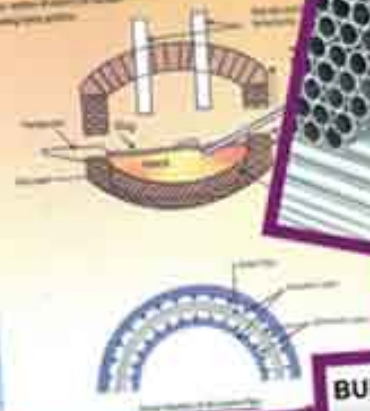


**CERAMIC COATED
OXYGEN LANCE PIPES**



M. S. ERW LANCE PIPES



BURNING / THERMIC LANCE



SLIDEGATE SYSTEM



POLYESTER POWDER COATED GAS PIPE LINE





Kandi Engineering Pvt. Ltd was incorporated in 1982, and started initial trading activities at Manor (Maharashtra), an Industrial Area just 85 kms from Mumbai, INDIA. Cost saving and good quality being the motto of the Management, the production started in 1995 for manufacture of industrial products related to Steel & Metallurgical Industry, for products namely:

- Burning / Thermic Lances for scrap, skull, non-ferrous cutting
- Refractory Coated Oxygen Lancing Steel Pipes
- Slide-gate System for pouring of liquid steel
- M.S. ERW Steel Pipes in sizes 6NB to 50NB for general usage

WHY WE

- ISO 9001 : 2008 Certification
- Our owned manufacturing setup over an area of 12,000 sqft.
- Semi-skilled & Skilled of up to 30 personnel's

MANUFACTURING SETUP

- Connected Electrical Load: 117 HP
- Generator (Additional Load): 65 HP
- Constructed / Covered Area: 12,000 sq. ft.
- Man power: 30 people



DIRECTOR
SANJAY AGGARWAL

BURNING / THERMIC LANCE



Burning Lance is the product developed, for the purpose of increasing the heat quality generated from the lance, by improving the cutting efficiency with the cutting core wires of several pieces built in the combustion steel pipe. The difficult-to-cut materials in gas cutting and mechanical cutting, i.e. not only limited to iron and steel, the stainless steel, alloys such as brass, nonferrous metal, ceramic etc. can be simply and quickly cut off and board without noise and vibration at the high temperature 3,600 deg F. It is optimum for cutting and boring concrete, special steel, cast steel, pig iron slag and refractory. Heat source is not required for the equipment.

APPLICATIONS

Defense & Naval organizations

Non-Ferrous & Ferrous Foundries and Steel Mills

- For Cleaning Up Spills
- Opening Tap Holes
- Cutting Refractory Brick, Skulls and Slag
- Removing Solidified Material from Vessels, Ladles, and Molds
- Aluminum, Copper, Lead, Zinc and Nickel Smelters Ferro-Alloy Plants
- Demolition
- Cement / Concrete Removal – Piling and Slabs

STANDARD SIZES & LENGTH:

- Size (O. D. in mm) 12.7, 13.5, 17.0, 21.7, 27.2
- End Finish: Plain End, Treaded and Coupled.
- Length: 3000 mm and/ or as per Customer's requirement.



TYPE "A"

1. Cutting of sheet structures, steels / plant etc.
2. Preliminary boring of heavy steel plants etc.



TYPE "B"

1. Cutting of RCC Structure, Non-metallic bodies etc.
2. Cutting of Blast furnace shell, furnace bottom etc.



TYPE "C"

1. Boring of Concrete structure, underwater cutting etc.
2. Cutting of Stainless Steel, Cast Iron etc.
3. General purpose applications.



CUTTING OPERATION OF R. C. C. BEAM



Before Cut



During Cut



After Cut



KANDI Slide-gate System was successfully designed and developed indigenously to suit the INDIAN STEEL INDUSTRY's condition, where most of steel plants were using the conventional STOPPER-ROD mechanism. KANDI has been successful in substituting the conventional system by new pouring technique known as SLIDEGATE SYSTEM for pouring liquid steel from ladle to tundish by manual operation.

