

### Features and Benefits:

#### **TAS solutions offer:**

- Proven Solutions with a history of success since 1988
- Best Quality-Price ratio
- Removable and Reusable
- Thermal Blankets offer an attractive payback period of 4-16 months
- Acoustic Blankets offer a highly effective noise reduction of 4-15 dBA
- Rain Shield enclosures for washdown and weather protection
- Safety Spray Shield enclosures for process leak prevention
- Double Sewn and Binded Edges
- CAD designed for exact fit & finish, each piece is custom designed
- Multiple piece design for ease of installation
- User-friendly installation and removal within minutes
- Integral fasteners
- Thermal efficiency of up to 95%
- Expected Lifetime 15 years
- Warranty











### Energy savings | Noise reduction | Safety solutions

#### THERMAL (1) BLANKET INSULATION

- Steam Systems
- Chilled Water Applications
- Process Industry
- Gas Transmission
- Plastic Industry
- Food Processing/Sanitary
- Refinery/Chemical Industry
- Paper and Pump Mills
- Tire Manufacturing
- Laundry Services
- Marine Applications
- Engine Exhaust



#### ACOUSTIC 📵 BLANKET INSULATION

- Liquid Chillers
- Fans, Blowers
- Compressors
- Power Generation

#### SAFETY BLANKET INSULATION

- Process Industry washdown conditions
- Fire Protection for sensitive equipment





### Proven Solutions with a history of success since 1988

#### Energy Surveys

- Energy surveys are typically free of charge, depending on project
- Will show the opportunity for energy savings and payback period
- TAS offers heat loss calculation to define a specified scope of work and measured performance on steam and process systems
- Actual savings are within a 5% error rate

See the *ENERGY SURVEY SAMPLE* on the last page.

		Energy Survey Log	Sheet					Yes/N
Presented By:		DISTR / REP NAME	Survey Date:	10/10/15		Ladders:		Y
Presenter Contact:		FILL - IN	Fuel Cost:	,		Man Lift:		N
Phone / E Mail:		"	Steam Cost:	# 12.30/mm		Union Install:		N
Project Name:		CUSTOMER- END USER	Blanket Design:	LT45055		Safety Training:		N
Project Contact:		FILL - IN	Fastener Type: Thickness:	NS-SRB 1" + 1/2"		FOB Delivered: Flange Dia. Refe		erence
Phone / E Mail:		"						
Qty	Tag #	Description: (Size, Rating, Type, Mfr)	Surface Temp	Ambient	Oper. Hours	125#/150#	Size	2504/30
		* BOILER ROOM - BOILER'S	#1,2	×3	16	3.7/8° Dia.	3/4"	4.5/8° E
111		6" 300# STOP - CK VALVE	353	92°F	12 M	4 1/4" Dia.	1"	4 7/8" D
111		10" x 6" 300# REDUCER	358	/	1	5" Dia.	1.5"	6 1/4" D
111		6"250# GATE VALVE	349			6" Dia.	2"	6 1/2" D
111		6" 300# ORIFICE FLANGE	334			7" Dia.	2.5"	7 1/2" D
111		17"x21" - MANWAY	361			7 1/2" Dis.	3"	8 1/4" D
11111		4" 300# SRV · FLANGE CAP	323			9" Dia.	4"	10° Di
11111		52"DIA. STEAM DRUM	347			10° Dia.	5"	11° Di
11111		17" × 21" - MANWAY	352	)		H*Dia.	6"	12 1/2" [
	- 60	* LEVEL GAUGE - LWCO PIP.	N6 *			13 1/2° Dia.	8"	15° Di
11111		I" THR'D. T/P/ENDCAP	349	85		16° Dia.	10"	17 1/2" [
11111		1" THR'D - P3 /UN/P2/T/EN	OCAP 343	,		19° Dia.	12"	20 1/2" [
111111		1" THR'D- P2 /UN /P	335			21° Dia.	14"	23° Di
111		LEVEL GAVGE	351			23 1/5° Dia.	16"	25 1/2° I
11/11		I" THR'D - P/UN/P/ENDCAP	340			25" Dia.	18"	28° Di
111		LWCO	345	,		27 1/2° Dia.	20"	30 1/2" [
		* BOTTOM OF BOILERS *				32" Dia.	24"	36° Di
111		42" DIA MUD DRUM	35/	80		Use a Poc	ket Rock	et for Dia.
///		17" x 21" - MANWAY	350	,,,	1	Referen	ice Descr	iptions:
		* MAIN STEAM HEADER *			1	10* 34	00# Flang	c Cap
//		10" 300# BLIND FLANGE	349	93		6° 300#	Stop Cho	ck Valve
111		4" 250# GATE VALVE	345	1		6" 250# Gs	te Valve (	Rect. Bon.
//		4"300 # GATE VALVE	346			6° 300	# Orifice	Flange
//		6" 300# GV BONNET	11			6" 250# GV	-Bonnet	Rect. Bon.
/		8"250# GV BONNET				Many	vay - 17*	x 21"
//		3"300# GV BONNET	11			Steam Drui	n-52" Dia	x 10° Dp
1		4" 1PS - DRIP LEG	335			Drip Le	g - 4" IPS	x 16°L
1		3/4" THR'D - GV   STR / UN	11			TxTx3	O'H t- Le	vel Gauge
/		3/4" ARMSTRONG 811 STM T		- /		3/4" Thris	I - Pipe/G	V/Str/Un
	and the same	* STEAM SUPPLY TO DATA	NK *			3/4" Steam	Trap (Ge	tra MK45
/		3" 250 # GATE VALVE	349	112°F	-/	Globe Valve	Bonnets	nea Cincola



