

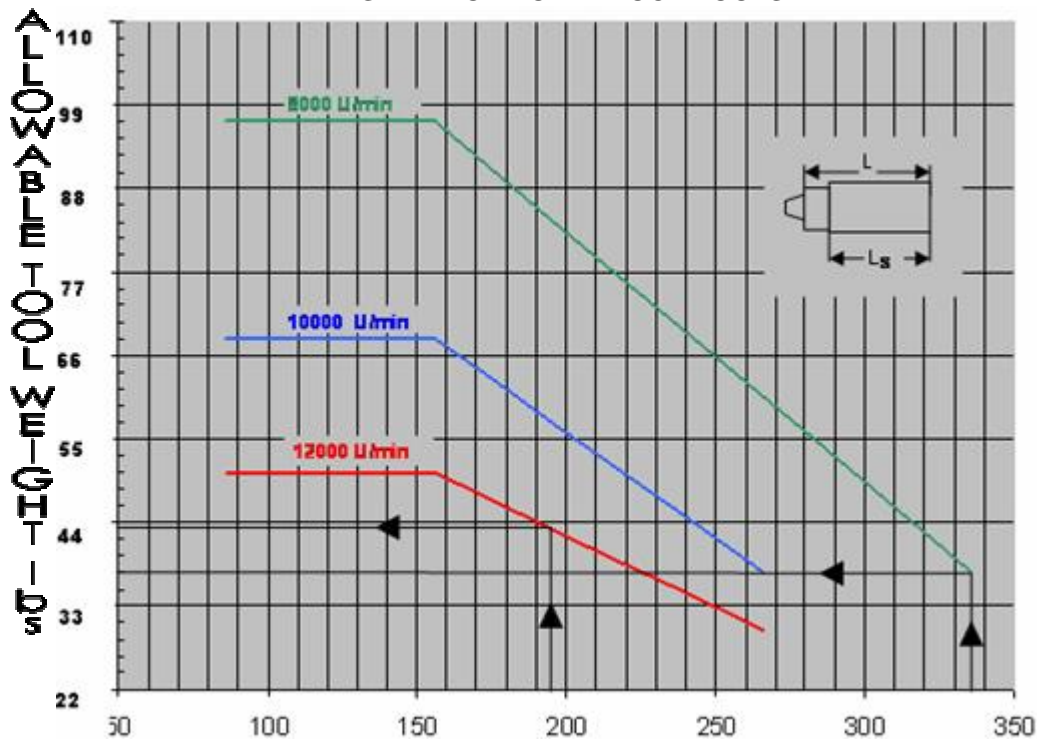
POWERLOCK TOOLING FOR WEINIG POWERMAT MOULDERS

The following conditions are critical, and MUST be completely followed and adhered to when using Powerlock tooling on Weinig Powermats.

- The tooling must be tested and certified by the tool manufacturer for the RPM speed that will be used. Correct handling and procedure instructions as listed in the operating manual must be strictly followed, without any alterations.
- The entire tool body weight can not exceed the stated maximum values as shown in the diagram below. The mass distribution of the tool bodies should be even throughout the length of the tools (see sketch below). Any differences in conditions must be treated as an isolated separate case, and re-calculated.



DIAGRAM FOR POWERLOCK TOOLS



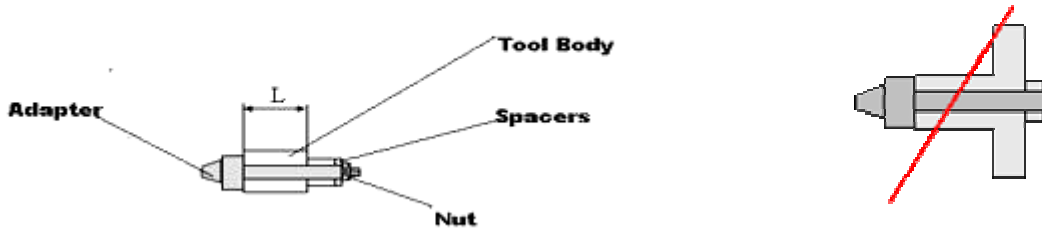
TOOL LENGTH

SHOWN EXAMPLES: A tool with a length (L) of 196mm and weight of 43 lbs is allowed to run 12,000 RPM maximum. A tool with a length (L) of 336mm and weight of 37.5 lbs is only allowed to run 8000 RPM maximum.

THE USE OF POWERLOCK ADAPTERS ON WEINIG POWERMAT MOULDERS

The following conditions are critical and mandatory when using Powerlock spindle adapters on Weinig Powermat moulders.

- 1) The tooling must be tested and certified by the tool manufacturer for the RPM speed that will be used. Correct handling and procedure instructions as listed in the operating manual must be strictly followed, without any alterations.
- 2) The tools must be clamped axially with a torque of 80 Nm (58 ft/lbs). The mass of the tool body (L) must be distributed equally throughout the length of the complete tool (see sketch below).



