

What are the load limits for Evacuable Dies?

The maximum load limits that are specified on the Atlas Evacuable Pellet Dies (e.g. 10 tons for the 13 mm die) means this is the recommended maximum load to be read at the pressure gauge of the Atlas Manual 15T and 25T hydraulic presses or tonnage load indicator display of the Atlas Power and Auto hydraulic presses, whenever a specific die size is in the press.

The pressure gauge on the Atlas Manual 15T and 25T should strictly be called the load gauge as it is this maximum tonnage load limit that is applied over a specific area under compression. As the dies grow in size for their diameter, so their recommended load limit increases as there is a larger area associated with being compressed for the die pellet. For the 13 mm diameter die the load of 10 tons (i.e. 22400 lbs) is being spread over an area of 132.73 mm² (or 0.205 in²). This equates to a pressure of 109,268 lbs per square inch or 48.78 tons per square inch.

Any increase above the maximum load limit could cause damage to the die set. For example, if the plunger was to “bulge” when inside the body because of over loading, the die set would completely seize and be totally unusable.

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