

R1-A3. Report of data analysis and conclusions.



This work is licensed under a [Creative Commons Attribution-ShareAlike 4.0 International License](https://creativecommons.org/licenses/by-sa/4.0/)

“Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them”.



Institute of
Entrepreneurship
Development

INTRODUCTION

Based on the Principle of Human Dignity contained in the Universal Declaration of Human Rights and focusing on persons with disabilities as human beings on an equal footing and dignity with others, and more specifically on the fact that this condition of disability requires in certain circumstances specific measures to guarantee the enjoyment and exercise of rights on equal terms with other persons, In the workplace, there are several axes in which you can act and that to one extent or another, we will be influencing during the development of this project, always focused on the natural stone sector:

1. With the people themselves to establish realistic and efficient employability itineraries.
2. In the field of training, to improve professional and personal skills to achieve decent employment and the development of a professional career.
3. With companies, especially ordinary companies, to promote the incorporation of people with disabilities in their workforce and thereby incorporate diversity, equal opportunities and non-discrimination.
4. With society in general to remove barriers and stereotypes and ensure the fulfillment of rights.

Companies are largely unaware of the existing resources for the adaptation of jobs, personal adjustments and especially the reasonable accommodation required by law to avoid discrimination based on disability. A large number of companies still handle stereotypes and prejudices that are barriers to employment for people with disabilities.

We can define responsible and sustainable companies as those that, based on ethical behavior and respectful of different cultural sensitivities, create sustainable value; that is, economic, environmental, and social value in the short and long term. In this way, this type of companies contributes to the increase in the well-being of today's society and the progress of present and future generations both in their immediate environment and on the planet in general.

Equally important for this type of company is to have optimal working and economic conditions for its employees, as well as to promote a culture and values that ensure through a wise management of diversity, equal opportunities and non-discrimination.

Without losing sight of this, InclusiveSTONE seeks to promote the "inclusive transformation" of companies in the natural stone sector, providing through the reports that make up this project, information that allows them to approach the knowledge of people with disabilities and the accessibility of work environments as a previous and necessary step to reasonable adjustments or specific support products that each person requires.

As already mentioned in the methodology of this project, several companies in the sector located in the countries that make up the InclusiveSTONE consortium participated in the study



through questionnaires, to analyze their situation in the face of a potential inclusion of people with disabilities in their workforces and a total of 10 jobs representative of the normal activity of these companies have also been analyzed.

The data provided by the R1-A2 questionnaires have led us to assess to what extent the jobs analyzed could be adapted for the inclusion of people with disabilities in the natural stone sector, making a selection of five of them based on the conclusions that we will present below; positions for which in the development of this project we will make recommendations of training materials and possible criteria for their adaptation.

Therefore, in making the selection of these jobs, we have also considered the possibility of **reasonable accommodation**.

Reasonable accommodation means any change in a job or work environment that is necessary for a person with a disability to be eligible for, perform and advance in the functions of the job, or receive training on an equal basis. The aim is to enable persons with disabilities to access, take part in or advance in employment in employment. In this way, employees with disabilities could achieve the same job performance and have the same opportunities as employees without disabilities, doing things a little differently.

Under the **EU Employment Equality Directive**, employers must provide reasonable accommodation to employees with disabilities to the extent that this does not place a disproportionate burden on the employer. That is why, this criterion has been considered when selecting jobs within those analyzed.

Finally, it should be noted that, prior to our analysis, positions in the field of administration or auxiliary services such as access control manager have been ruled out since these are positions that we clearly recommend as an inclusion option since they could be performed by people with disabilities, and for this type of positions there are already multiple materials and training options available. Therefore, we have started from 10 more specific jobs in the natural stone sector.

Next, we will detail the conclusions of the job analysis and the criteria for the selection of 4 of them with which we will continue working in the InclusiveSTONE project.

In summary, based on the previous results, the project partners will elaborate a report in the task "R1-A3 Report of data analysis and conclusions" reflecting the identified transversal skills and competences as well as the specific adaptation needs of each job activity in the stone sector assessed.

