ONUS GROUP

ONUS- Excellence in the Gas Handling System
Since 1995

ABOUT ONUS

Since 1995, the Onus Group of Companies has been an international valve manufacturer. This organization is made up of two companies: Onus Equipments Pvt. Ltd. and Onus Engineering. Onus Equipments Private Limited is a leading Indian manufacturer that develops and executes high-pressure reducing systems, Safety Valves, Breather Valves, Flame Arrestors, Centrifuge Blanketing, Tank Safety Solution etc and provides turnkey solutions for chemical, pharmaceutical, API plant, and oil fields. Onus Engineering is a well-known company that designs analytical laboratory requirements for sectors such as pharmaceutical, chemical, food, fragrances, forensic, environmental monitoring, and oil and gas. It is a pioneer in the manufacture and supply of turnkey solutions for gas management systems and analytical laboratory instruments. Onus Group began operations with a manufacturing unit in Navi Mumbai and has since constructed expansions totaling 100,000 square feet at DAHEJ GIDC. Our clients receive absolute precision with each Onus product. Engineered products with the assurance of quality. We have always endeavored to develop creative and personalized solutions that assist our customers in reaching new heights. We feel that our obligations extend beyond simply supplying unique items. We are equally active in all stages of the process, from product conception and production to execution, as well as prompt and regular post-delivery follow-up meetings.

CERTIFICATES

Technická inšpekcia, a.s.
Trnavská cesta 56, 821 01 Bratislava, Slovenská republika

CERTIFICATE
no. 285/5/2022

Technická inšpekcia, a. s., Trnavská cesta 56, 821 01 Bratislava, Slovakia
notified body: 1354,
on the basis of results from assessment of quality assurance system of production process

notifies, that

Onus Equipments Pvt Ltd
Pl.No.51, Road No.3, Sector 1/S, Behind Colco Office, New Panvel (E), Navi Mumbai, Maharashtra – 410206, India

implemented and applies system of quality assurance of production process (module D1)

according to the European Directive 2014/68/EU on pressure equipment

Range of equipment:
Gas Pressure Regulator Valve, Slam Shut Valve
Type: Downstream
(see Annex to the Certificate for details)

Audit Report no. 285/5/2022

Manufacturer shall inform Technická inšpekcia, a. s. of any intended change of system of quality assurance of production process (module D1)

Certificate is valid until 21st July 2025

The Certificate validity is conditioned with performing of surveillance by Technická inšpekcia, a.s. for minimum 1 periodic audit per 12 months. Performing of periodic audit is proved by Audit Report.

Date of initial notification: 22nd July 2022

Bratislava, on 22nd July 2022

Judr. Vladimír Juris
General Director

CZT4-160

A 014739

PED CE EN 334 & EN14382

ASSESSMENT

CERTIFICATE

This is to certify that the
Environmental Management System of

ONUS EQUIPMENTS PVT. LTD.
PLOT NO. 51, ROAD NO.3, SECTOR -1-S, NEW PANVEL (E),
NAVI MUMBAI - 410206, INDIA

has been found to comply with

ISO 14001:2015

This certificate is applicable to the following scope:

MANUFACTURING & SUPPLY OF GAS HANDLING EQUIPMENT; HIGH & LOW PRESSURE REDUCING SYSTEM, SAFETY VALVES, GAS PIPING & DESIGNING OF INSTRUMENTS AUTOMATION SYSTEM, PLANT ERECTION WORKS.

Certificate No :: I-ESC202006002

Date of Initial Registration	03 June 2020
1st Surveillance Audit done on	18 June 2021
2nd Surveillance Audit done on	20 May 2022
Certificate Expiry	02 June 2023
Recertification Due	02 June 2023

*The scope is as per IAF Code 17,18

MANAGEMENT SYSTEM CERTIFICATE

MSCB -124

Authorized Signatory
BQC ASSESSMENT PRIVATE LIMITED

ISO 9001:2015

ASSESSMENT

CERTIFICATE

This is to certify that the
Occupational Health & Safety Management System of

ONUS EQUIPMENTS PVT. LTD.
PLOT NO. 51, ROAD NO.3, SECTOR -1-S, NEW PANVEL (E),
NAVI MUMBAI - 410206, INDIA

has been found to comply with

ISO 45001:2018

This certificate is applicable to the following scope:

MANUFACTURING & SUPPLY OF GAS HANDLING EQUIPMENT; HIGH & LOW PRESSURE REDUCING SYSTEM, SAFETY VALVES, GAS PIPING & DESIGNING OF INSTRUMENTS AUTOMATION SYSTEM, PLANT ERECTION WORKS.

