

Tube & Pipe Welding Guide



- Oscillator Tubes
 - Impeders
 - Ferrite Cores
 - SCRs/Diodes
- High Voltage Capacitors

Ferrite Cores

Ferrite cores are prepared from a combination of various ferrite materials to concentrate the energy of the HF generator into the welding area.

Cores are available in five shapes, depending on the application:



RF
Round Solid
with Flats



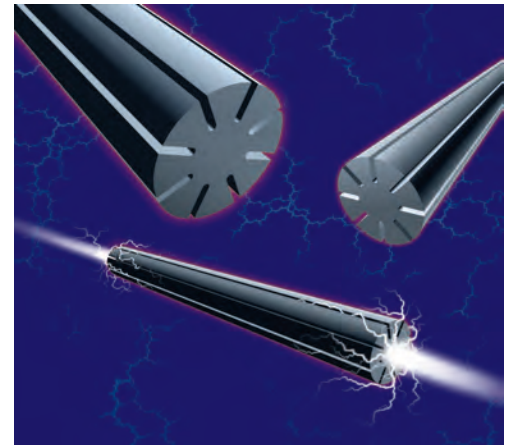
RH
Round with Hole



RS
Round Solid
with Slots



RSH
Round with
Slots and Hole



R
Round Solid

Impeders

In addition to ferrite cores, Richardson Electronics also supplies impeders and impeder casings.

Impeder Styles:

- Through Flow
- Exposed Through Flow
- Integral Mandrel
- Return Flow
- Hollow

Impeder Casings:

- Magnetic
- Epoxy Glass
- Silicone Glass



Tube Maintenance Guide

Richardson Electronics is proud to offer a Tube Maintenance Guide to help our customers get more life out of their tubes and generators. In this document you will find information on...

- How to test tubes,
- How to condition tubes,
- Preventive maintenance for industrial generators, and
- Liquid Cooling Systems

This information can help tube users save thousands of dollars on existing tubes and generators. **Tube Maintenance Guides are available for only \$49.95 (while supplies last).**



High Power RF Tubes for Tube & Pipe Welding

The following is a list of oscillator tubes typically found in induction heating generators. In addition to pipe welding, they can also be found in generators used in annealing, hardening, brazing and melting. All tubes come with a full manufacturer's warranty to further ensure you of Richardson Electronics' dedication to supplying only quality products.

You can also rely on Richardson Electronics for cross-referencing assistance. We can help you identify industry standard part numbers and technical support, so you select the most efficient replacement product for your application.

For oscillator tubes, you will not find a more dependable source than Richardson Electronics.



Part Number	Cooling	Output Power (kw)	Filament Voltage	Filament Current	Maximum Ratings	
					Anode Voltage	Anode Dissipation
6426K	Water	55.4	8	200	12.5	40
AX3040CJ	Water	60	8	185	14	14
RS3040CJ	Water	60	8	185	14	14
3CW40000H3	Water	70	10	160	12	40
6696A	Water	80	13	205	16	60
5681K	Water	115	12	220	15	75
AMK30-2	Water	120	11	240	14	50
AX3060CJ	Water	120	10	190	14	40
3CW45000H3	Water	120	10	160	14	45
ITK30-2	Water	120	11	240	14	50
RS3060CJ	Water	120	10	190	14	40
YD1202/8752	Water	163	12.2	250	15	80
YD1202FL	Water	163	12.2	250	15	80
YD1202-WJ	Water	163	12.2	250	15	80
AMK60-2	Water	170	13	250	14	70
ITK60-2	Water	170	13	250	14	70
9T94A	Water	170	13	320	16	80
5682K	Water	215	16.5	325	16	140
9T38/9T38A	Water	220	18	315	15	120
AX3150CJ	Water	240	15	225	15	100
YD1212/8680	Water	240	12.6	380	16.8	120
YD1212FL	Water	240	12.6	380	16.8	120
YD1212-WJ	Water	240	12.6	380	16.8	120
RS3150CJ	Water	240	15	225	15	100
8795	Water	240	16.5	325	20	140
AMK120-2	Water	425	18	330	17	130
ITK120-2	Water	425	18	330	17	130
7560	Water	440	14.5	450	20	175
AX3300CJ	Water	450	16	425	17	150
RS3300CJ	Water	450	16	425	17	150
YD1342/8918	Water	530	14	555	18	240
AMK200-1	Water	550	22	375	18	200
ITK200-1	Water	550	22	375	18	200
YD1345	Water	600	17.5	540	18	208
RS3500CJ	Water	750	17.5	510	18	300
ITK350-1	Water	1000	24	620	22	500
RS3700CJ	Water	1250	13.5	1300	20	500

Richardson Electronics ...

