

# Sine Wave

## Index

- Sine Wave
- Changes over the years
- Sine Wave Motion Diagram and how to perform.
- Types of Sine Wave
- Conclusion

## Sine Wave

My understanding is that Sine Wave has always been part of our Taekwon-Do movements. But I don't remember it being called that when I started. However, it certainly has changed over the years compared to what we do now.

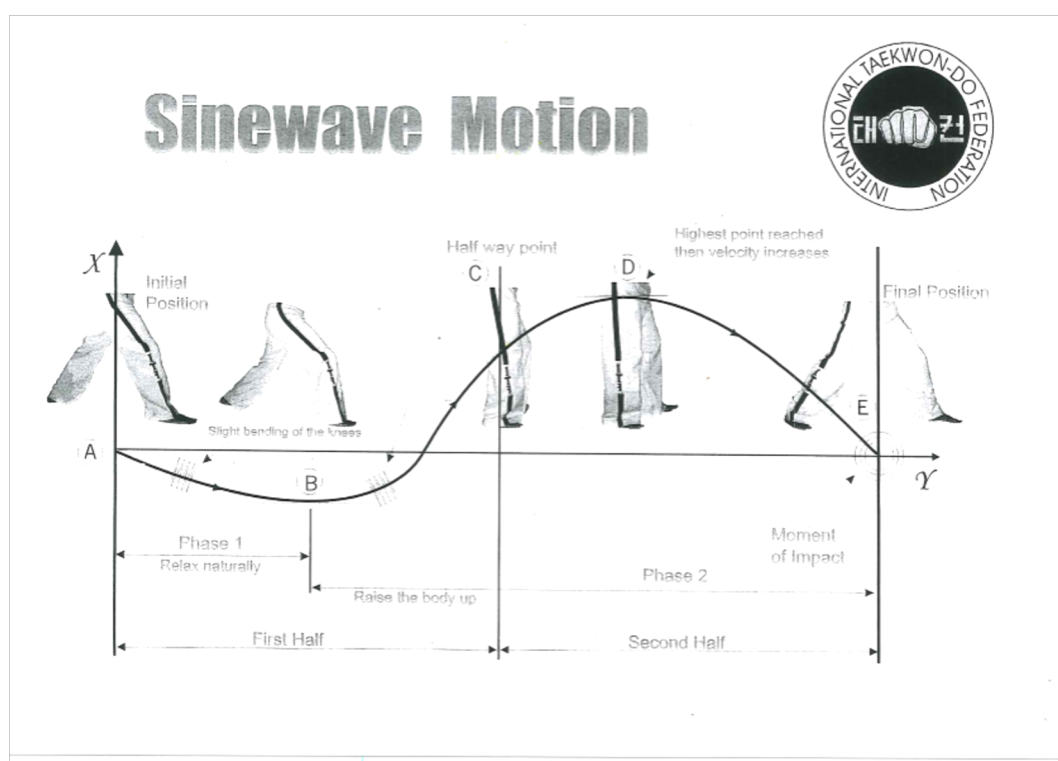
### Changes over the years

When I first started back in the mid 80's the main emphasis was on the Hip Twist with very little down up down if any. We also exaggerated the crossing & backward motion. I remember it feeling strong, even if it was a little rough, but that might have been the way I performed it. It was also similar to some of the Karate Styles at that time. With the General being a 2nd Dan in Shotokan Karate that may have transferred over.

A few years later the Hip Twist was all but removed and replaced with Knee Spring or at the time called Spring Style. It was like performing a double sine wave, where we used to bounce in the middle of our step before dropping into the technique.

During the 90's it was further refined by General Choi while he traveled the World teaching his seminars. How we've a combination of Knee Spring along with the Hip Twist. The whole action from start to finish should be Free from tension, smooth maximizing speed while dropping your body weight adding mass into the technique.

## Sine Wave Motion Diagram and how to perform Sine Wave



After the General passed the ITF Technical Committee printed this Sine Wave Motion diagram to help explain when the Sine wave is performed moving forwards & backwards.

### Moving straight forwards and backwards

As mention above in the diagram the first half is called the " Relaxation Phase ". By bending the knees slightly "down" raise the body up by straightening the leg/s but not completely "up". The 2nd Phase is dropping your body weight while accelerating the tool to the target.

Turning in your stance is a little different. A small down to get moving, raise up while turning and chambering ready to drop and accelerate the technique to the target.

## Types of Sine Wave

In our Patterns there are various types of Sine Wave.

1. Full Sine Wave down up down.
2. 2/3 Sine Wave, where we perform the Up & Down only. Some examples are the Fast Motion punches in Do - San & Yul - Gok, Continuous Motion in Po - Eun & Yoo - Sin.
3. 1/3 Sine Wave, where you're just perform the final down. Examples are when performing Connecting Motion either a Hooking block then punch, Yul - Gok or a Scooping block then punch Gae - Baek, Yoo - Sin & Moon - Moo. You're already up after the block then you drop down for the punch.
4. No Sine Wave, some movements we perform have no Sine Wave. Some examples below

Between 2 kicks e.g. Hwa - Rang, high turning kicks, Choong - Moo Turning, then Back kick.

Moving from a Bent leg stance to a Straight leg stance, example Juche moving from a sitting stance flat fingertip high outward cross cut to a high elbow strike in Walking stance. Ul - Ji, sitting stance Horizontal punch into a Knife Hand high front strike while standing up.

Performing a Shifting movement, e.g. Kwang - Gae, walking stance double forearm block shifting into a walking stance forearm low block, Eui - Am, L stance middle punch, shifting back into an L stance reverse knife hand low inward block.

Releasing Techniques, e.g. Do - San, after the straight fingertip thrust, Joong - Gun, after the L stance high back fist side strike.

## Conclusion

While Sine Wave has changed over the years I think we now have a smoother and nicer style to watch if performed well and with intent. A very good example of this is in my opinion is Master Patterson.

Written by Ian Walton