Certificate No :: I-OHSC202006004

Date of Initial Registration	03 June 2020
1st Surveillance Audit done on	18 June 2021
2nd Surveillance Audit done on	20 May 2022
Certificate Expiry	02 June 2023
Recertification Due	02 June 2023

*The scope is as per IAF Code 17,18

MANAGEMENT SYSTEM CERTIFICATE

MSCB -124

Authorized Signatory
BQC ASSESSMENT PRIVATE LIMITED

ISO 45001:2018

ASSESSMENT

CERTIFICATE

This is to certify that the
Quality Management System of

ONUS EQUIPMENTS PVT. LTD.
PLOT NO. 51, ROAD NO.3, SECTOR -1-S, NEW PANVEL (E),
NAVI MUMBAI - 410206, INDIA

has been found to comply with

ISO 9001:2015

This certificate is applicable to the following scope:

MANUFACTURING & SUPPLY OF GAS HANDLING EQUIPMENT; HIGH & LOW PRESSURE REDUCING SYSTEM, SAFETY VALVES, GAS PIPING & DESIGNING OF INSTRUMENTS AUTOMATION SYSTEM, PLANT ERECTION WORKS.

Certificate No :: I-QSC202201021

Date of Initial Registration	10 January 2022
Surveillance Audit on/before	10 December 2022
Certificate Expiry	09 January 2023
Recertification Due	09 January 2025

*The scope is as per IAF Code 17, 18

MANAGEMENT SYSTEM CERTIFICATE

MSCB -124

Authorized Signatory
BQC ASSESSMENT PRIVATE LIMITED

ISO 14001:2015

PRESSURE REDUCING STATION

We offer complete Hydrogen Unloading / Pressure Reducing Stations to suit your specific process requirement, right from pigtail and manifold pressure reducing station, safety shut off, safety interlocks, flow measurement etc., generally, supplied as complete skid mounted ready to use unit.

TECHNICAL SPECIFICATION	
SIZE	15 NB – 125 NB
INLET PRESSURE RANGE	0 – 250 bars
FLOW RANGE	0 – 10,000 Nm3/Hr
SET PRESSURE RANGE	0 – 85 Kg/cm2
BODY	Carbon Steel, Stainless Steel (304/316/304L/316L), Monel Hastelloy 'C'.
TRIM	Stainless Steel 316L (for CS/SS304/SS316/SS304L/SS316L Body) Haste Alloy 'C' (For CS/SS Body, Monel, HAC body) Stainless Steel 316L (for CS/SS304/SS316/SS304L/SS316L Body) Haste Alloy 'C' (For CS/SS)
END CONNECTION	Flange End / Screwed End

VALVES

DIRECT OPERATED PRESSURE CONTROL VALVE

Direct Acting Downstream Pressure Regulating Valves – also, called as Pressure Reducing Valves – are meant for reducing the source pressure and regulating the outlet / downstream pressure at the pre-determined set value required for the processes. With direct acting Regulators precise pressure control can be achieved at specified process requirements.

PILOT OPERATED PRESSURE CONTROL VALVE

These Pilot Actuated Pressure Control valves have an edge over conventional control valves as these do not require any auxiliary inputs like pneumatic line, electricity or hydraulic line. These PCV operate on the basis of signal received from line fluid itself.

