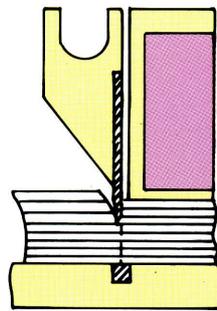
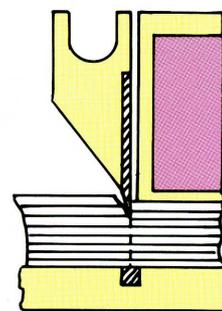


As a consequence of too low pressure on soft stock and depending on the sharpness of the knife and the pliability of the material, a difference between the top and bottom layers will occur, usually an undercut or a pull.



If too high pressure is exerted on hard stock, the material forms a solid and rigid block along the cutting line. The knife takes the line of least resistance and the cutting edge is deflected outwards, resulting in an overcut.



The correct clamp pressure – it should never be set higher than necessary – is the result of a correlation between the type of material, the pile height, the cutting length and the sharpness of the knife.

CONDITION	POSSIBLE CAUSES	POSSIBLE REMEDIES
<b>Overcut</b> (knife is diverted outwards so bottom sheets are too long)	Clamp pressure is too high Grinding angle too acute Knife is blunt Counter face on the ridge of the knife	Reduce clamp pressure Adjust back gauge angle in accordance with the deviation Exchange knife
<b>Undercut</b> (knife is diverted inwards so bottom sheets are too short)	Grinding angle too obtuse Clamp pressure too low Insufficient initial clamping	Increase clamp pressure - extend time of initial clamping Adjust back gauge angle in accordance with deviation Exchange knife
<b>Mushroom cut</b> (the first five or six sheets are longer than the rest of the pile, which is correct)	Clamp pressure too low when cutting soft material; the knife is compressing the material further before it is cut; the top sheets are not cut but squeezed off Air gap between knife and clamp beam too large	Increase clamp pressure - extend time of initial clamping  Guide gibs to be adjusted by a specialist mechanic
<b>Wavy cut edge</b>	Bevel of the knife too acute - the cutting edge flutters Clamp pressure too high and bevel too acute when cutting hard paper	Exchange knife - a more obtuse grinding angle is required for this material Reduce clamp pressure to minimum, though it will probably still be necessary to change to a knife with a more obtuse grinding angle Pre-bevel of the knife to be reground
<b>Bow or hollow cut</b>	Thickness of the stock varies Wavy material	Use flexible cover plate In case of great difference in thickness, make further adjustment by gluing pieces of cardboard to the clamp beam