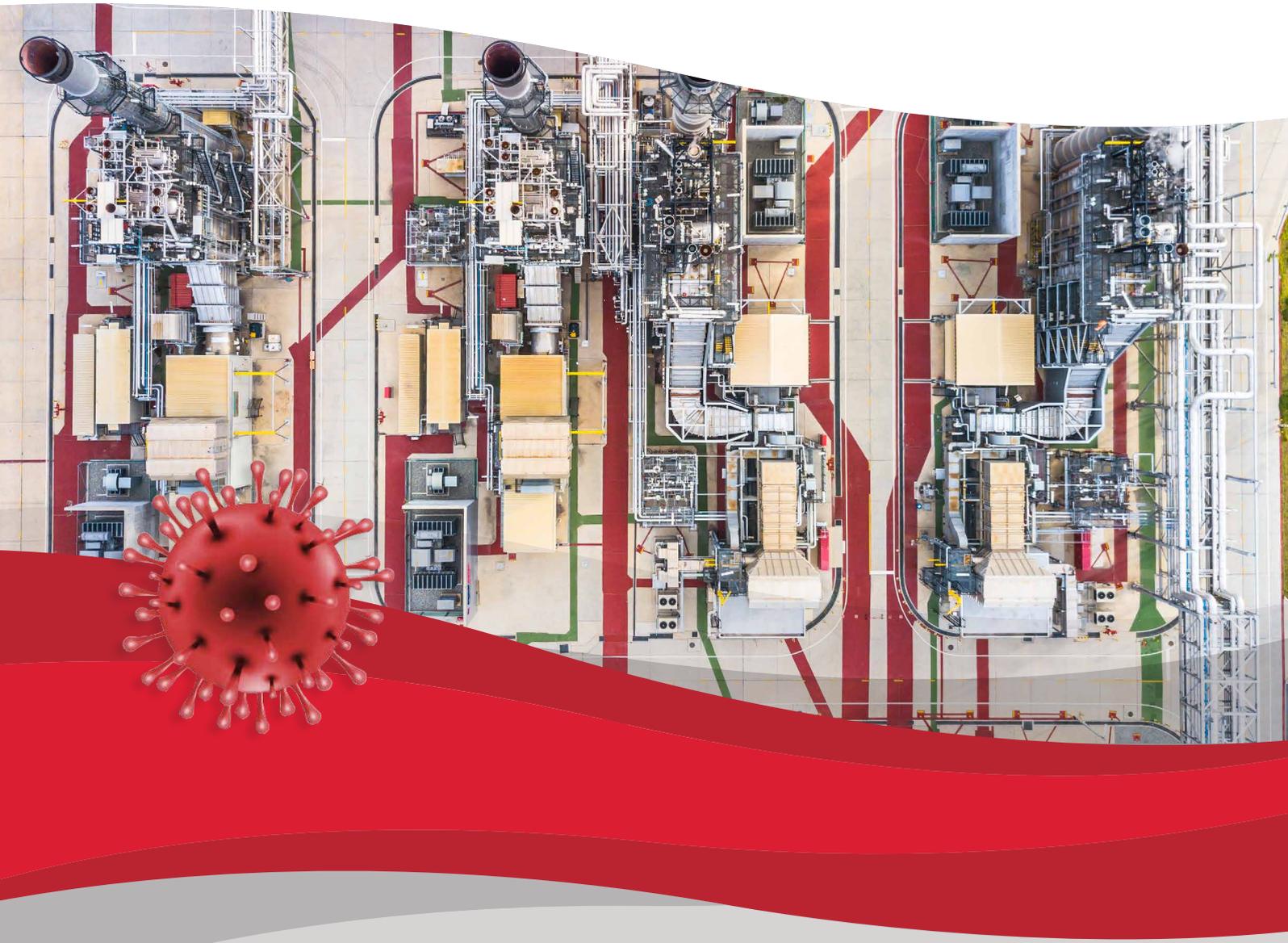


WHITE PAPER

Optimising EPC Contracts in COVID-19 Crisis

Including simple guidelines for EPC companies that
have to deal with compressed air purchases



Introduction

The coronavirus outbreak (COVID-19), the prolonged quarantine responses and the enormous economic uncertainty are affecting the normal development of EPC contracts.