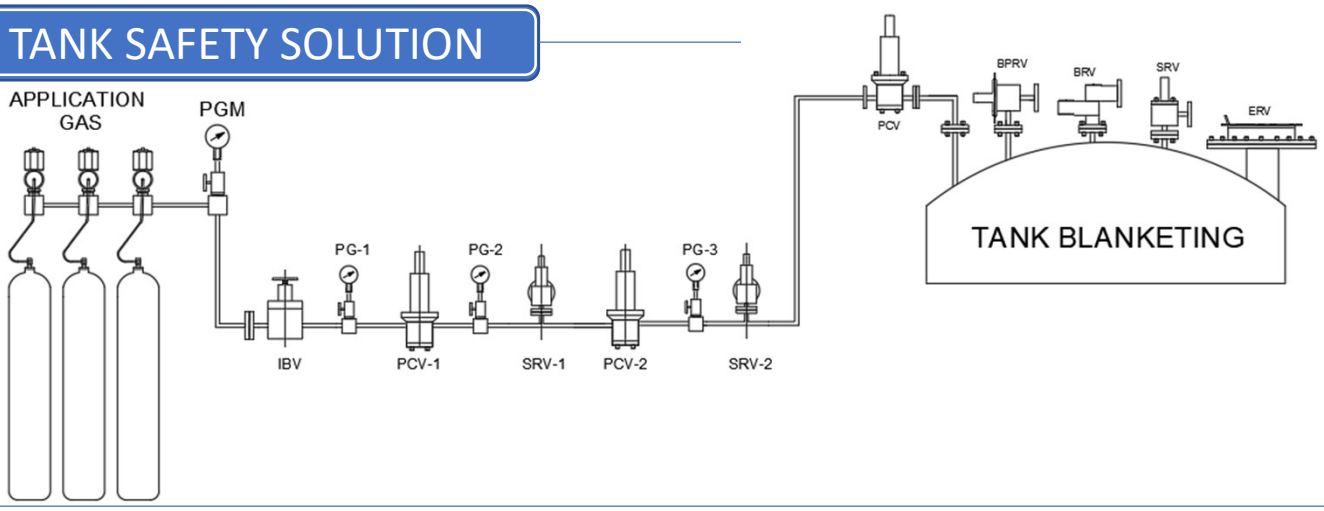
TECHNICAL SPECIFICATION	
SIZE	15 NB – 125 NB
INLET PRESSURE RANGE	0 – 250 bars
FLOW RANGE	0 – 10,000 Nm3/Hr
SET PRESSURE RANGE	0 – 85 Kg/cm2
BODY	Carbon Steel, Stainless Steel (304/316/304L/316L), Monel Hastelloy 'C'.
TRIM	Stainless Steel 316L (for CS/SS304/SS316/SS304L/SS316L Body) Haste Alloy 'C' (For CS/SS Body, Monel, HAC body) Stainless Steel 316L (for CS/SS304/SS316/SS304L/SS316L Body) Haste Alloy 'C' (For CS/SS)
END CONNECTION	Flange End / Screwed End

BLANKETING PRESSURE REGULATOR

Self-actuated lever operated direct acting regulators are the best solution for low pressure applications like blanketing. These are designed to control the set outlet pressure precisely irrespective of variations in inlet pressure and flow rate for the process. Blanketing pressure regulator provides an economical solution for precise pressure control with high accuracies at low pressure requirements for process

TECHNICAL SPECIFICATION	
SIZE	15 NB – 100 NB
INLET PRESSURE RANGE	0 – 10 bars
FLOW RANGE	0 – 1000 Nm3/Hr
SET PRESSURE RANGE	0 – 1000 mmWCg
BODY	Carbon Steel, Stainless Steel (304/316/304L/316L), Monel Hastelloy 'C'.
TRIM	Stainless Steel 316L (for CS/SS304/SS316/SS304L/SS316L Body) Haste Alloy 'C' (For CS/SS Body, Monel, HAC body) Stainless Steel 316L (for CS/SS304/SS316/SS304L/SS316L Body) Haste Alloy 'C' (For CS/SS)
END CONNECTION	Flange End / Screwed End

TANK SAFETY SOLUTION



SAFETY RELIEF VALVE

Spring Loaded Safety Valves or Safety Relief Valves are the most commonly used relieving safety device. Spring Loaded Safety Relief Valves are designed to automatically discharge the accumulation of fluid from any pressure containing system, preventing a predetermined safe pressure being exceeded and protecting plant & personnel.