This report and all the information about the project are available at the following url:

- InclusiveStone project website: <https://inclusivestone.eu/>



Institute of
Entrepreneurship
Development

Content

INTRODUCTION	2
1. INCLUSION DIAGNOSIS.....	5
2. JOB ANALYSIS	5
2.1. Activities and jobs	5
2.2. Adaptation of workplaces.....	6
2.2.1. Forklift truck.....	6
2.2.2. Truck driver	7
2.2.3. Crane	8
2.2.4. Calibration line, reinforcement.....	8
2.2.5. Block cutters and headers.....	9
2.2.6. Scraper, cutting table and other equipment	10
2.2.7. Maintenance operator	11
2.2.8. Board cutting machine	11
2.2.9. Terminations	12
2.2.10. Cleaning and waste management.....	13
3. CONCLUSIONS	14

1. INCLUSION DIAGNOSIS

The consortium that makes up InclusiveStone considers it necessary to carry out a survey that would allow evaluating the degree of compliance of the different dimensions in the companies with which it has contact. This survey has aimed to provide participating companies with an analysis that identifies opportunities for improvement to facilitate their passage or improvement to be an inclusive company. In addition, this survey has enabled us to gather valuable information on the accessibility of enterprises, the use of technical resources and tools, communication and information, attitudes and policies, standards and procedures. With this information, the consortium will be able to work more effectively with participating companies to improve their accessibility and make their work environments more inclusive for people with disabilities.

2. JOB ANALYSIS

2.1. Activities and jobs

In order to identify and analyze those jobs that may be more likely to incorporate personnel with disabilities, we have analyzed the specific requirements of 11 jobs, taking into account the skills and competencies necessary to perform the job effectively and from the data table that has been filled in by experts and companies in the natural stone sector.

We have considered it important to select those 5 that we consider could generate a greater number of job opportunities for the group of people with disabilities, or because they are less limiting and specific, and therefore with greater possibilities of finding qualified profiles, and with lower barriers to entry, and / or that would adapt better; in order to delimit the development of training activities and recommendations for adaptation to the activities that can be covered by this project.

The positions analyzed have therefore been:

1. Forklift.
2. Truck driver.
3. Crane.
4. Calibration line, reinforcement.
5. Block cutter and header.
6. Disc bridge, cutting table and other equipment.
7. Maintenance Operator.
8. Board cutting machine.
9. Finishes.

10. Cleaning and waste management.

2.2. Adaptation of workplaces

Once the jobs related in the previous section have been identified, we will present the conclusions of this analysis that makes us opt for five of them as more feasible to be occupied by people with disabilities, so that later the possible adaptations that must be made to guarantee accessibility and equal opportunities in the workplace will be evaluated.

During the analysis of positions, different factors have been considered in each of them: the skills required, the tasks to be performed, the skills required, conditions of the position in relation to furniture and technology to be used, environmental conditions and risk factors, training, work experience or other requirements demanded by each position.

We go on to present the conclusions of the analysis of each position:

2.2.1. Forklift truck

It is a position that given the characteristics of the tasks required (forklift handling, handling and loading and unloading of materials by forklift and basic maintenance operations), most of them automated and the degree of complexity comparatively less than other positions analyzed, in principle we think that they could be carried out or adapted more easily than others, for the realization by people with disabilities.

The analysis of this position shows that manual dexterity is required, ability to move, requires previous knowledge of driving and possessing the qualification for the handling of the forklift, tolerance to situations of stress or mental fatigue, personal autonomy, ability to interpersonal relationship and communication, orientation in the environment, handling of documentation (delivery notes), skill in handling the equipment, vision and hearing and occasionally verbal and oral comprehension.

Regarding the skills required by the position, we think that the most delicate are those related to position and effort and that the exact requirements for each position of this type in particular by the companies must be thoroughly defined, in order to carry out an adequate selection process and the precise adaptations where appropriate since, We have detected that in some cases this post presents the risk of forced postures and that they can be prolonged in time and that it may be the case of non-mechanization or automation of loading and unloading operations, which could involve considerable effort.

