

# SCAFFOLD

# Improving Training, Working Conditions, andTransformation in the European Scaffolding Sector

**Country report Denmark** 

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# 1.0 The overall economic situation of the sector:

# 1.1 General economic figures

It has not been possible to collect general economic key figures for the scaffolding industry, but Annex 1 lists the Danish scaffolding companies organised in the Danish Construction Industry Association, Scaffolding Section, figures for 2022, with the exception of one foreign company and 2 I/Ss. A few of the companies also provide services other than service-oriented scaffolding work, but for the most part they are pure scaffolding companies. The Danish Construction Industry Association has about 70 member companies that employ around 1,300 scaffolders, according to the section itself.

The Danish scaffolding industry has around 1,500 employees, which can rise to around 2,000 employees in the peak periods around the summer months, which is of course cyclical. The data is subject to some uncertainty, as there is no so-called industry code for calculating the figures.

To go by the data from Statistics Denmark's Research Service (BFL), employment in April 2022 was around 1,377 employees (seasonally adjusted), so that the figures from different sources must be considered consistent.

The industry generally has a low unemployment rate, but, as mentioned, employment is seasonal. The latest unemployment figures (internal from 3F) as of 1 March 2023 are 119 unemployed scaffolding workers.



# 1.2 The development of the economic performance over the last years

Employment in the scaffolding industry 2010-2022 according to Statistics Denmark's Research Service (BFL). As you can see, it is a small industry, which can accordingly see significant fluctuations in both employment and unemployment.



Unemployment figures 2017-2022 according to 3F's internal unemployment figures.

1.3 Relevant framework conditions

# Practical organisation of work:

The Danish scaffolding industry is characterised by a high degree of independence in the planning, calculation and performance of the work by trained scaffolders.

So it is also rare for companies to use foremen or similar types of employees on the job to manage and distribute, as well as plan the work during performance. Scaffolders perform this task for themselves.

This is because Danish scaffolders learn about the applicable rules and regulations and how to perform calculations on scaffolding types that require calculations during the 2-year scaffolder training programme. Planning is also part of the programme, but there is also practical training in companies.

In addition, the programme requires a truck driver's licence, as well as crane and forklift certificates. Transport and material handling, as well as loading and unloading, are thus also a natural part of the working tasks.

Scaffolders generally work together in shifts/teams of 2-3 people. On some projects, staffing levels may be higher, with several shifts/teams working together on the task.

Scaffolders arrive at their company every morning and evening and gather in their shared dining and lounge area, a so-called "Borgerstue". Here, they discuss the status of new and completed tasks, staffing, etc.

Each morning, company representatives delegate the projects and tasks to be completed that day or pass on information on longer-term tasks, such as schedules, changes, etc.

In this context, scaffolders are given drawings of the relevant buildings and summaries of the tasks to be performed.

Once the scaffolding workers have been assigned and allocated their tasks, they count and sort the calculated scaffolding materials to be used for the specific task(s) to be performed. The materials are then loaded onto one or more trucks, in which the individual shifts/teams transport them to their specific task(s).

In some special cases, scaffolding materials are delivered on site. This usually happens on sites of longer duration and where the amount of material to be used for the job or re-erection has a certain volume.

On long-term assignments, scaffolding workers meet and end their working day at the job site and do not go in to the company unless this has been agreed or there are acute shortages of equipment, etc.

The fact that the scaffolding workers meet both morning and evening helps to create a sense of consensus within the company and to promote discussion of key issues with colleagues on an ongoing basis, something which can often be a challenge in the construction industry.

# Offshore

In addition to onshore scaffolding, several companies have specialised in supplying or performing scaffolding work offshore.

The 2-year scaffolding training programme also covers this offshore work due to the qualification requirements in the programme, including calculation-intensive scaffolding. However, where work is carried out offshore, it is a precondition, and often a requirement, that special offshore safety courses must be completed on offshore platforms and by the companies operating the platforms.

Unlike scaffolding work on land, there are special rules for offshore, and scaffolding companies and personnel are accordingly included in the rotation schemes that apply to the companies that do offshore work.

This means working in pre-determined work schedules, with outbound and return travel.

The work carried out offshore is often focused on platform maintenance and is primarily carried out in system scaffolding customised to the individual tasks.

In connection with the maintenance of offshore platforms, some of this work takes place on quayside tasks in harbours, where work is carried out just as if it were on land.

# 1.4 Labour market conditions

The labour market is regulated by collective agreements (see more under social dialogue).