### Measurements on site

- Depending on the project, TAS staff may do a site visit to obtain necessary measurements for design, which is necessary to achieve a perfect fit of the blanket insulations
- Typically it is included in the pricing





#### **SUPPORT SERVICES**



# Proven Solutions with a history of success since 1988

#### Installation

- TAS offers installation services for large or complicated projects
- Typically it will be included in the turn-key offering
- TAS staff is well trained, experienced and fully insured





### M & V Reporting

- Measure and verification reporting using picture-on-picture thermography
- It is not a standard service, but can be added to the offering
- Define Savings within the 5% error rate
- Sound Testing report pre and post installation





#### THERMAL BLANKET INSULATION

### TAS Thermal Blanket Solutions for Steam Systems

- Quick payback period. The investment pays for itself in 4-16 months.
- Instant energy savings, lower emissions, lower ambient temperature.
- Improve safety conditions by insulating hot surfaces.
- Steam valves, boiler doors, manways, flanges, expansion joints, flowmeters, piping and much more.
- Turnkey project done by TAS team.





#### Energy savings







AFIEK

#### THERMAL BLANKET INSULATION

### Thermal Blanket Solutions for Boiler Doors and Steam Traps

- Captures 75% of all radiant heat loss
- Cost-effective solution
- Ideal for eliminating safety concerns with hot surfaces
- Standard and custom offering
- Can be sold as standard insulation for all steam traps
- Custom design for boiler doors





### Thermal Blanket Solutions for the Process Applications

TAS offers blanket insulation for process applications that require Non-Wicking & Non-Porous solutions.

- Industries: Pharmaceutical, Refineries, Chemical Processing, Distilleries, Industrial, Manufacturing
- Chemical and acidic resistant materials
- Non-Porous & Non-Wicking
- Are designed for outdoor conditions, weather resistant materials





## Thermal Blanket Solutions for the Plastics Industry

- Significantly reduces heat loss and surface temperature for plastics extrusion, injection molding and blow molding equipment
- Average payback period is a few months!
- Protects workers from hot surfaces
- Reduces ambient temperature
- High Quality, long lifetime materials



## Thermal Blanket Solutions for the Food Processing/Sanitary

TAS Blankets will boost steam system thermal efficiency, which improves steam quality and the overall manufacturing process.

- Approved materials (sanitary wash-down)
- PTFE jacketing fabrics
- Drastically lower ambient temperatures
- Instant energy savings
- Improved safety conditions





#### THERMAL BLANKET INSULATION

# Thermal Blanket Solutions for Refinery Applications, Chemical Process

- Oil resistant jacketing & Non-Flammable
- Specifications up to 1000 °C
- Improves steam quality
- Improves steam tracing performance, complex surfaces otherwise left untreated





# Thermal Blanket Solutions for Tire Manufacturing

TAS Blanket Insulations offer solutions for tire presses and steam systems.

- Saves energy, lower ambient temperature
- Improved cure times
- Covers complex surfaces
- Non-flammable
- Durable materials, double sewn and binded edges







#### **ACOUSTIC (III) BLANKET INSULATION**

#### **TAS Acoustic Blanket Solutions**

TAS Acoustic Blanket Insulation offers a noise reduction solution on complex surfaces.

- Applications Include: compressors, pumps, fan housing, ducting, process piping, valves, motors.
- Treats the sound problem at the source with a direct surface treatment, wrapping critical complex components that would otherwise be left untreated.
- Offer Standard & Custom designed packages.
- Will generate up to 16 decibels of reduction, depending on the application, nature of the field condition and sound profile of the source noise.