TECHNICAL SPECIFICATION	
SIZE	15 NB – 250 NB
BODY	Carbon Steel, Stainless Steel (304/316/304L/316L), CS/SS , Hastelloy 'C'.
TRIM	Stainless Steel 316L (for CS/SS304/SS316/SS304L/SS 316 L Body) Haste Alloy 'C' (For CS/SS Body, HAC body)

BACK PRESSURE RELIEF VALVE

A back pressure regulator is a device used to accurately control the pressure of a system, through opening just as much as is needed to return to normal pressure levels. The back pressure regulator keeps a steady pressure by regulating flow through it as it reacts to the pressure levels of the system to keep good stability. Back pressure relief valve is throttling relief valve used to protect vessels, equipment & piping system from over pressure while maintaining a steady system pressure at the desired level. A smooth throttling action minimizes pressure surge during operation.

TECHNICAL SPECIFICATION	
SIZE	15 NB – 250 NB
BODY	Carbon Steel, Stainless Steel (304/316/304L/316L), CS/SS , Hastelloy 'C'.
TRIM	Stainless Steel 316L (for CS/SS304/SS316/SS304L/SS 316 L Body) Haste Alloy 'C' (For CS/SS Body, HAC body)

ONUS GROUP

PIPE AWAY BREATHER VALVE

Breather Valves are installed on the vent nozzle of atmospheric storage tanks for providing adequate pressure and vacuum relief, which helps in preventing bulging and buckling of atmospheric storage tanks Breather valves also help considerably reducing vapor & nitrogen emission losses. Over the years we have adapted our designs for various pressure, vacuum, temperature applications. Our pallets are made with utmost precision which ensures tight shut off and reduces the chattering of the pallet considerably. The dead weight type pallets can be replaced at a later stage if your process requirements have changed.

BREATHER VALVE WITH FLAME ARRESTOR

Breather Valve with Flame Arrestor is a tank protection device, which safeguards tank/ vessel from over pressurization or fire. This is a combination of Pressure Vacuum Relief Valve with in-built Flame Arrestor. These are generally, dead weight type for standard set pressures. If required, these can be given as spring loaded for higher set pressures.

TECHNICAL SPECIFICATION	
SIZE	15 NB – 250 NB
BODY	Carbon Steel, Stainless Steel (304/316/304L/316L), CS/SS , Hastelloy 'C'.
TRIM	Stainless Steel 316L (for CS/SS304/SS316/SS304L/SS 316 L Body) Haste Alloy 'C' (For CS/SS Body, HAC body)

END OF LINE FLAME ARRESTOR

End-of-line flame arrestors are fitted to the end of a pipe line or exit to a vessel to prevent flames from entering, and not, as is sometimes believed, to prevent the flame exiting the pipe or vessel. Without a weather-hood, they may be mounted in almost any orientation, but inverted mounting is not recommended as this increases the risk of heat being trapped thus causing a flash back. End of line Flame Arresters are Mainly Used For Above Ground Storage Tanks

IN -LINE FLAME ARRESTOR

In-line flame arrestors are fitted in piping systems to protect downstream equipment. it is also possible that the source of ignition could cause the flame to travel with the gas flow. If the flame could come from either direction then a bi-directional flame arrestor is required. Pipe orientation is usually not a problem unless liquid is entrained in the gas flow and would tend to collect in the arrestor. In such situations, an eccentric flame arrestor housing may be fitted to allow collection and drainage of the liquid. In line flame arrestors are mainly Used For Underground Storage Tanks And In Continuous Process Lines

TECHNICAL SPECIFICATION	
SIZE	15 NB – 400 NB
BODY	Carbon Steel, Stainless Steel (304/316/304L/316L), Monel Hastelloy 'C'.
ARRESTOR ELEMENT	Stainless Steel 316L (for CS/SS304/SS316/SS304L/SS316 L Body) Haste Alloy 'C' (For CS/SS Body PTFE/PFA Lined, HAC body)
WHETHER HOOD	SS304, SS304 with ETFE coating

EMERGENCY VENT VALVE

ONUS emergency relief vents are designed to provide an opening for storage tanks when exposed to overpressure that are not handled by standard tank vents. These vents provide the capacity to meet API standard 2000 for emergency venting due to fire exposure when properly sized. These vents also provide quick easy access for tank inspection and maintenance. Emergency pressure relief vents provide pressure relief only. Vacuum relief must be supplied by normal venting devices. When excessive pressure builds within the storage tank the ONUS emergency pressure relief vent hinged cover begins to open at the predetermined set pressure, relieving excess pressure. When overpressure has dissipated, the cover reseats onto the base. The hinge mechanism prevents misalignment and provides an accurate reseat.