# 1.5 Forms of employment

The scaffolding industry's installers come from a wide range of educational backgrounds. There are former teachers, engineers, soldiers, people with other work experience or education from other industries, but also young people straight from high school. It's safe to say that it's an industry with employees from very different backgrounds. What they have in common is training as scaffolders and a very high degree of organisation in the profession, as well as a very active national association that works for the profession, education, pay and working environment and the industry. The feeling among scaffolding workers is one of a certain pride in belonging to the profession.

Scaffolders' employment conditions are regulated by the collective agreements between the parties, see more under sections 6.0 and 6.5. In the Danish labour market, there are also some areas that are regulated by law. This applies, for example, to health and safety legislation, much of which comes from the EU. Some matters are a combination of collective agreements and legislation, such as employment certificates.

The collective agreement stipulates a 37-hour working week, and the vast majority of scaffolders work on a piecework basis, i.e. with pay by performance. The collective agreement that regulates pay and working conditions is a so-called minimum wage agreement, where wages are negotiated locally at least once a year. In practice, however, it is often the case in the construction industry that wages are negotiated for each new site as it is started up.

The typical salary for a scaffolder in the Capital Region of Denmark in Q4 2022 was DKK 252, whereas for the Construction industry it was DKK 216 in the same period<sup>1</sup>. This is the agreed wage and excludes the employer's pension contribution, benefits and irregular payments such as bonus payments. This is consistent with the idea that the organisation of the scaffolding industry and the high volume of piecework drives up wages in the industry.

Scaffolding work in Denmark is primarily carried out on a piecework basis, which translates to pay by performance, i.e. remuneration is based on the work performed and so effectively a predetermined payment. The piecework system drives the evolution of wages in the industry, which is similar to the dynamics of the rest of the construction industry. The use of performance-based pay also contributes to more thorough planning of the work.

In the Building and Construction Collective Agreement, special chapters and sections have been agreed that constitute rules for performing this so-called piecework. In addition to these rules, agreements have been reached between the parties on pricing for piecework, which is found across all industries.

<sup>&</sup>lt;sup>1</sup>The "direct salary" salary concept is used

The price list for service-oriented scaffolding work, which covers the entire scaffolding area, is a collection of prices and payments for work performed down to a level where there is a unit price for each part, and it may be regarded as the agreed basis of payment for piecework done. In addition to prices and pricing, the price list also includes industry-specific rules and agreements.

The price lists are directly linked to the Building and Construction Collective Bargaining Agreement and thus form part of the basis of agreement between the parties. New topics such as new scaffolding parts or changed methods are discussed and negotiated in an ongoing process in a so-called price list committee with representatives from both the Scaffolding Section and the scaffolding workers' national association. Pricing and payment basis, occupational health and safety initiatives are a natural part of this work and are included in the pricing process.

The latest initiative is that, in order to promote a better working environment and reduce wear and tear, prices and payments have been reorganised to make the use of heavier scaffolding equipment more expensive. The purpose of this is to create a motivation to invest in lighter equipment and utilise the lighter parts that are already available today.

In the scaffolding sector, there is also a small number of self-employed individuals and temporary agencies with foreign labour, but the perception is that the level of this is lower than in the rest of the industry. This can be attributed to a high degree of organisation in a relatively small industry with a strong community that can identify companies that exploit the use of foreign labour, etc. As in the rest of the construction industry, foreign labour generally has poorer conditions, especially due to the low level of education, which creates challenges for safety on scaffolding, in particular. In addition, lack of knowledge of the Danish model and so of the wage formation in the industry has a major role. As a result, foreign employees are often paid around the minimum wage and are not familiar with the piecework system or their right to local wage negotiations. This creates a breeding ground for underpayment of foreign labour. However, in the scaffolding industry this is less of a problem than elsewhere in the construction industry due to the high level of unionisation (around 94%).

Another challenge is the European recognition of training programmes. Recognised training from another EU country through the Danish Working Environment Authority does not necessarily mean that the scaffolder's training in their home country enables them to work on the erection, alteration or dismantling of scaffolding in Denmark. This is because the requirements for erection, alteration, dismantling and organisation of scaffolding are often higher in Denmark than in many other member states. A good example is the implementation of the directive on full protection when working at height, which in Denmark, unlike many other EU countries, is a natural part of the work, so that collective protection, where possible, always comes before individual protection through the use of e.g. retractable guardrails.

## 1.6 Gender Equality

The scaffolding industry is a highly male-dominated industry, just like the rest of the construction industry. In 3F Byggegruppen, around 2% of members are women, which reflects the distribution in the industry in general. The number of female scaffolding workers can be counted on one hand. This is a result of both a culture, but also of the physically demanding work. The scaffolding association is working to get more women into the industry, not least because experience shows that it's good for everyone when a woman becomes part of the workplace.

