



Element Refurbishment Service

Vertical Furnaces (all OEMs)

Typical Rebuild Process:

1. The customer ships his failed element to Thermcraft. We disassemble it, salvaging the outer water cooled shell, inner metal liner, machined metal bases, and any other interior metal parts.
2. The element coil and insulation are removed and discarded. The ceramic spacers may be reused depending on their condition.
3. All metal parts are inspected to assure they are in good reusable condition. Typically, there is no wear or damage. Damaged parts are replaced on an as needed basis. This could result in additional charges, although it is extremely rare.
4. The new element coil is wound using the same type (A-1 or APM) and gauge of resistance wire as the OEM. Ceramic spacers are secured in place.
5. The coil will have new lead taps welded at the same position as the original.
6. The finished coil is wrapped with new layers of ceramic fiber insulating blanket
7. The metal shell, bases, insulating vestibules and water cooled jacket are then re-assembled.
8. The element is powered causing it to heat and dry out moisture and organics. Heating the element causes the dry out to occur from the inside out.
9. The element goes thru a finishing operation and final QC process. This involves verifying dimensions, element resistance and checking all details on the drawing against the rebuilt element.
10. The rebuilt element is packaged and returned to the customer.

With the availability of Thermcraft's craftsmen and engineers the rebuilding of a failed element can offer greater cost savings when compared to completely new elements



Partial P/Ns Cross Reference List:

OEM	OEM PT#:	Thermcraft PT#:	OEM	OEM PT#:	Thermcraft PT#:
KOKUSAI NO.	D4EX03531/Low Mass	AD-1404FC200	TEL	VMU-40-007	AD-1354DCHT500
	D4EX03531/Heavy Ga.	AD-1404DC1300	TEL	VMU-32-001	AD-1365DCHT500
KOKUSAI NO.	D4EX02648	AD-1420FC200	TEL	VMU-28-017	AD-1395DCHT500
KOKUSAI NO.	D4EX03531	AD-1437FC200	TEL	VMM-40-102EX	AD-1436S-A
KOKUSAI NO.	4037440	AD-1439DC1300	TEL/KOREAN	VMU-40-003	AD-1446DCHT500
KOKUSAI NO.	D4EX04882	AD-1444DCHT500	TEL	VOS-40-017	AD-1415S-A
KOKUSAI NO.	F-270W-81 VR4Z	AD-1447DC1300	SVG	165558-003	AD-1352DCHT500
KOKUSAI NO.	D4EX08455-4	AD-1448FC200	SVG	602783-03	AD-1360SP-03-A
TEL	VMU-40-003	AD-1318DCHT500	SVG	602783-02	AD-1429SP-01-A
TEL	VMM-40-101	AD-1339S-A			

Each rebuilt element is carefully reverse engineered to assure an exact replication of the original. Element components used are the "same as" used by the OEM. Therefore, your rebuilt elements will have the dimensional, electrical, and operating characteristics of the original.