TECHNICAL SPECIFICATION	
BODY	Carbon Steel, SS 304, SS 304L, SS 316, SS 316L
WITTED PARTS	Carbon Steel, SS 304, SS 304L, SS 316, SS 316L, Hastelloy-C, Halar Coating, PTFE lining
GASKET	PTFE, CNAF, Graphite
FASTNER	SS 304, SS 316, High Tensile Coating, Halar Coating

CENTRIFUGE BLANKETING

The dangers of flash fires and explosions is inherent is many plant operations. Specifically, the combination of volatile solvents and dusts in process vessels, such as a high-speed Industrial Centrifuge, where highly flammable conditions can be created. Unless proper safety measures are undertaken, this situation can potentially lead to catastrophic fires and explosions. Methods of monitoring and avoiding such hazards are important to all those involved, not just the production operator and safety manager.

TECHNICAL SPECIFICATION	
SIZE	15 NB – 100 NB
INLET PRESSURE RANGE	0 – 20 bars
FLOW RANGE	0 – 1000 Nm3/Hr
BODY	Carbon Steel, Stainless Steel (304/316/304L/316L), Monel Hastelloy 'C'.
TRIM	Stainless Steel 316L (for CS/SS304/SS316/SS304L/SS316L Body) Haste Alloy 'C' (For CS/SS Body, Monel, HAC body) Stainless Steel 316L (for CS/SS304/SS316/SS304L/SS316L Body) Haste Alloy 'C' (For CS/SS)
END CONNECTION	Flange End

REPTURE DISC

A rupture disc is a critical safety device designed to protect equipment and personnel from overpressure situations. Typically made from thin, non-metallic materials or metal alloys, these devices are engineered to burst at a predetermined pressure, allowing excess pressure to safely vent and preventing catastrophic failures.

Key Features and Benefits

- **Safety First**: Protects against dangerous pressure build-up, ensuring operational safety.
- **Customizable Options**: Available in various materials, sizes, and pressure ratings to fit specific applications.
- **Maintenance-Free**: No moving parts mean minimal maintenance and reliable operation.
- **Fast Response**: Immediate activation at set pressure thresholds ensures quick venting of excess pressure.
- **Compact Design**: Space-efficient, making them suitable for a variety of industrial applications.

FORWARD ACTING DISC

A forward acting rupture disc is a specialized safety device designed to provide reliable pressure relief in various industrial applications. This innovative disc is engineered to burst in response to overpressure, allowing for rapid venting and protecting your equipment and personnel from potential hazards.

TECHNICAL SPECIFICATION	
Size range	15-500mm (1/2" - 20")
Burst pressure range	3.1-185 barg (51-2683 psig)
Temperature range	-200ºC to 600ºC (-328°F to 1,112ºF)
Max. Operating Ratio	90% of minimum burst pressure (86% of nominal burst pressure)
Performance Tolerance	+/-5%

REVERSE ACTING DISC

A reverse acting rupture disc is a specialized safety device designed to protect systems from overpressure conditions. Unlike forward acting discs, reverse acting rupture discs are engineered to burst under vacuum or negative pressure, allowing for safe venting and safeguarding equipment and personnel from hazardous situations.

TECHNICAL SPECIFICATION	
Size range	1"-12" (25-300mm)
Burst pressure range	10-2,500 psig (0.69-172.3 barg)
Temperature range	-120°F to 1000°F (-84°C to 538°C)
Max. Operating Ratio	95%
Performance Tolerance	+/-5%

An explosion vent is a critical safety device designed to protect equipment and facilities from the devastating effects of explosions. These vents provide a predetermined weak point in a structure, allowing excess pressure to escape safely and minimizing damage during an explosive event.

Key Features and Benefits

- **Reliable Pressure Relief**: Designed to activate quickly, ensuring rapid venting during an explosive event.
- **Customizable Designs**: Available in various sizes, shapes, and materials to suit specific applications and regulatory requirements.
- **Durable Construction**: Made from high-quality materials that can withstand harsh environments and temperatures.
- **Compact and Lightweight**: Designed for easy installation, even in space-constrained areas.
- **Maintenance-Free**: With no moving parts, explosion vents require minimal maintenance and are always ready for operation.

