Four types of planer cutterheads				
Cutterhead type	Resharpenable straight knives on jackscrews	Disposable straight knives on quick-change registration pins	Helical with square carbide inserts	Helical with carbide knife inserts
	Knife Gib Jack- screw	Knife Knife Registration pin	Carbide cutters	Carbide Knife Knife holder
Description	The traditional system where three long single-edge knives span the width of the cutterhead, resting on spring-loaded jackscrews in channels. Gibs secure the knives in place. You resharpen these knives when dull.	Similar to a cutterhead in a benchtop planer, these disposable, double- edge knives register on pins mounted in the cutterhead channels and are held in place with knife plates. These are easy to change because you don't have to adjust their height.	Four or five rows of insert cutters twist around the cutterhead. The disposable carbide inserts have four sharp edges, letting you rotate them individually as needed. The inserts have either straight or slightly radiused edges.	Much like the previous helical head, this model has four rows, but instead uses 3 cm-long (about 1 ³ / ₁₆ ") double-edge knives that mount on registration pins on each holder.
Cut quality			Ridges	
	Smooth, consistent surface with subtle scallop marks perpendicular to the workpiece edges; requires the least amount of sanding. Highly figured woods prove more prone to tear-out, especially as the knives dull.	Similar cut to traditional straight knives on jackscrews.	Consistent pattern of ridges and grooves along the length of boards, visible in a raking light or under finish. Sanding or planing required to remove the ridges.	Ridges and grooves along the length of boards similar to helical heads with square carbide inserts, but slightly less pronounced; also, perpendicular marks similar to a straight-knife head
Bottom line	Primary benefits: Lowest price for the machine and replacement knives Primary detriments: Knife resharpening and resetting time, figured-grain tear-out	Primary benefit: Quickest knife changes Primary detriment: Figured-grain tear-out	Primary benefits: Noise levels significantly lower than straight-knife planers, convenient cutter changes, long cutter life, less likely to tear out figured grain Primary detriments: Up-front machine cost, cutter-replacement cost	Primary benefits: Low noise level, long cutter life Primary detriments: Up-front cost, cutter-replacement cost, longest cutter-replacement times
Found on	Grizzly G0453	Jet JWP-15DX	Grizzly G0453Z, Jet JWP-15HH, Powermatic 15HH-PLNR, Shop Fox W1742S	General International 30-115HC