

## TECHNICAL INFORMATION

### Expansion Joint Questionnaire

Date: \_\_\_\_\_

Company Name: \_\_\_\_\_ Contact Person: \_\_\_\_\_

Address: \_\_\_\_\_ Position: \_\_\_\_\_

Telephone No.: \_\_\_\_\_ Fax No.: \_\_\_\_\_

Email Address: \_\_\_\_\_

Order No.: \_\_\_\_\_ Project No.: \_\_\_\_\_

Project: \_\_\_\_\_ Quantity: \_\_\_\_\_

Item No.: \_\_\_\_\_

#### 1. Medium

\_\_\_ Flue gas                      \_\_\_ Air                      \_\_\_ Waste gas                      \_\_\_ other: \_\_\_\_\_

\_\_\_ Composition according to enclosed analysis

\_\_\_ Dry                      \_\_\_ moist

Dust                      \_\_\_ no                      \_\_\_ yes: \_\_\_\_\_ content: \_\_\_\_\_ oz/ft<sup>3</sup>

Solid particles                      \_\_\_ no                      \_\_\_ yes: \_\_\_\_\_ content: \_\_\_\_\_ oz/ft<sup>3</sup>

Grain size: \_\_\_\_\_

Flow rate: \_\_\_\_\_ ft<sup>3</sup>/h                      Flow velocity: \_\_\_\_\_ ft/s

Direction of flow:                      \_\_\_ horizontal                      \_\_\_ vertically up                      \_\_\_ vertically down

\_\_\_ diagonally up                      \_\_\_ diagonally down

Temperature falling down below dewpoint level                      \_\_\_ no                      \_\_\_ yes                      Dew point: \_\_\_\_\_ °F

Condensate                      \_\_\_ strongly acid                      \_\_\_ slightly acid                      \_\_\_ neutral                      \_\_\_ slightly basic                      \_\_\_ strongly basic

## 2. Temperatures

Temperature of medium: \_\_\_\_\_ °F    Design temperature: \_\_\_\_\_ °F    Excursion temperature \_\_\_\_\_ °F

Duration of individual excursions    days: \_\_\_\_\_    hours: \_\_\_\_\_    minutes: \_\_\_\_\_

Duration of excursions per year    days: \_\_\_\_\_    hours: \_\_\_\_\_    minutes: \_\_\_\_\_

Ambient temperature \_\_\_\_\_ °F    Standard value: 122 °F with free convection

Radiation impeded    \_\_\_ no    \_\_\_ yes, by: \_\_\_\_\_

Passive radiation by components    \_\_\_ no    \_\_\_ yes, by: \_\_\_\_\_

External insulation    \_\_\_ no    yes! Has to be confirmed by manufacturer

## 3. Pressure

Operating Temperature: \_\_\_\_\_ psi    Neg. op. pressure: \_\_\_\_\_ psi    Design pressure: \_\_\_\_\_ psi

Transient pressure    \_\_\_ no    \_\_\_ yes, from: \_\_\_\_\_ psi    to: \_\_\_\_\_ psi    Frequency: \_\_\_\_\_

Surge load    \_\_\_ no    \_\_\_ yes, from: \_\_\_\_\_ psi    to: \_\_\_\_\_ psi    Frequency: \_\_\_\_\_

Excursion pressure: \_\_\_\_\_ psi    Neg. op. pressure: \_\_\_\_\_ psi    Duration of excursion: \_\_\_\_\_ h

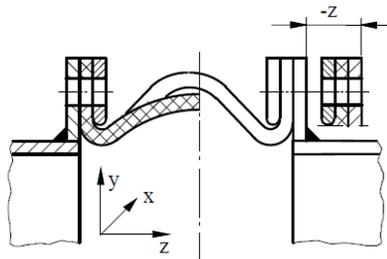
Excursion frequency: \_\_\_\_\_ per: \_\_\_\_\_ at a temperature of \_\_\_\_\_ °F

## 4. Specified Tightness

\_\_\_ without    \_\_\_ Flue gas tight acc. to TI-002    \_\_\_ nekal tight acc. to TI-003

