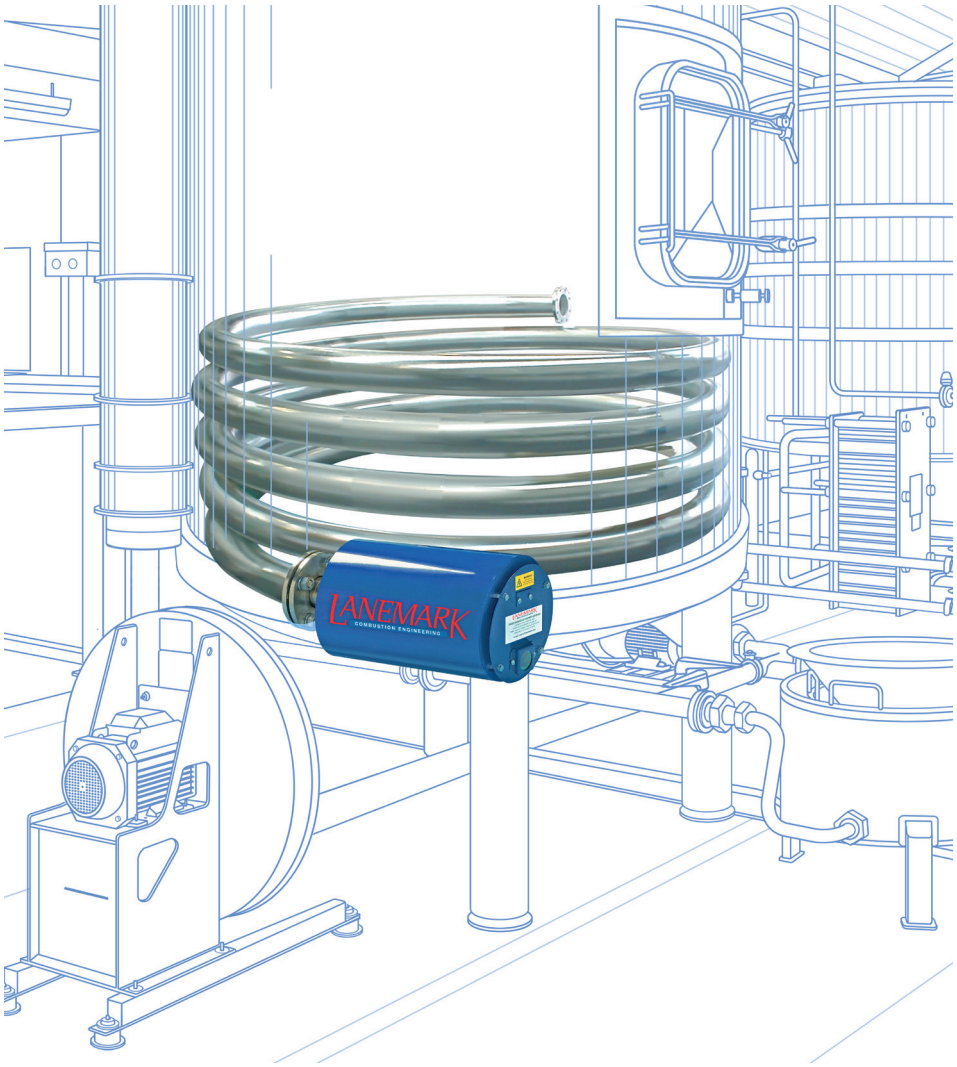
LANEMARK COMBUSTION ENGINEERING

TX BREWERY BURNERS DATA

Lanemark is the leading supplier of gas fired immersion tube burner systems specifically designed to provide high efficiency vessel heating solutions for brewery applications.

Main features and advantages:

- Low operating costs compared to alternative electric or steam arrangements.
- >80% efficient.
- Helical coil immersion tube heat exchangers occupy minimal space – ideal for cylindrical brewing coppers and hot liquor tanks.
- Accurate temperature and rolling boil control.
- Dedicated Lanemark TxCalc design software to calculate heat input requirements and to predict immersion tube heat exchanger performance.
- Suitable for use with natural gas or propane.