FORWARD ACTING DISC

A forward acting rupture disc is a specialized safety device designed to provide reliable pressure relief in various industrial applications. This innovative disc is engineered to burst in response to overpressure, allowing for rapid venting and protecting your equipment and personnel from potential hazards.

TECHNICAL SPECIFICATION	
Size range	15-500mm (1/2" - 20")
Burst pressure range	3.1-185 barg (51-2683 psig)
Temperature range	-200ºC to 600ºC (-328°F to 1,112ºF)
Max. Operating Ratio	90% of minimum burst pressure (86% of nominal burst pressure)
Performance Tolerance	+/-5%

REVERSE ACTING DISC

A reverse acting rupture disc is a specialized safety device designed to protect systems from overpressure conditions. Unlike forward acting discs, reverse acting rupture discs are engineered to burst under vacuum or negative pressure, allowing for safe venting and safeguarding equipment and personnel from hazardous situations.

TECHNICAL SPECIFICATION	
Size range	1"-12" (25-300mm)
Burst pressure range	10-2,500 psig (0.69-172.3 barg)
Temperature range	-120°F to 1000°F (-84°C to 538°C)
Max. Operating Ratio	95%
Performance Tolerance	+/-5%

NON-RETURN VALVE

The check or non-return valve is most commonly used in pumping stations and allows the flow in only one (and always the same) direction thus preventing back flow when the fluid in the line reverses direction.

The main importance of this function is twofold: 1) To prevent damage to upstream equipment that can be affected by reverse flows such as other Valves and measuring equipment.

2) To prevent reverse flow after system shutdown.

TECHNICAL SPECIFICATION	
BODY	Carbon Steel, SS 304, SS 304L, SS 316, SS 316L
WITTED PARTS	Carbon Steel, SS 304, SS 304L, SS 316, SS 316L, Hastelloy-C, Halar Coating, PTFE lining
GASKET	PTFE, CNAF, Graphite
FASTNER	SS 304, SS 316, High Tensile Coating, Halar Coating

OUR CLIENTS

AARTI INDUSTRIES LIMITED

HMEL
Energising a Brighter Tomorrow

LUPIN

SUN PHARMA

AM/NS INDIA

ओएनजीसी
ONGC

राष्ट्र की सेवा में परमाणु
भा प अ कें
BARC
ATOMS IN THE SERVICE OF THE NATION

SERUM INSTITUTE OF INDIA
Cyrus Poonawalla Group

Bharat Petroleum

राष्ट्र की सेवा में परमाणु
ई सी आई एल
ECIL
ATOMS IN THE SERVICE OF THE NATION
इलेक्ट्रानिक्स कारपोरेशन ऑफ इंडिया लिमिटेड
Electronics Corporation of India Limited

CEAT

TATA
TATA POWER

DUPONT

AEGIS

RALLIS INDIA LIMITED
A TATA Enterprise

Cipla

Reliance
Industries Limited

HEAD OFFICE ADDRESS:
Pl.No.51, Road No.3, Sector 1/S, Behind Cidco Office, New Panvel (E), Navi Mumbai, Maharashtra- 410206 India

FACTORY ADDRESS UNIT 1:
ONUS EQUIPMENTS PVT LTD Plot No: 63/2/B, Palekhurd, Taloja MIDC District: Raigad, Maharashtra 410208 India

ONUS GROUP

of companies

ONUS EQUIPMENTS PVT LTD
ONUS ENGINEERING

VISIT US:
www.onusgroup.co.in

GUJARAT FACTORY ADD UNIT 2:
ONUS EQUIPMENT PVT LTD
D-2/E-48, Dahej GIDC-II, Taluka: Vagra District: Bharuch, Gujarat , -392130 India

SOUTH OFFICE
KANHAIYA INTERNATIONAL
Villa -7, Plam st Vadalapudi Sezpost Autonagar-E Block Vishakhapatnam -530046 India
Ph No: 8686353709

CONTACT US:
Phone No.: +91 9029229797
9821338114/9833192783/9376815111
EMAIL:
Info@onusgroup.net , sanket@onusgroup.net, onusengg@gmail.com , yuvraj@onusgroup.net
sales@onusgroup.net