For over 60 years, Richardson Electronics has been supplying power grid tubes to the tube and pipe welding industry. Our commitment to this industry is second to none. Not only do we supply the components you need, but we also make technical expertise available when you need it. It is going the extra mile that sets Richardson electronics apart.

An extensive inventory of power grid tubes is in stock and ready for immediate delivery, from such leading manufacturers as:

Amperex



THALES

TOSHIBA

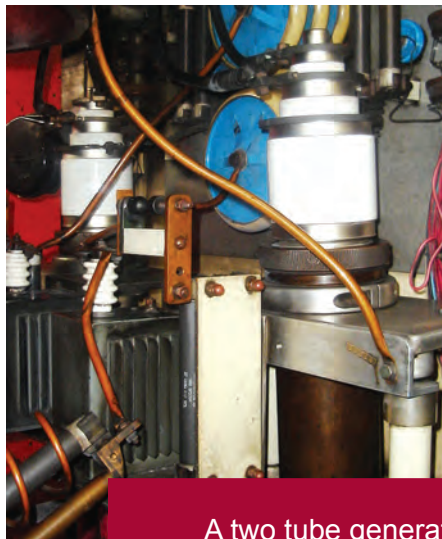


When you need a replacement tube for your RF welder, turn to the industry leader — Richardson Electronics.

Retrofits

Richardson Electronics provides technical expertise whenever you need it, including technical data to assist in retrofitting existing generators to accept new, more efficient tubes. Retrofitting an existing generator is the best choice if you do not want to spend the high cost for a new welder, just because their tube has become difficult to source or too expensive.

Richardson Electronics has assisted in retrofitting hundreds of generators. In every situation, the new tube runs more efficiently and lasts longer — saving the customer thousands of dollars every year.



A two tube generator retrofitted to a one tube generator.

High Voltage Capacitors

With over 80,000 capacitor and related units shipped annually, Richardson Electronics has demonstrated the ability to service our global customers' "high frequency, high voltage" needs. We complement our power tube and solid-state offerings with a wide selection of high voltage capacitors and related products.

Whether for an MRO requirement or a new design-in project, our sales and technical support staff can find the right product for any need. We have over 15,000 different part numbers on file, representing a wide variety of markets and applications.

Products

Oil Filled Capacitors

RF Ceramic Capacitors

- Disc/Plate types
- Doorknob types
- Feed-through types
- Pot types
- Tubular types
- Water Cooled types

Vacuum (and Gas-Filled) Capacitors

- Variable types
- Fixed types

Vacuum (and Gas-Filled) Relays

Vacuum Interrupters

Popular Types Include:

834-1200PF	PS55-1200
857-6800PF	PS55-2000-10
A26F6665	PS55-500-20
CS500	PWC16602MA
LC287	PWC20502MA
PD100-1200	TWXF110X250-470
PD140-3000	TWXF110X250-500
PD140-3000-10	TWXF125X300-760
PE140-3000	TWXF135X272-600
PE200-3000-10	TWXF135X285-500
PE200-3000-20	TWXFZ106X266-40
PE200-5000-20	TWXFZ135X285
PE200-6000	TWXFZ140X316-75



Manufacturers

DRALORIC[®]
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Morgan
MorganElectroCeramics



SCRs

Richardson Electronics offers one of the industry's broadest inventories of:



Description	Voltage Range	Current Range
Rectifiers/Diodes	500V to 6000V	10A to 1200A
Rectifiers Bridges	200V to 1500V	20A to 100A
Phase Control SCRs	50V to 5500V	3A to 5000A
Inverter SCRs	50V to 3600V	40A to 3500A
Power Modules	300V to 2400V	20A to 1500A
IGBTs	400V to 6500V	5A to 4800A
SCR Heatsink Assemblies		



If you have a rectifier, diode, SCR, or IGBT requirement call Richardson Electronics.

**Visit www.rell.com/locations.asp
for a complete listing of our 70 worldwide locations.**

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