3) The total weight (tool+adapter+spacers+locking nut+secure ring) can not exceed the values of the appropriate RPM level, as shown in diagram 1 and 2 below.

DIAGRAM #1: Indicates the values for tools when the total mass is located next to the shoulder of the adapter

SHOWN EXAMPLE: A 12,000 RPM approved tool with a length of 120mm located next to the shoulder of the adapter cannot exceed a total weight of 33 lbs

Another example of this would be a 12,000 RPM approved milled-to-pattern tool with length (L) of 120mm and diameter D of 120 x 40 weighs 20 lbs, the adapter 170 x 40 weighs 7.75 lbs, and the spacers, nut and secure ring weigh 2.75 lbs. All of these items total 30.5 lbs, which is within the allowable limits for a 12,000 RPM tool.

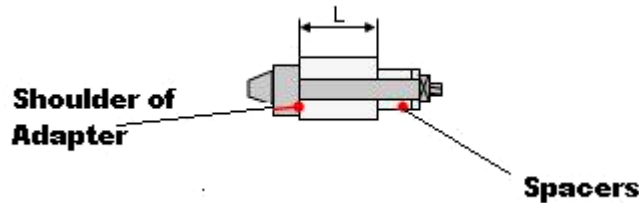


DIAGRAM 1 FOR POWERLOCK ADAPTER

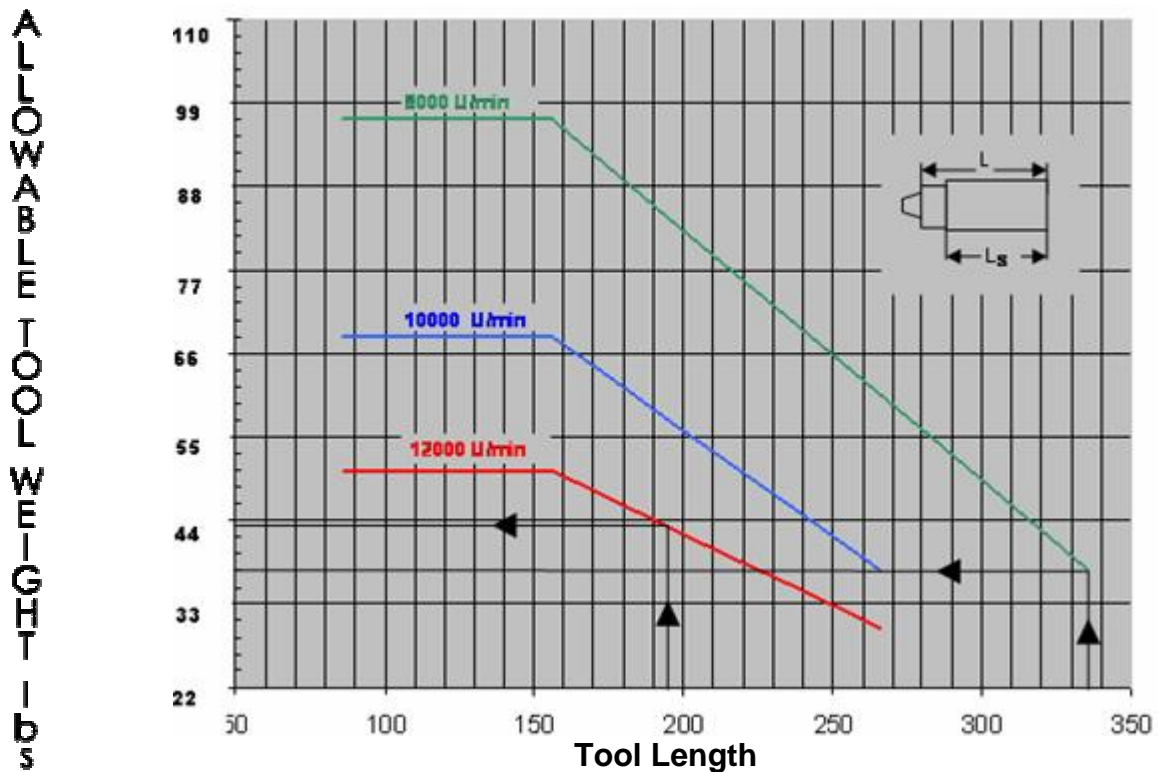


DIAGRAM #2: Indicates the values for tools when the total mass is opposite the shoulder of the adapter (see sketch on the following page).

SHOWN EXAMPLE: A tool with a length of 100mm and rated for operation of up to 8000 RPM located opposite the shoulder of the adapter can not exceed a total weight of 32 lbs

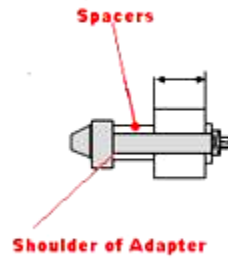


DIAGRAM 2 FOR POWERLOCK ADAPTER

