









Serving The Nuclear Industry





A Proven Leader In Flexible Piping Technology

High Quality Custom Flexible Piping & Ducting Systems

Thorburn Flex offers unmatched capabilities and expertise in applications engineering, design development and manufacture of custom flexible piping systems for nuclear power plants. Operating under a strategy of global presence, Thorburn Flex has structured and developed a specific nuclear business unit used to service this niche market sector. Through this nuclear business unit, our nuclear products consistently meet and exceed all quality design requirements of our nuclear reactor business partners.



Metallic Expansion Joints

Thorburn Flex designs and manufactures custom metallic expansion joints for main steam penetration, spent fuel bay interconnecting piping, turbine crossover, steam lines, boiler feed pumps & treated water lines, meeting the requirements of ASME NPT Class 1, 2, 3 & MC/ASME Section III/CSA N285.0 Classes 1, 2, 3, 6.



Rubber Expansion Joints

Thorburn Flex designs & manufactures rubber expansion joints for raw service water, circulating water cooling and circulating water service piping critical to the operation of a nuclear reactor, meeting requirements for ASME Section III/CSA N285.0 Class 6.



Metallic Bellows

Thorburn Flex designs and manufactures custom bellows for the fuelling channel annulus seals, loop liner tubes, penetration seals & heat exchangers in nuclear reactors, meeting the requirements of ASME NPT Class 1, 2, 3 & MC/ASME Section III/CSA N285.0 Classes 1, 2, 3, 6.



Miniature Bellows

Thorburn Flex designs and manufactures custom seamless drawn over mandril & hydroformed bellows for sampling in a nuclear reactor, snout indexing mechanism, fuel rod flask limit switch & rod cup seal, reactivity mechanism, meeting the requirements of ASME NPT Class 1, 2, 3 & MC/ASME Section III/CSA N285.0 Classes 1, 2, 3, 6.



Fueling Machine Head Separator Bellows

Thorburn Flex designs and manufactures custom nickle deposit & hydroformed flexible fittings for linear potentiometer and F/M head separator assemblies, meeting the requirements of ASME NPT Class 1, 2, 3 & MC/ASME Section III/CSA N285.0 Classes 1, 2, 3, 6.



Hose Assemblies

Thorburn Flex designs and manufactures custom metallic & rubber hose assemblies for catenary, fueling machine, ion exchanger, core feeder, D_2O primary & auxiliary transfer service meeting the requirements of ASME NPT Class 1, 2, 3 & MC/ASME Section III/CSA N285.0 Classes 1, 2, 3, 6.



NT52 Cryogenic Couplings

Thorburn Flex designs and manufactures non-valved quick couplings for liquid nitrogen service in radioactive environments, meeting the requirements of ASME NPT Class 1, 2, 3 & MC/ASME Section III/CSA N285.0 Classes 1, 2, 3, 6.



NT92 D₂O Resin Couplings

Thorburn Flex designs and manufactures ball valved quick couplings for nuclear fueling machines, D_2O resin transfer, D_2O primary & auxiliary systems and core feeder systems, meeting the requirements of ASME NPT Class 1, 2, 3 & MC/ASME Section III/CSA N285.0 Classes 1, 2, 3, 6. NT92 couplings are designed for vacuum and low pressure applications.



NS71 Dry Break Quick Couplings

Thorburn Flex designs and manufactures valved and non-valved quick couplings for nuclear fueling machines, D_2O primary & auxiliary systems and core feeder systems, meeting the requirements of ASME NPT Class 1, 2, 3 & MC/ASME Section III/CSA N285.0 Classes 1, 2, 3, 6. NS71 couplings are perfect for use where space is limited and are designed for high pressure applications.



Thorloc Pipe Clamp Connectors

Thorburn Flex designs and manufactures pipe clamp connectors which provide an alternative to pipe flanges and are ideal where space, weight and joint integrity are critical requirements in a nuclear reactor, meeting the requirements of ASME NPT Class 1, 2, 3 & MC/ASME Section III/CSA N285.0 Classes 1, 2, 3, 6.



Custom Assemblies

Thorburn Flex designs and manufactures custom adapters for D_2O discharging and loading transfer, plumb-up of fueling machine, catenary ion exchanger & panametric connections, meeting the requirements of ASME NPT Class 1, 2, 3 & MC/ASME Section III/CSA N285.0 Classes 1, 2, 3, 6.

THORBURN FLEX - Canada

165 Oneida, Pointe-Claire, Quebec Canada, H9R 1A9

Tel: +1-514-695-8710 Fax: +1-514-695-1321

sales@thorburnflex.com

1-800-363-6613

(Toll Free North America)







B31.3











European Conformaty

ISO 9001:2015

Sec. III Class 1 Sec. VIII Div. 1 CGA CR96-001

Module H

ISIR Romania | CNCAN Romania | EN 13480-2002 | HAF 604 China | TSG China

(CRN for all Canadian provinces)





Over 50 years of flexible piping experience waiting to serve you...