This position on the other hand may present access barriers to the cab of the forklift, or the presence of small unevenness and uneven terrain. In addition, the environment may present certain risks to consider when determining the most advisable type of disability to work in this type of position, such as conditions of exposure to extreme temperatures if outdoor work is

performed, humidity, poor lighting, noise or vibrations. Likewise, and in line with the characteristics of the natural stone sector, there may be exposure to chemical substances or dust.

Notwithstanding all the above, it is a position in which, yes, there would be the possibility of making adaptations and reasonable adjustments of certain conditions, which would allow the incorporation of people with disabilities.

It will therefore be the occupation of FORKLIFT OPERATOR one of those selected to work on this project. In activity R1-A4 we will detail which disabilities we think might be more likely to adapt to this position, as well as propose possible adjustments that companies could apply to facilitate the access of people with disabilities to their workforces.

2.2.2. Truck driver

Among the tasks of the position are those of driving and circulation of the vehicle, together with the continuous review of its condition (tires, fuel, bodywork, cleaning) and that of the load, in addition to the previous adaptation to the loading and unloading activities.

The analysis of this position shows that skill and previous knowledge are required in the handling of these vehicles of large size and capacity, so that a wide manual dexterity is necessary both for driving tasks and for the preparation of stowage and unloading, ability to move (raising or lowering a considerable height of the truck bed, and between the load), tolerance to situations of stress or mental fatigue, personal autonomy, ability to interpersonal relationship and communication, orientation in the environment, handling documentation (delivery notes), skill in handling equipment, vision and hearing and occasionally verbal and oral comprehension.

Regarding the skills required for the position, we think that the most delicate are those related to the prolonged sitting position, the ability to move between the load of the truck and the raising and lowering of the passenger compartment of the vehicle, in addition to the force necessary for the opening and closing of doors of the box. Therefore, the exact requirements for each position must be defined in detail by the companies, to carry out an adequate selection process and the precise adaptations where appropriate.

However, even though it is a position in which, there would be the possibility of making reasonable accommodations and adjustments for the incorporation of people with disabilities; This position requires previous knowledge of driving and possession of the truck license. Obtaining this involves the previous overcoming of a theoretical part and driving practices that today are an important economic outlay and has become one of the main barriers to entry for the transport sector in general, so we think that even being able to be made or adapted by people with disabilities.

Therefore, the occupation of TRUCK DRIVER will not be one of those selected to work on this project.

2.2.3. Crane

It is a position based mainly on the handling of machinery for the mobilization of loads of heavy materials in loading docks, trucks, platforms and containers, signaling and process supervision.

Since the position of crane operator requires specific training and an enabling card for its performance, in many cases these have been seen as an opportunity for improvement for many workers in the construction sector. In the case of people with disabilities who had been developing eminently physical jobs as laborers or construction officials, and due to a disability or supervening disability have had to abandon them, jobs such as this have meant and represent an opportunity for requalification and improvement in working conditions, compatible with their disability.

After the analysis of the position it is determined that it requires some manual dexterity for the handling of the equipment, ability to move accompanying the load to avoid accidents, tolerance to situations of stress or mental fatigue by performing monotonous work, personal autonomy, ability to interpersonal relationship and communication, orientation in the environment, handling of documentation (delivery notes), skill in handling equipment, vision and hearing and occasionally verbal and oral comprehension.

The exact requirements for each position should be defined by the companies, to carry out an appropriate selection process and the necessary adaptations where appropriate. It is a position in which a priori it is not associated with a great physical effort of loads, and in which there would be the possibility of making adaptations and reasonable adjustments of certain conditions, which would allow the incorporation to them of more people with disabilities.

The occupation of CRANE OPERATOR will be one of those selected to work on this project. In activity R1-A4 we will detail which disabilities we think could be more susceptible to adaptation to the position, as well as propose possible adjustments that companies could apply to facilitate the access of people with disabilities to their equipment.

2.2.4. Calibration line, reinforcement

The work consists of the use and supervision of calibration equipment, and surface finishes, classification work, material reinforcement operations and the handling of loads for feeding and unloading production lines.

