



PEMA 30 TONNE NOTE. In order to avoid overloading and risk of potential harm / machine damage / tipping hazard / component failure, please abide by the below when calculating the load capacity of the welding positioner:

C of G = Positioner max load capacity if the job is a 'balanced load' with centred centre of gravity. C of G IS NOT where the centre of gravity of the job is 'and' at what distance from the tilted table (when bolted to the table)

1. If the job is evenly balanced (no offsets loads), follow the **black line (Spectrum load chart only)** for what weight the welding positioner can tilt / rotate, and at what distance away from the table (based on C of G being even).
2. The centre of gravity line should not be used and then 'doubled'. For example, if a 30 tonne positioner can tilt / turn a 30 tonne load with a balanced C of G @ a distance of 1000mm from the table (based on a balanced load), this **DOES NOT** mean the machine can turn / tilt 60 tonnes @ 1m or 30 tonnes @ 2m, because the load chart C of G says 30 tonnes @ 1000mm (even if the weight of the job is evenly distributed). 30 tonnes @ 1000mm is the stated maximum load and distance 'because' it has a central balanced 'centre' of gravity. This is like weighing scales with a precise amount of balanced weight on each scale, so there are no additional gravitational forces pulling the weight away.
3. A welding positioner **must never** be used at 100% of its MAXIMUM load capacity. This will only encourage wear, tear, damage and potential injury / danger to life. The maximum load capacity is to demonstrate what the machine is capable of (duty ratings for usage also apply), so the operator knows they are not going beyond 75% of the positioner's maximum load capacity, and that they are working within 'safe parameters'.
4. To reiterate, if the job is evenly balanced we advise to use the **black line** as a MAXIMUM capacity guide for what weight it can turn and at what distance away from the table ie. 18 tonnes @ 1500mm 100% MAXIMUM.
5. An unbalanced load = if a job is off centre on the table / not balanced / offset ie. elbow joints coming off / if the majority of the weight is at the other end furthest away from the positioner table (EVEN IF IN THE MIDDLE OF THE TABLE).
6. If the job is un-evenly balanced / offset / eccentric in any way (ie. elbow joints), we advise to use the **red line** as a MAXIMUM capacity guide for what weight it can turn (½ the load capacity) and at what distance away from the table ie. 9 tonnes @ 1500mm 100% MAX!!!!