#### **BLANKET DESIGN FEATURES**



- 1. Silicone coated fiberglass cloth
- 2. PTFE coated fiberglass cloth
- 3. ATEX approved materials
- 4. PTFE fabric for food processing, chemical resistance and high humidity environment
- 5. Stainless steel wiretwist
- 6. Metal embossed ID tag for each piece



- 7. Velcro® and simple flaps
- 8. Stainless steel buckles with straps
- 9. Double sewn and binded edges
- 10. Metal gommet for leak detection



#### **ENERGY SURVEY SAMPLE**

Presented By: TAS Blanket Insulation Kft.

Phone/Email: +36 30 558 4126

**Project Name:** Sample Steam System

**Project Contact:** Phone/Email:

**TAS Project #:** 25565

**Survey Date:** 1/30/2025

**Steam Cost:** 50€/ton of steam **Product Specification:** LT232C-SS **Insulation Thickness:** 40mm

Fastener Type: Velcro® Flaps/Dbl D Ring STD. Straps

**Proposal Date:** 

QTY	DESCRIPTION / LOCATION	AMB. TEMP	MEAS. SURFACE TEMP	OPERATING HOURS	BARE HEAT LOSS (W/HR)	BARE OPER. COST (€/YEAR)	INSULATED HEAT LOSS (W/HR)	INSULATED OPER. COST (€/YEAR)	
			BOILER	ROOM - BLR.	1,2 & 3				
3	DN100 Safety Relief Valve	30	210	8760	2,800	€2,001.69	236	€168.83	
3	DN150 Globe Valve	30	210	8760	8,411	€6,013.62	709	€507.20	
3	DN150 Orifice Flange	30	210	8760	2,640	€1,887.34	223	€159.18	
6	DN40 Globe Valve	30	210	8760	5,049	€3,609.88	613	€438.22	
18	DN65 Globe Valve	30	210	8760	21,320	€15,243.63	1,798	€1,285.68	
3	DN65 Strainer	30	210	8760	3,553	€2,540.61	300	€214.28	
3	DN65 Control Valve	30	210	8760	4,086	€2,921.70	345	€246.42	
72	DN25 Globe Valve	30	180	8760	44,507	€31,821.73	5,080	€3,632.40	
12	DN25 Control Valve	30	180	8760	8,531	€6,099.16	974	€696.21	
3	Boiler Door Ø 2.6 m × 12 cm	30	210	8760	2,800	€58,100.32	27,629	€19,753.89	
	STEAM HEADERS								
18	DN150 Globe Valve	25	190	8760	46,260	€33,074.92	3,660	€2,616.52	
6	DN50 Globe Valve	25	190	8760	4,848	€3,465.89	383	€274,18	
9	DN25 Globe Valve	25	180	8760	5,749	€4,110.31	656	€469.18	
3	DN150 Control Valve	25	190	8760	8,867	€6,339.36	701	€501.50	
6	DN15 Ball Valve	25	180	8760	2,936	€2,099.13	335	€239.61	
3	DN15 Strainer	25	180	8760	1,659	€1,185.95	189	€135.37	
3	DN150 Safety Relief Valve	25	190	8760	3,855	€2,756.24	305	€218.04	
3	DN50 Orifice Flange	25	190	8760	857	€612.70	68	€48.47	
3	DN200 Globe Valve	25	190	8760	11,296	€8,076.62	894	€638.93	
3	DN100 Globe Valve	25	190	8760	5,133	€3,669.76	406	€290.31	
6	DN150 Orifice Flange	25	190	8760	4,839	€3,460.13	383	€273.73	

ENERGY SURVEY SUMMARY	SAMPLE		
Total Heat loss - <b>BARE</b> (kWh/Year):	2,439,287.34		
Total Heat loss - w/TAS Blanket Insulation (kWh/Year), only	401,970.33		
Total Heat loss SAVED - w/TAS Blanket Insulation (kWh/Year):	2,037,317.01		
Total Annual Operating (Steam Cost) - BARE	€199,090.70		
Total Annual Operating (Steam Cost) - w/TAS Blanket Insulation, only	€32,808.17		
Annual (Steam Cost) SAVINGS w/TAS Blanket Insulation	€166,282.53		
*Lifetime (Steam Cost) SAVINGS (15 Yrs)	€2,444,629.32		
Total Cost (Thermal Blanket System)	€49.608.63		
Total Cost	€49.608.63		
Payback (Months)	5		
DOI	225 10%		

#### **SUSTAINABILITY MEASURES SAMPLE**

Number of Fittings

EMISSIONS SAVINGS #1 NATURAL GAS (kWh):	2,037,317.01
CO <sub>2</sub> (tons)	407.03
$NO_{x}(kg)$	473.10
VOC (kg)	16.96
EMISSIONS SAVINGS #2 FUEL OIL (kWh):	2,037,317.01
CO <sub>2</sub> (tons)	620.90
$NO_{x}(kg)$	1,239.24
VOC (kg)	36.21
CUBIC METER OF WATER SAVED (m³/YEAR)	3,157.76

Distributed by:

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