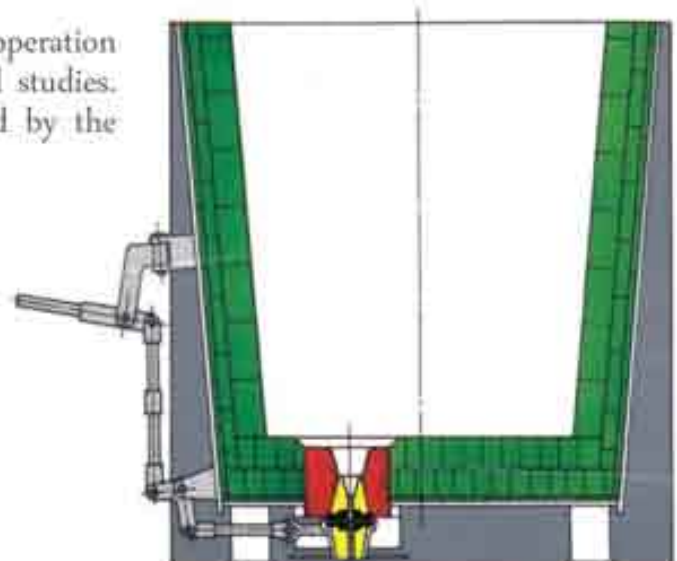
Slide-gate technology has proved its worth in handling a large tonnage with minimum losses, the basic benefit of the mechanism. More than 70 steel plants have opted for SAFLOW system.

KANDI Slide-gate system is easy to operate, and does not require any intricate, electrical or hydraulic mechanism. The high degree of reliability in the system makes it more adaptable for ladles up to 30 tonnes. The essential nature of the constructional and operating features means that normal maintenance can be performed with very simple spare parts management, which enables easy replacement of refractory nozzles and slide plates quickly. Use of high quality of refractory materials ensures safety and operating economies.



KANDI device can be operated through a central oleodynamic unit, and the various pouring flow regulation phases can be controlled. The operating lever with its relatively simple construction can be compared amongst the leaders of existing manually operated systems. The lever and device is designed and constructed so as to enable the operator to open, close and regulate the casting flux from the ladle nozzle with minimum effort which corresponds to appx. 10-20 kg. maximum, calculated from the uppermost end of the operating lever.

Choice of nozzle flow diameter for optimal operation is based on assessment of all the technical studies. Also available are ladle nozzles prolonged by the application of a protective tube for casting.



MS LANCE PIPES



HIGH FREQUENCY INDUCTION WELDED WATER AND GAS TUBES

HFIW water and gas tubes are produced from low-carbon mild steel on Automatic Tube Mill by High Frequency Induction Welding Process.

END USES: Transmission of water, gas, oil and air.

SIZES: Outside diameter: From 21.4mm (1/2") to 114.3mm (4")

Wall thickness: 2mm to 5.4mm. Length: 4 to 7 meter

PIPE ENDS: Plain, Screwed and Socketed

SURFACE FINISH: Black (self-colored) outside mill protected coating

PRODUCTION STANDARD:

IS – 1239 part 1, equivalent BS – 1387, ASTM A53 Grade A and/or Conforming to IS – 10577.

PACKING: Bare Bundles

INSPECTION: Mill's certificate or inspection by an independent organization authorized by the customer.

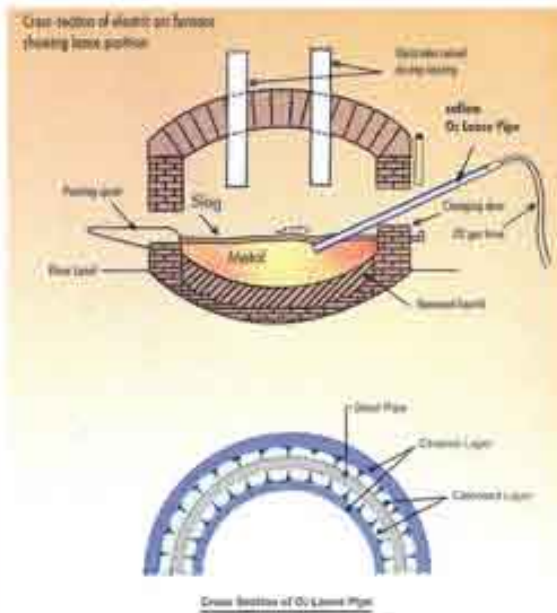
TESTS PERFORMED: Chemical test, Mechanical test, Hydrostatic test, Other as required by the standards.

