



***Indo Anushka***  
*Steam Technologies*

# ***THERMOJECT***



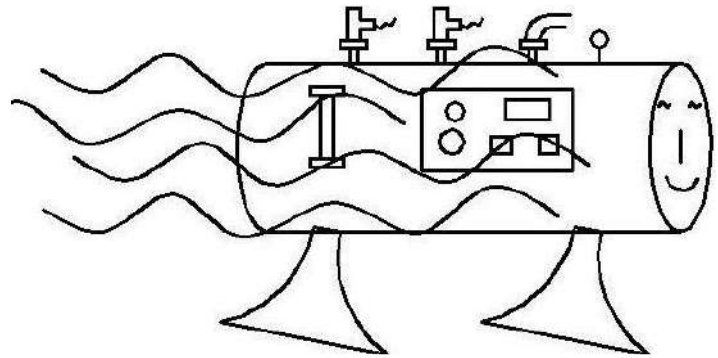
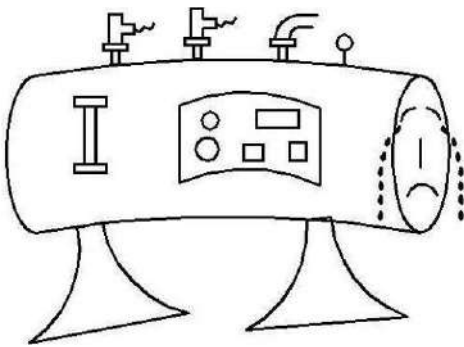
***MANUFACTURED & MARKETED  
BY  
INDOANUSHKA***

***“PROVIDING VALUE FOR MONEY IN STEAM ENGINEERING”***

# Increased Efficiency With THERMOJECTS

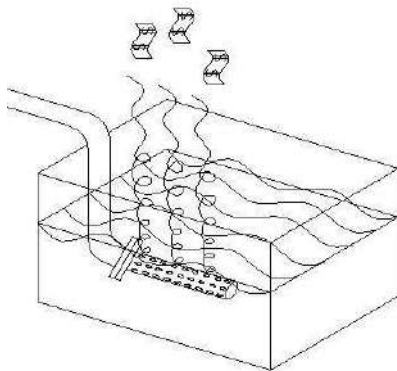
ALL BOILERS ARE RATED AT F & A 100°C

Is your boiler running at low efficiencies as your boiler feed water temperatures are low?



Run your boiler at high efficiencies by heating your boiler feed water to as close as 100°C as possible.

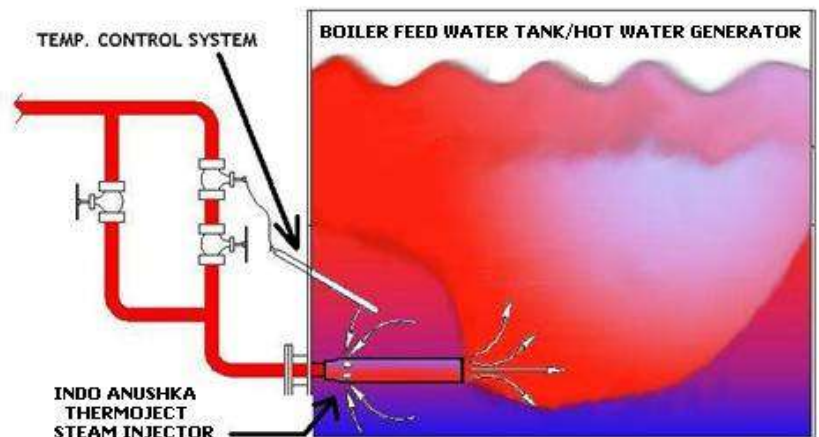
THE TRADITIONAL WAY OF HEATING FEED WATER USING SPARGE PIPES.



Steam loss of just 20kg/hr to atmosphere due to inefficient mixing can result into losses of **Rs.480/day** or **Rs. 14400/mth** or **Rs. 1,72,800 / year.**

The same holds true for any direct steam injection heating like process heating or hot water generation

Use **INDOANUSHKA THERMOJECT STEAM INJECTOR SYSTEM** for efficient boiler feedwater / process fluid/process water and zero loss of steam.



INDOANUSHKA STEAM INJECTOR SYSTEM helps you increase the efficiency of boiler and any other direct steam heating application by preventing lose of steam and energy and therefore effectively helps you increase your earnings for, today .....

**MONEY SAVED**



**IS MONEY EARNED**



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## THERMOJECTS

Traditionally a sparge pipe is used whenever steam is required to be directly purged into a process fluid for heating. This process fluid may be water for hot water generation or any other chemicals, dyes, etc. This gives rise to two kinds of challenges.

1. High noise due to vibration as steam comes out from a number of small holes and at a high velocity.
2. As steam comes out at high velocities, a sizable percentage of this steam actually escapes and gets wasted without condensing and mixing with the process fluid.