As the production lines are attended by several people, this teamwork favors the complementarity between people with different levels of training and / or experience, and therefore makes possible the inclusion among others of people who did not have experience or needed support in their adaptation and integration process.

In addition, it is usually a position carried out by those who start in the sector, therefore, not necessarily with experience, it can be an opportunity for people without a special qualification, and / or interested in learning the profession and entering the sector.

The various functions (calibration, reinforcement, classification and transport, treatments / application of products and realization of finishes) that it entails, make that a priori the work facilitates postural changes.

The analysis of this position shows that manual dexterity is required for the handling of the pieces, ability to move with the possibility of small unevenness and irregular terrain, orientation in the environment, skill in the handling of the equipment, vision and hearing and occasionally verbal and oral comprehension.

According to the requirements in terms of skills necessary to develop the position, we think that the most delicate are those related to position and effort, the application of materials and chemicals, and the non-mechanization or automation of some loading and unloading operations of the products, which could involve an additional effort. In addition, the environment may present certain risks to consider, such as exposure to extreme temperatures if outdoor work is carried out, humidity, poor lighting, noise or vibration.

For all the above, the occupation of CALIBRATION LINE, REINFORCEMENT will be one of the occupations with which we will work in this project. In activity R1-A4 we will give more information about the possible adaptations to be made by companies, and what disabilities we think could be more easily adapted to this position.

2.2.5. Block cutters and headers

It is a position in which the person who performs it must supervise the movement and handling of the large blocks through the factory both through the bridge crane and the wagons, to the block cutting machine, taking measurements of the blocks and cutting them to cut the pieces in clean cuts Program the cutting machinery, and change and adapt it after each use.

The analysis of this position shows that a high manual skill is required in the handling of the equipment to avoid accidents and / or errors in cutting, strength to handle the cut parts and waste to the rubble wagon, ability to move, tolerance to stress situations caused mainly by the control of several machines that work simultaneously (block cutter and header) and by delivery times, autonomy and responsibility, ability to interpersonal relationship and communication, orientation in the environment, handling documentation, skill in handling equipment, vision and hearing and occasionally verbal and oral comprehension.

This post may have access barriers due to the presence of uneven terrain. The environmental environment can present certain risks, such as exposure to extreme temperatures if outdoor

work is performed, humidity, noise or vibration. Likewise, and in line with the characteristics of the natural stone sector, there may be exposure to chemical substances or dust.

Regarding the skills required for the position, we think that the most delicate are those related to the supervision of several equipment and processes at the same time, the expertise of the activities of measurement, preparation and cutting of the pieces and the responsibility of the good work of these for the loss that for the company could have an incorrect performance, and the non-mechanization of some of the loading and unloading operations, which could involve considerable effort.

Therefore, the degree of complexity is comparatively higher than other positions analyzed, so in principle it seems reasonable that they should be carried out by people with more previous experience in the sector.

Therefore, the occupation of BLOCK CUTTER AND HEADER will not be selected to work on this project.

2.2.6. Scrapper, cutting table and other equipment

It is a position that according to the required tasks will carry out the handling of blocks to the corresponding machine, as well as the tables, and final pieces to measure, together with the programming, supervision, and adaptation of the cutting equipment. As in the previous case, many of these tasks are automated with sophisticated cutting programs depending on the equipment used, but therefore, in any case, they have a certain degree of complexity with respect to other positions analyzed.

According to the demands of the position, manual dexterity and knowledge are required for the handling of this equipment to avoid accidents and errors in the cutting of materials, ability to move through the factory that may present small unevenness and uneven terrain, strength for handling the parts, tolerance to situations of stress or fatigue caused by the control of the process of the machines and delivery times, autonomy and responsibility, ability to interpersonal relationship and communication, orientation in the environment, handling documentation, vision and hearing and occasionally verbal and oral comprehension.

According to the skills required for the position, we think that on which more attention should be paid are those related to the programming, supervision and adaptation of the different equipment, the completion of the cutting of the pieces and the responsibility of the good work of these for the loss that for the company could have an incorrect performance, and the non-mechanization of some of the loading and unloading operations of finished products, which could involve considerable effort.