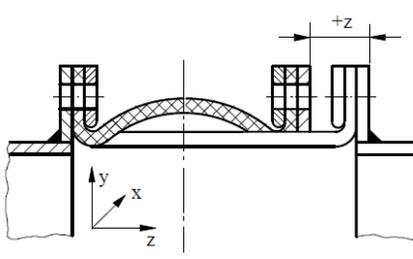
**5. Movements**

Axial Compression



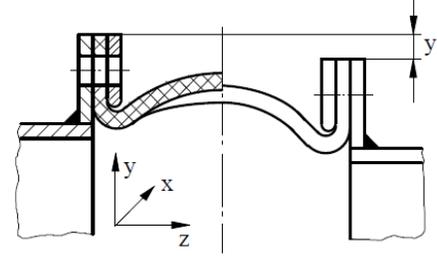
- z: \_\_\_\_\_ in

Axial Elongation



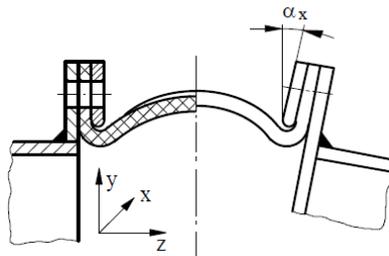
+ z: \_\_\_\_\_ in

Lateral Offset



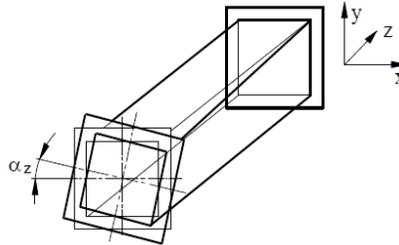
x: \_\_\_\_\_ in; y: \_\_\_\_\_ in

Angular Movement



ax: \_\_\_\_\_ °    ay: \_\_\_\_\_ °

Torsion



az: \_\_\_\_\_ °

Vibration

\_\_\_ no                      \_\_\_ yes

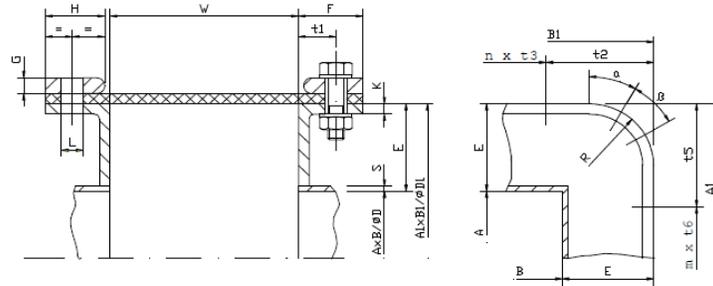
Frequency: \_\_\_\_\_ s-1

Amplitude: \_\_\_\_\_ in

**6. Design**

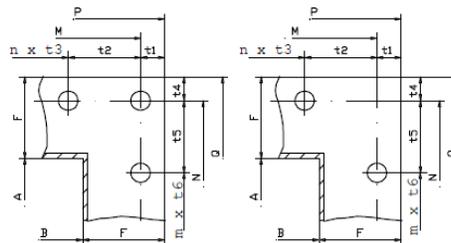
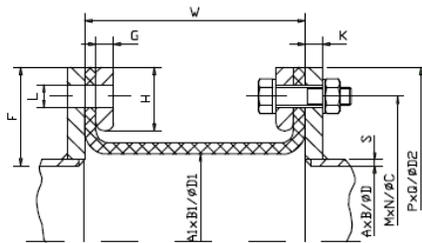
Type on connection	___ Tubular connection	___ Flange connection
Delivery	___ open	___ endless
Baffle/Sleeve	___ no            ___ yes	___ welded      ___ bolted
Insulation between expansion joint and baffle/sleeve	___ yes	___ no

Tubular connection



Flange connection

\_\_\_ with hole in the edge      \_\_\_ without hole in the edge



Rectangular

Round

AxB	inner duct dimension	A	_____ in	D	inner duct diameter	D	_____ in
A1XB1	inner dimension of the expansion joints	A1	_____ in	D1	inner diameter of the expansion joint	D1	_____ in
E	set back	E	_____ in	E	set back	E	_____ in
F	flange height/width	F	_____ in	F	flange height/width	F	_____ in
G	counter flange thickness	G	_____ in	G	counter flange thickness	G	_____ in
H	counter flange width	H	_____ in	H	counter flange width	H	_____ in
K	flange thickness	K	_____ in	K	flange thickness	K	_____ in
L	bolt hole diameter	L	_____ in	L	bolt hole diameter	L	_____ in
MxN	hole line distance	M	_____ in	C	bolt pitch	C	_____ in
		N	_____ in	N	number of holes	N	_____ in
PxQ	outer dimension	P	_____ in	D2	outer diameter	D2	_____ in
		Q	_____ in				_____ in

R	radius	<b>R</b> _____ in		_____ in
S	duct wall thickness	<b>S</b> _____ in	S	duct wall thickness <b>S</b> _____ in
W	flange distance	<b>W</b> _____ in	W	flange distance <b>W</b> _____ in
T1	distance (round/rect.)	<b>T1</b> _____ in	T4	distance (only rect.) <b>T4</b> _____ in
T2	distance (only rect.)	<b>T2</b> _____ in	T5	distance (only rect.) <b>T5</b> _____ in
T3	distance (only rect.)	<b>T3</b> _____ in	T6	distance (only rect.) <b>T6</b> _____ in
m	number of holes	<b>m</b> _____ in	n	number of holes <b>n</b> _____ in
$\alpha$	angle	<b><math>\alpha</math></b> _____ in	$\beta$	angle <b><math>\beta</math></b> _____ in

**7. Scope of supply**

Expansion Joint

Internal insulation

Counter flanges/tension strips

Duct flanges

Bolting

Baffle/Sleeve

Baffles/Sleeve gasket

supplied in parts

supplied pre-assembled

On site measurement

Mounting

Supervision

**8. Other details**

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**9. Sketch/Drawing**

Sketch/Drawing enclosed      \_\_\_ yes      \_\_\_ no

Drawing no.:      \_\_\_\_\_

\_\_\_\_\_  
Name

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature