Chart Below)
- 4. Take the die density from Part 1 and find the closest <u>larger</u> lbs./ ft./pair from the chart below. Then move across the top to find your desired die lifter style keeping in mind the Narrow or Wide from Part 2 and the number of available slots from Part 3.
- 5. Record the rail model number and number of needed rails from the chart:

Model	Quantity
Model	Quantity
Model	Quantity

- 6. Select the Model you desire from the chart on page 13:
- 7. For the selected model, confirm that the number of rails always supports the dies as follows:

	W	Chart	No. of	Lift	Weight
	ft.	lbs./ft./pair	Rails	Capacity	lbs
Die 1		_xx		÷ 2 =	>
Die 2		_xx		÷ 2 =	>

Ensure lift capacity is greater than die weight.

- 8. Use the Model Number and Bolster Length (V) to determine the rail length desired (see page 13). Lifter will be flush with the loading side and should be near the back side but less than length (V). (Continue with Step 9)
- 9. With the model and length determined, the profile and final shape of the rail must be calculated. Page 14 provides simple calculations to obtain the final information for the part number.



^{*}Rectangular rails are recommended for all slots and are preferred. When calculating part number, be certain to use the proper E_R for rectangular rails or E_T for T-shaped rails.

NOTE: Rail sizing is done for a <u>nominal lift height of the die of</u> <u>approximately .060" - .080" above the bolster surface</u>. If other heights above the surface are desired, contact PFA for easy sizing to those requirements.

	NARRO	W SLOT	WIDE SLOT		
DIE DENSITY (lbs./ft./pair)	BALL ROLLERS 317N/318N (1,800 lbs./ft./pr.)	CYLINDER ROLLERS 315N/316N (1,800 lbs./ft./pr.)	BALL 317W/318W (2,150 lbs./ft./pr.)	ROLLERS 315W/316W/322W (4,000 lbs./ft./pr.)	HEAVY DUTY ROLLERS 327W/328W (9,000 lbs./ft./pr.)
1,800	2 Rails		2 Rails		
2,150	3 Rails	2 Rails	2 Rails	2 Rails	
2,700	3 Rails	2 Rails	3 Rails	2 Rails	
3,225	4 Rails	2 Rails	3 Rails	2 Rails	
3,600	4 Rails	2 Rails	4 Rails	2 Rails	
4,000	5 Rails	2 Rails	4 Rails	2 Rails	
4,300	5 Rails	3 Rails	4 Rails	3 Rails	2 Rails
4,500	5 Rails	3 Rails	5 Rails	3 Rails	2 Rails
5,500	6 Rails	3 Rails	5 Rails	3 Rails	2 Rails
6,000	**	**	**	**	**

**For large die densities, call PFA.

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