EPC stands for Engineering, Procurement and Construction and is a prominent form of a contracting agreement in the construction industry. They are not only carried out in the construction sector, but also in other industries such as power generation, oil & gas, petrochemical, chemical, water treatment, mining, among other sectors. The EPC model is used where an owner or employer wishes to engage a contractor to undertake the engineering, procurement and construction of a project. Normally the EPC Contractor has to execute and deliver the project within an agreed time and budget, commonly known as a Lump Sum Turn Key (LSTK) Contract.

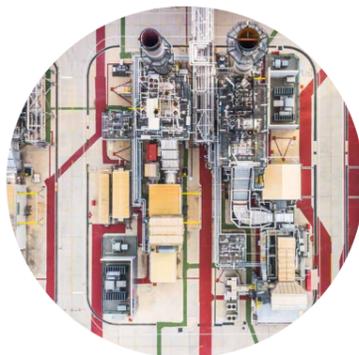
EPC projects are complex and generally involve longer-term commitments from both the project owner and the EPC contractor and equipment suppliers. On average, it could be said that the period to complete a project ranges from 12 to 24 months. Considering that EPC contracts usually involve several hundreds of millions of euros or dollars, the risks are large-scale and more so in complicated circumstances, such as those we are experiencing today.

The COVID-19 outbreak is imposing delays in the award or even cancellation of projects, construction deadlines, and milestones (due to the delay in the supply of equipment). In some cases, the COVID-19 outbreak prevents the possibility of on-site construction work therefore delaying project completion dates.

For certain projects that are currently in the development phase, all parties involved (end-user, EPC and suppliers) are reviewing their contracts to understand and renegotiate delivery dates, as well as reviewing other legal and financial implications.

This white paper outlines:

- What Force Majeure means in EPC Contracts
- The application of Force Majeure to COVID-19
- The impact and risks of COVID-19 in Every EPC Contracts Phases
- Simple guidelines for EPC companies that have to deal with compressed air purchases



What Force Majeure means in EPC Contracts

An unanticipated supervening event which is the fault of neither party and which prevents performance of the works is generally referred to as a "force majeure" event.

Although different definitions or approximations can be found, it can be said that in order for the situation to be defined as "force majeure", the event could not be reasonably foreseen, prevented, or its consequences avoided. In this regard, it may be instructive to see what the FIDIC (International Federation of Consulting Engineers) says about force majeure in their Yellow and Silver Books, A force majeure is an event:

- a) which is beyond a party's control,*
- b) which such party could not reasonably have provided against before entering into the contract,*
- c) which, having arisen, such party could not reasonably have avoided or overcome, and*
- d) which is not substantially attributable to the other party."*

Events or Circumstances

FIDIC also considers the following list of events or circumstances expressed as an exhaustive list of Force Majeure Events:

- i. war, hostilities (whether war be declared or not), invasion, act of foreign enemies;*
- ii. rebellion, terrorism, revolution, insurrection, military or usurped power, or civil war;*
- iii. riot, commotion, disorder, strike or lockout by persons other than the contractor's personnel and other employees of the contractor and sub-contractors;*
- iv. munitions of war, explosive materials, ionising radiation or contamination by radio-activity, except as may be attributable to the contractor's use of such munitions, explosives, radiation or radio-activity; and*
- v. natural catastrophes such as earthquakes, hurricane, typhoon or volcanic activity.*

Application to COVID-19

After reading the different scenarios in which certain circumstances could be classified as "force majeure", it seems that in the first impression, the COVID-19 virus could appear to be a "force majeure" event within the force majeure category. But the question for the end-user and the EPC contractor is, could the disruption of the supply chain and delays caused by the COVID-19 virus really qualify as "force majeure"?

Actually the answer to this question will depend on its characterization under the definition in the EPC contract. Classifying COVID-19 as a form of "physical natural disaster" may not be entirely correct, as it is not a geological or hydrological disaster. The classification by the World Health Organization of COVID-19 has been as a "Public Health Emergency of International Concern". This could help qualify COVID-19 as a Force Majeure Event.

A Force Majeure Circumstance definition or indeed a Delay Event definition may also include various types of government actions. In addition, EPC contracts often include clauses regarding changes in laws. With this, the EPC finds some relief when the change in a law may cause delays in the date of commercial operation and / or additional costs.