**THERMOJECT** - The Indoanushka make steam injector is an apt substitute for such sparge pipes.

- ❖ The THERMOJECT is a venturi type nozzle provided inside a concentric cylindrical housing with elliptical slots in the low pressure zone. When steam flows out at a high velocity through his convergent divergent nozzle, a differential pressure is created in the low pressure zone above the nozzle due to displacement of fluid by the steam velocity.
- ❖ As a result fresh cold process fluid is sucked in through the pre-designed slots and this gets mixed with the steam inside the mixing chamber provided in the injector housing. As a result what flows out of the injector is hot fluid and there is no scope of steam escaping without condensing.
- ❖ Also as the injector remains dipped inside the water, the water body itself acts as a silencer by hindering the flow of the high velocity steam coming out of the nozzle. This results into negligible or no sound during the mixing process.

**THERMOJECT** helps in reducing steam consumption in such applications by 100% utilization of steam and 0 loss due to escaping of uncondensed steam

**THERMOJECT** capacities in kg/h of injected steam when heating tanks vented to atmosphere



**DIMENSIONAL DETAILS:**

THERMOJECT type	INJ15	INJ25	INJ40
Steam pressure at inlet of THERMOJECT, bar g	Capacities in kg/h of saturated steam		
2	40	205	540
3	62	275	725
4	80	340	900
5	100	410	1080
6	110	470	1250
7	130	540	1430
8	145	615	1610
9	170	685	1790
10	190	750	1950

MODEL	STEAM INLET SIZE	O.D. OF THERMOJECT	TOTAL LENGTH OF THERMOJECT
TJ15	15NB	28	205
TJ25	25NB	60	450
TJ40	40NB	90	550

**Sizes :**

The THERMOJECTs are available in three sizes, 15NB, 25NB and 40NB.

**Material of construction:** M.S./SS 304/316/316L/PTFE.



# **Indo Anushka**

## **Steam Technologies**

### **CUSTOMERS USING INDO ANUSHKA THERMOJECT**

- ❖ CADILA HEALTH CARE LIMITED – ANKLESHWAR
  - ❖ BIOTOR LIMITED – VADODARA
  - ❖ EUSA PIGMENTS PVT.LTD (HEUBACH) – ANKLESHWAR
  - ❖ SUYOG DYE CHEMIE PVT LTD – ANKLESHWAR
  - ❖ LOXIM INDUSTRIES LTD – PADRA
  - ❖ BODAL CHEMICALS – DUDHWADA (PADRA)
  - ❖ PARKIN INDUSTRIES (KIRI DYES) - KARAKHADI
  - ❖ FARMSONS ANALGESICS – NANDESARI
  - ❖ WANKSONS CHEMICAL IND. PVT. PVT. – ANKLESHWAR
  - ❖ SHREE SYAM DYING AND PRINTING MILS – ANKLESHWAR
  - ❖ SUN PHARMACEUTICAL INDUSTRIES LTD – HALOL
  - ❖ INEOS ABS LIMITED – NANDESARI
  - ❖ K.G.N.ENTERPRISE – KHEDA
- .....and the numbers are growing.

### **OTHER PRODUCTS MANUFACTURED BY US**

#### **1. STRAINERS.**

- “Y TYPE” STRAINER WITH INBUILT BLOW DOWN VALVE FOR ONLINE CLEANING. MODEL MAINTENO
- “T TYPE” STRAINER WITH ONLINE CLEANING FACILITY.
- DIFFERENT TYPES OF “T-TYPE” FABRICATED STRAINER.

#### **2. SIGHT GLASSES**

- MULTI VIEW SIGHT GLASS WITH UNIQUE CAP NUT ARRANGEMENT MODEL MULTIVIEW

#### **3. STEAM TRAP MODULES.**

- FLOAT TYPE STEAM TRAP MODULES (STANDARD MODULES, FULL MODULES)
- THERMODYNAMIC TRAP MODULES

#### **4. MOISTURE SEPARATOR WITH DRAIN MODULE.**

#### **5. MAX-FLASH FOR FLASH STEAM SEPARATION.**

#### **6. MUTINY FOR CONDENSATE RETURN. STEAM OPERATED PUMP.**

#### **7. DEARETOR HEADS FOR BOILER FEED WATER TANKS**

#### **8. FEED WATER TANKS COMPLETE WITH RETURN CONDENSATE MIXING AND AUTOMATIC STEAM HEATING ATTACHMENTS**

#### **9. HOT WATER GENERATORS STEAM OPERATED WITH COMPLETE AUTOMATION.**

#### **10. THERMAL RECOVERY PACKAGE UNIT SYSTEMS. (TRPS) SKID MOUNTED.**

#### **11. AIR VENT ASSEMBLY.**

#### **12. CLEAN AIR PACKAGES**

#### **13. O-RING IDENTIFIER “ORIDENT” FOR CHECKING THE MATERIAL OF ‘O’-RINGS WITHOUT DESTROYING THE ‘O’-RINGS.**

#### **14. MICROSH - ABS CRUSHER UP TO 50#**

### **WE ALSO DO STEAM AUDITS, PIPING AND SYSTEM DESIGN.**

#### **CONTACT US :**

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