

## Use and handling recommendations for SANGRAF Graphite Electrodes.

- Avoid shocks and bumps to either end of the electrode and always keep protective caps in place.
- Always use a rubber pad on the floor when opening the bundles and lifting columns to the vertical orientation.
- Be sure to use a steel lifting device and be sure to inspect the plug before use to ensure there are no damaged threads.
- Before adding the new piece to a column, clean the faces and threads with compressed air to remove all dust and debris. If any debris still remains, remove it with a wire brush.
- Use a wishbone spacer resting on the top of the column face to properly position the new piece.
- Rotate the piece being added until you reach roughly 4-5mm (1/8" to 3/16") between both the piece and the column. Then blow the space between both pieces with compressed air.
- Tighten the electrodes with the proper torque.  
*(view chart at right >)*

RECOMMENDED ELECTRODE TORQUE			
Diameter		Recommended Torque	
(in)	(mm)	FT - LB	N - M
14	350	710	980
16	400	900	1240
18	450	1175	1620
20	500	1825	2520
22	550	2550	3520
24	600	2915	4025
26	650	3990	5500
28	700	5340	7370
30	750	7500	10350
32	800	10000	13800

- Never clamp on the joint area marked by the white lines.
- Never leave the recently made joint above the EAF arms clamps, as this tends to loosen the joint. If this happens, tighten the joint again with the correct torque.