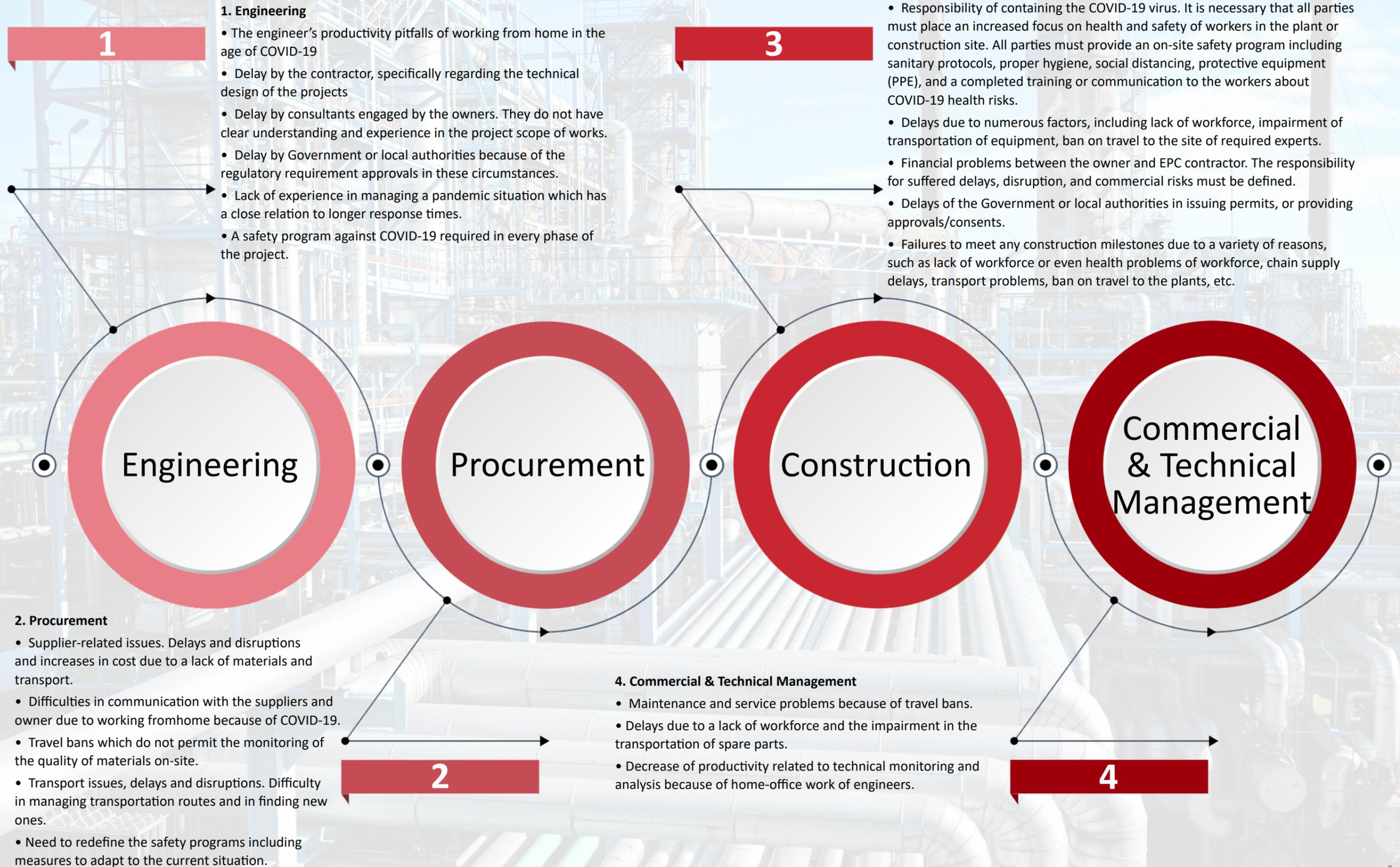
Taking all of the above into account, if the case occurs that the COVID-19 virus is considered a "Force Majeure Event" under the EPC contract, the EPC contractor will have the right to claim an extension of time in the event that the supply is interrupted and there are delays.