In addition, the environment may present certain risks to consider such as conditions of exposure to extreme temperatures if outdoor work is carried out, humidity, poor lighting, noise or vibration.

Therefore, it seems reasonable that these positions could be performed by people with experience and / or previous training in the sector, so the occupation of DISCOPUENTE, CUTTING TABLE AND OTHER EQUIPMENT will not be selected to work on this project.

2.2.7. Maintenance operator

Among the tasks required for the position are periodic repair and maintenance work on mechanical, electrical, welding, hydraulic equipment, and the programming of automata. These can be developed both in the farms and / or quarries, on the access tracks to these facilities, on work platforms, in the vehicles and machinery of the company, and / or in the factories.

Given the breadth of knowledge required in various subjects, such as the complexity of a large part of the functions, it hinders access to most candidates, and leaves the possibilities of access to these positions in the hands of a minority.

According to the skills required for the position, we think that on which greater attention should be paid due to the risk, are those related to the combination of work in the factory and in quarry, in atmospheric conditions a priori difficult due to conditions of exposure to extreme temperatures, humidity, poor lighting, noise or vibrations, and / or physical risks typical of the activity (entrapment, burns, cuts, electrical contacts,..), forced and prolonged postures, wandering on small slopes and uneven terrain, work at different heights, and exposure to chemicals or dust as well.

Therefore, it seems reasonable that these positions could be performed by people with extensive experience in the functions of the position, therefore, the occupation of MAINTENANCE OPERATOR will not be selected to work on this project.

2.2.8. Board cutting machine

Among the tasks required for this position are the transfer of the blocks to the machinery, handling of the equipment, and introduction of measurements, cutting, surveillance and removal of the boards mostly of them automated.

The analysis of this position shows that manual dexterity is required for the handling of the pieces, ability to move (the work can be done on a platform at height), tolerance to situations of stress or mental fatigue, personal autonomy, ability to interpersonal relationship and communication, orientation in the environment, skill in handling the equipment, vision and hearing and occasionally verbal and oral comprehension.

Regarding the skills required for the position, we think that the most delicate are those related to position and effort. In addition, the environment may present certain risks to consider when such as the conditions of exposure to extreme temperatures if outdoor work is carried out, humidity, poor lighting, noise or vibrations, and / or wandering through small unevenness and irregular terrain. There may also be exposure to chemicals or dust.

Therefore, the degree of complexity is greater than other positions analyzed, so in principle it seems reasonable that they should be carried out by people with previous experience in the sector and who had previously passed through other positions in the company.

The occupation of TELAR has not been selected to work on the following items of this project.

2.2.9. Terminations

It is a position that, as its name suggests, includes finishing tasks of the pieces through automatic and manual equipment, supervision of these equipment and handling of the loads for feeding and unloading of the lines of the different terminations. The equipment can be very varied (cutting, polishing, finishing equipment drills and other anchoring equipment) depending on the type of finish that the material requires.

The analysis of this position shows that a wide manual dexterity is required by the number of tools to be used in the completion process, ability to move, tolerance to situations of stress or mental fatigue, personal autonomy, ability to interpersonal relationship, orientation in the environment, handling documentation, skill in handling the equipment vision and hearing and occasionally verbal and oral comprehension.

According to the requirements in terms of skills necessary to develop the position, we think that the most delicate are those related to position and effort, the application of materials and chemicals, and the possible non-mechanization or automation of loading and unloading operations of finished products, which could involve an additional effort.

In addition, the environment may present certain risks to consider, such as the presence of small slopes and irregular terrain, the conditions of exposure to extreme temperatures if outdoor work is carried out, humidity, poor lighting, noise or vibrations.

However, it is a complex position, due to the diversity of techniques and equipment to be used, of great responsibility for being the final part of the process.

The occupation of TERMINATIONS has also not been selected to work with her in the further development of this project.