SPECIFICATION FOR MILD STEEL TUBES & TUBULARS CONFORMING TO IS – 1239 (PART-I): 1990

SPECIFICATION FOR MILD STEEL TUBES & TUBULARS CONFORMING TO IS – 1239 (PART-I): 1990 & IS 10577

Nominal Bore (NB)		Class	Outside Diameter		Thickness
mm	inches		MAX	MIN	
mm	inches		mm	mm	mm
6	(1/8")	L ■	9.85	9.65	1.80
8	(1/4")	L ■	13.35	13.10	1.80
		M ■	13.60	13.10	2.25
10	(3/8")	L ■	16.85	16.60	1.80
		M ■	17.10	16.60	2.25
		H ■	17.10	16.60	2.90
15	(1/2")	L ■	21.40	21.00	2.00
		M ■	21.80	21.00	2.60
		H ■	21.80	21.00	3.20
20	(3/4")	L ■	26.90	26.40	2.30
		M ■	27.30	26.50	2.60
		H ■	27.30	26.50	3.20
25	(1")	L ■	33.80	33.20	2.60
		M ■	34.20	33.30	3.20
		H ■	34.20	33.30	4.00
32	(1 1/4")	L ■	42.50	41.90	2.60
		M ■	42.90	42.00	3.20
		H ■	42.90	42.00	4.00
40	(1 1/2")	L ■	48.40	47.80	2.90
		M ■	48.80	47.90	3.20
		H ■	48.80	47.90	4.00





Ceramic coated pipe (CCP) is carbon steel pipe with multiple, thin layers of ceramic coating both exteriorly and interiorly. The ceramic coating is resistant to slag attack and extends the life of the pipe when it is immersed into molten metal or in high temperature atmospheres. The CCP applications include powder injections, tap-hole cleaning and opening nozzles in ladles, tundish and launders. KANDi Lance Pipes are coated with Refractory / Ceramic on the outside and inside of the pipes.

These pipes are mainly used for used for blowing oxygen in Electric Arc furnace, apart from the

other uses. CCP was developed to increase the lance life beyond conventional black steel pipes.

CCP is also used to inject gas into the submerged electric furnaces. The pipe provides a much longer life in the high-temperature furnace environment than previously used



stainless-steel pipes. Using CCP to inject gas in submerged electric furnaces reduces costs and downtime for smelter production.

The various characteristics of KANDi CERAMIC COATED PIPES are as follows:



- EXCELLENT REFRACTORINESS**, resistance against heat, erosion and spalling.
- SPEEDY DE-CARBURIZATION** because of longer life and superior heat resistance. There is no decrease in its strength and pipe remains straight resulting optimum metal oxygen interaction.
- GREATER EFFICIENCY** of reaction with oxygen, pipes can be inserted in liquid

metal with / without bening which avoids bubblings of oxygen near surface of metal or slag.

d) **COST REDUCTION** considering above advantages, various savings can be expected such as electric power, decreases in consumption of electrodes, lower melting time, saving in cost of pipes.

"KANDI" COATED PIPES are available in the following standard sizes and specifications:

STANDARD SIZES:

NOMINAL BORE SIZE (mm)	PACKING (per bundle)	LENGTH (mm)
15 (1/2")	100 Pcs	5500 mm OR 2750 mm
20 (3/4")	100 Pcs	
25 (1")	100 Pcs	
32 (1 1/4")	50 Pcs	
40 (1 1/2")	50 Pcs	



SPECIFICATION:

TYPE 1	Bothe ends threads with one coupling and one plastic cap.	Threads Screw Coupling Plastic cap
TYPE 2	Bothe ends threads with one coupling and one plastic cap.	150 - 170 mm
TYPE 3	No threads.	
TYPE 4	No threads with one press coupling.	Press Coupling

SOME OF THE VARIOUS USES OF CCP INCLUDE THE FOLLOWING:



- Cutting scrap, raising bath temperatures and decarburizing
- Opening nozzles in tundish and ladles
- Injecting carbon and other powders into the electric furnace and ladle
- Opening the iron notch of a blast furnace
- Injecting argon into ladles
- Injecting argon and oxygen into the A.O.D. furnace
- Injecting flux for degassing in aluminum melting furnaces



CSR ACTIVITIES



KANDI ENGINEERING PVT. LTD

An ISO 9000 : 2008 CERTIFIED COMPANY

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