Conversely, if the COVID-19 is deemed not to be covered by any of the force majeure event definitions, the EPC contractor must bear the risk of reaching the original date or may even terminate their contract.

In any case, after what is happening with the COVID-19 virus, it is easy to think that in the future, more care will be taken to include these types of circumstances in EPC contracts.

The impact of COVID-19 in Every EPC Contract Phases

Depending on the phase of the EPC project, different effects and risks can be found to be faced. It is important to be aware of them to take measures to mitigate their impacts in the project:



Simple guidelines for EPC companies that have to deal with compressed air purchases

COVID-19 outbreak consequences from a financial, legal and commercial point of view are significant and should be analyzed correctly. Mitigating the risks in EPC projects is difficult and complex as the development of the pandemic is unpredictable. Below, you will find some tips to manage the situation with your compressed air supplier:

Align with your compressed air supplier:

All the main actors in an EPC project should be aligned, including the Project owners, the EPC contractor and the suppliers of key equipment. Maintaining a close relationship with your compressed air provider is even more important than before. The companies best prepared to respond to COVID-19 have built strong relationships with key suppliers and have put systems in place to provide visibility across the extended supply network to better understand their risks and drive specific actions based on their priorities.

Proactively reach out to your compressed air supplier so you can support each other through this crisis.

Trust in a reliable supplier

Trust in a supplier that has taken measures around health and safety, business continuity, integration execution, and capital structure and liquidity. Choose a supplier with robust financial strength. Ask your supplier about the measures they are taking during the COVID-19 pandemic.

The importance of project management

Choosing a supplier with a dedicated project management team is key to leading a project during the COVID-19 outbreak. This helps to proactively communicate with the supplier and give each other support in every project phase.

Managing EPC projects demands significant management and coordination resources and an ability to adapt. In each phase of the project, it is important to establish the tasks to be carried out with the compressed air supplier and to follow a method.

This plan incorporates: analysis of specification, product configuration and project integration, detailed engineering and documentation, manufacturing and assembly, testing, logistics, commissioning and start-up tasks and training.

Analysis of technical specifications

The process of studying and analyzing the technical specifications is crucial to the delivery of the client's requirements. During the COVID-19 pandemic, this is even more important. This includes a project description, quality standards, explosive environment certifications and system requirements. Study and adopt specifications to fulfil the requirements of your client.

Analyze the product range including custom and special requirements from the vendor that you will need. This information is key to choosing a good supplier of compressed air packages.

Product configuration & project integration

Product configuration should be simplified as much as possible to save costs. In addition, be sure to analyse operating parameters, power supply, space required, and maintenance and control requirements. With regards to project integration, be very clear about the needs of the global project to include the compressed air.

Flexibility

It is worth to consider additional flexibility in the contracts due to these unprecedented times. Contract amendments to address the potential impact and to try and secure a "fair" outcome to the COVID-19 crisis remain a reasonable and achievable option. The negotiation should be undertaken not only with the end-user or owner of the plant, but also with your compressed air supplier to adapt to the situation, and adjust the chain supply to the new circumstances provoked by the virus.

Think global

Gain a real-time and place situational awareness of

your compressed air supply. Identify potentially weak links especially in geographies currently affected by COVID-19 and those that could be impacted in the future. In this case, it is very important to trust in a supplier that can provide a flexibility and a global presence. That means a supplier with factories and multi-disciplinary teams that can provide solutions around the world.

Make the work safe

Invest in protective gear for workers and communicate via apps to manage time, availability and safety. Users must be trained on the relevant equipment and

should not work alone.

The EPC/user should provide a safety program that identifies specific safety training and communicate it to the compressed air supplier to ensure a safety in commissioning and start-up.

Stay Informed

The COVID-19 pandemic is still spreading. It is important to stay informed of any developments with respect to COVID-19, for example, supply chain issues, trade restrictions, new laws, etc. The situation is in a state of flux and it is necessary to continuously evaluate the impacts of COVID-19 on the project.

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Lean on us during COVID-19 crisis

Ingersoll Rand has taken measures around health and safety, business continuity, integration execution, and capital structure and liquidity. Ingersoll Rand's top priority is the health and safety of our employees, customers, partners and communities. The company is proud to provide mission-critical products and services that are helping to serve on the frontline of the COVID-19 pandemic.



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