2.2.10. Cleaning and waste management

Before starting, we will point out that although this position as such, does not exist in most of the companies consulted, we have carried out the analysis of it since we believe that it is a position that we recommend that companies value the possibility of their inclusion in their productive structures since, in addition to offering a very interesting possibility of inclusion of people with disabilities in their templates, It can be an effective solution to various problems that arise in normal activity derived from lack of cleanliness or inefficient management of waste produced during the various phases of production in the natural stone sector, without forgetting that it could also be an alternative to reduce to some extent the permanent risk of silicosis that exists in the sector.

This position can cover both industrial cleaning, office cleaning and waste management tasks.

It is a position that given the characteristics of the tasks required (cleaning services of a punctual nature and also cleaning maintenance work that requires specialization, identification of the need for material resources: cleaning products and protective equipment necessary to carry out the service, and controls its stock in the warehouse of the work center, managing its replacement when appropriate, knows the hygiene plan and the safety data sheets of the cleaning products used in each of the work centers, performs cleaning by manual means and / or specific machinery (polishers, sweepers, industrial vacuum cleaners, injection and extraction machines, etc.), applies different industrial cleaning techniques, such as ultrasonic cleaning, pressure or dry steam cleaning, among others, completes work control notes and communicates and / or manages service incidents, both real and potential, to apply the necessary corrective and / or preventive measures, manages the collection, classification and treatment of waste produced) and the degree of complexity comparatively lower than other positions analyzed, in principle we think that they could be carried out or adapted more easily than others, for the realization by people with disabilities.

The analysis of this position shows that manual dexterity, ability to move, occasionally tolerance to situations of stress or mental fatigue, personal autonomy, occasionally interpersonal relationship and communication skills, orientation in the environment, handling documentation (delivery notes), skill in handling equipment, vision and hearing and occasionally verbal and oral comprehension are required.

Regarding the skills required by the position, we think that once again, the most delicate are those related to position and effort and that the exact requirements for each position of this type in particular by companies must be thoroughly defined, in order to carry out an adequate selection process and the precise adaptations where appropriate since, We have detected that in some cases this position presents the risk of forced postures that produce physical overload or musculoskeletal injuries or occasionally some weight loading.

This post on the other hand may present access barriers to heights, cleaning of areas of difficult access, or the presence of small slopes and irregular terrain. In addition, the environment may present certain risks to consider when determining the most advisable type of disability to work in this type of position, such as conditions of exposure to extreme temperatures if outdoor work is performed, humidity, poor lighting, noise or vibration. Likewise, and in line with the characteristics of the natural stone sector, there may be exposure to chemical substances or dust. In addition, the use of specific cleaning machinery can also entail certain access barriers and risks.

Notwithstanding all of the above, it is a position in which, taking into account that no prior training is required, and specific training can be accessed in a simple way, there would be the possibility of making adaptations and reasonable adjustments of certain conditions, which would allow the incorporation of people with disabilities since the level of specialization and complexity required compared to other positions is much lower.

It will also be the occupation of CLEANING AND WASTE MANAGEMENT OPERATOR one of those selected to work on this project. In activity R1-A4 we will detail which disabilities we think might be more likely to adapt to this position, as well as propose possible adjustments that companies could apply to facilitate the access of people with disabilities to their workforces.

3. CONCLUSIONS

For all the above, it has been considered to study in detail in activities R1-A4 the five selected posts:

1. Forklift.
2. Crane.
3. Calibration line, reinforcement.
4. Cleaning and waste management.

We must remember that, throughout the development of this project, we intend to give guidelines to companies in the natural stone sector to open their minds and break barriers to access for people with disabilities, showing them examples of adaptations and reasonable adjustments that can be replicated or even help them create their own adaptations.

Both for these selected positions and for the rest of those analyzed, we must not forget, however, that the final decision regarding the performance of the same by a person with disabilities and, where appropriate, the applicable adjustments, will depend on each worker in particular since, although we will make proposals regarding possible pathologies that can be better adapted to the positions, Generalization is never possible because each individual finally



has its own characteristics and ultimately, human resource management consists of working with people, and each one is undoubtedly unique.



institute of
Entrepreneurship
Development