TYPICAL APPLICATIONS

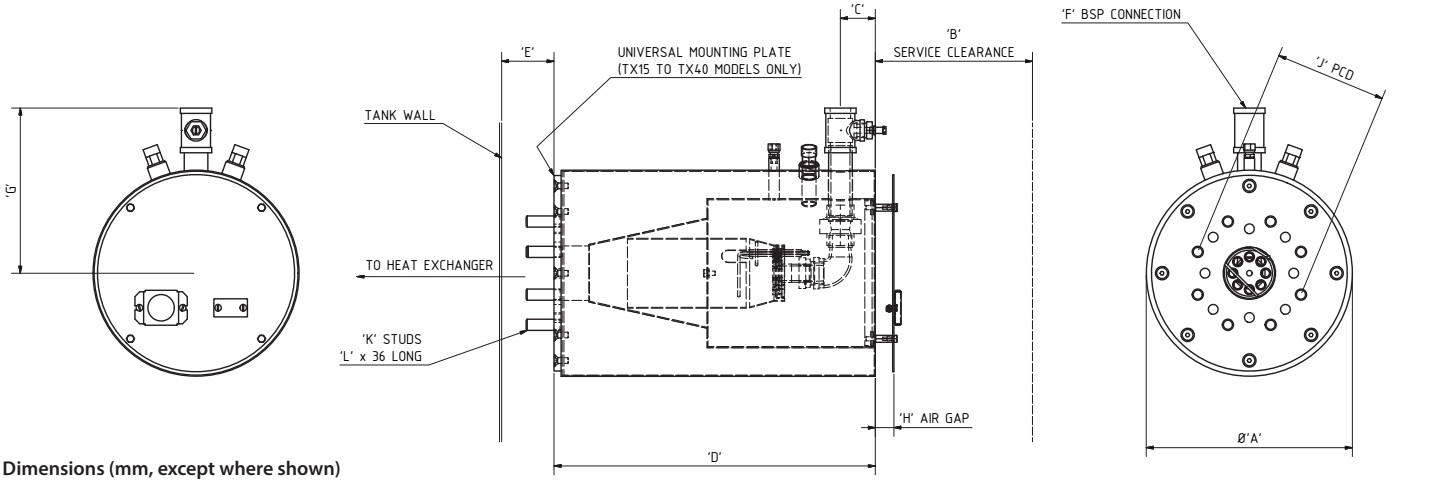
- **Coppers**
  - Vertical cylindrical vessels 5 BBL to 60 BBL (820-9,820 litres)
- **Hot Liquor Tanks**
  - Vertical cylindrical vessels or rectangular tanks
- **Mash Tuns**
- **CIP Tanks**
- **Bottle & Crate Washing**

MODEL	HEAT INPUT	TUBE SIZE	TYPICAL VESSEL SIZE
TX15	15 - 45 kW	1½" (40 mm)	3 - 5 UK BBL
TX20	20 - 80 kW	2" (50 mm)	5 - 10 UK BBL
TX25E	35 - 140 kW	2½" (65 mm)	10 - 15 UK BBL
TX30	55 - 220 kW	3" (75 mm)	15 - 25 UK BBL
TX40	100 - 400 kW	4" (100 mm)	25 - 40 UK BBL
TX60	190 - 730 kW	6" (150 mm)	40 - 60 UK BBL

PRODUCT DESCRIPTION

A modular Lanemark TX immersion tube burner system includes a cylindrical burner assembly available in stainless or painted steel versions to withstand typical brewery heating operating environments, a compact monoblock gas valve train, burner controls mounted in a protective control panel (which can include digital temperature and liquid level controllers), exhaust damper and an exhaust fan which can be coupled to multiple TX burner installations.

TX BREWERY VESSEL HEATING SYSTEMS



Dimensions (mm, except where shown)

MODEL	TX15	TX20	TX25E	TX30	TX40	TX60
A	220	220	295	295	295	405
B	150	150	225	225	300	320
C	40	40	50	50	50	120
D	305	305	450	450	500	625
E	75	75	75	75	100	100
F	½"	½"	1"	1"	1"	1½"
G	160	160	210	210	230	305
H	12	12	25	25	25	35

DIN PN16 FLANGE CONNECTION

MODEL	TX15	TX20	TX25E	TX30	TX40	TX60
J mm	110	125	146	160	180	240
K qty	4	4	4	8	8	8
L size	M16	M16	M16	M16	M16	M20

BS TABLE 'D' OR 'E' FLANGE CONNECTION

MODEL	TX15	TX20	TX25E	TX30	TX40	TX60
J mm	98	114	127	146	178	235
K qty	4	4	4	4	4	8
L size	M12	M16	M16	M16	M16	M16

SPECIFICATIONS	STANDARD EQUIPMENT	OPTIONS
Fuels	Natural gas	Propane
Control voltages	230 V / 1ph / 50 Hz	110 V / 1ph / 50-60 Hz
Exhaust fan electrical supplies	400 V / 3ph / 50 Hz	230 V / 1ph / 50 Hz or 460 V / 3ph / 60 Hz
Flame sensing	Flame electrode	UV scanner
Heat output control options	On / off or High / low	Modulating (gas and air)

Lanemark TX burner gas valve train and control panel assemblies are pre-wired / tested prior to despatch and conform with relevant sections of European Standard EN 746 Part 2 or NFPA 86 for US applications.

LANEMARK BurnerCare

All Lanemark burners benefit from Lanemark's BurnerCare customer support. BurnerCare services can include burner system installation, commissioning / start-up, system training, regular servicing and the supply of spare parts. BurnerCare can provide a service agreement plan incorporating a rapid response facility individually designed to ensure the continued, reliable operation of Lanemark equipment worldwide.

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