So it is also a positive factor that, in connection with the conclusion of Action Plan 1, Action Plan 2 and Action Plan 3 cf. section 2.0, with a focus on improving the working environment and minimising attrition, an incentive is being created to encourage more women to enter the industry.

# 2.0 Working conditions



# 2.1 Accidents and their development

The scaffolding industry has one of the highest accident rates in Denmark. The average Danish incidence rate in 2022 was 240 per 10,000 FTEs. For building and construction just under 600, and as the graph shows, around 1,300 for the scaffolding industry. However, it should be noted that the accident incidence rate covers all accidents related to work on scaffolding and not just accidents for scaffolding workers, which is why the statistics are very likely to be over-represented.

When erecting scaffolding, there is a clear division of responsibilities in the operational procedure that describes who is responsible for the scaffolding and when, see Annex 2. A scaffold must be able to be used safely for the work to be performed from it.

It is the responsibility of the scaffolder to ensure that the scaffolding is erected properly. This applies, in particular, in relation to support and fastening conditions, anticipated loads, including weather conditions, and other conditions that could affect the stability and load-bearing capacity of the scaffolding.

The responsibility for ensuring that the scaffolding is designed so that work can be carried out safely from it rests with the scaffolder as supplier, if it is the scaffolder who has determined the specific layout. If the specific layout is determined by the designer or by the person who ordered the scaffolding, it is the responsibility of the scaffolder to ensure that the layout of the scaffolding is safe and that the scaffolding corresponds to what was ordered.

It is the scaffolding erector's responsibility as an employer to ensure that the employees' work of erecting and dismantling scaffolding is planned, organised and carried out in a fully responsible manner. This means, in particular, that the employees have received adequate education, training and instruction, including in the manufacturer's instructions for use, and that they are protected against the risk of falling during the work.

There is a culture in the industry by which the union for scaffolding workers, Stilladsarbejdernes Landsklub under 3F, has emphasised the importance of reporting all accidents in order to get accurate statistics. This is something that is being slow to develop not only in other parts of the construction industry, but also in other industries. This means that the number of unreported accidents may be higher elsewhere than in the scaffolding industry, but of course it also means that scaffolding has a significantly higher accident rate than others.

The Scaffolding Association has previously conducted an in-depth analysis of 112 accidents in the industry from 2003-2008. The study showed that the vast majority (48%) had occurred in terrain, vehicles and other contexts where they could be attributed to poor planning. Only 5% of the accidents could be directly related to frame fencing and scaffolding assembly. In addition, around 38% were in and on the scaffolding, and so had nothing to do with frame fences or falls. Around 8% occurred on rolling scaffolding, which is not erected or used by scaffolders, but by other construction professionals.

	Number of accidents	Reason as a percentage
1) Other accidents, on and from scaffolding	35	31.25
2) Fall through ladders	8	7.14
3) Fall from building/scaffolding	4	3.57
4) Not directly scaffolding	7	6.25
5) Falling from the load	21	18.75
6) Falling on the ground	22	19.64
7) Accidents with mobile scaffolding	9	8.04
8) Fall for unknown cause	6	5.36
	112	

#### 2.2 Special attention to the ergonomic working conditions

The parties in the scaffolding sector have long focused on physical wear and tear and ergonomics in the industry and how the physical working environment could be improved. DI Byggeri, 3F and Arbejdstilsynet have approved and implemented three action plans to improve the working

environment in the industry. These action plans have changed the culture in the scaffolding industry and have been a lever for constant work to improve the working environment. See Annex 3 for the overall action plans.

#### Action Plan 1 (2005):

Action Plan 1 is intended to minimise loads caused by manual handling where technically and economically feasible both horizontally and vertically. The action plan focuses on minimising loads using technical aids for manual vertical transport, horizontal transport and loading and unloading of vehicles.

#### Action Plan 2 (2011):

Action Plan 2 has been prepared on the basis of a letter of formal notice from the EU regarding the implementation of the EU directive on work at height, which, according to the European Commission, was not implemented correctly as there was not full safety for scaffolders during assembly and dismantling of scaffolding. Action Plan 2 has both an adaptation and a development track. The adaptation track relates to full fall protection in all open fields, including making it mandatory for scaffolders to wear harnesses when assembling and dismantling column and frame scaffolding, as well as additional measures. The development track deals with training initiatives aimed at strengthening occupational health and safety efforts in the scaffolder training programme.

#### Action Plan 3 (2019):

Following an increased regulatory focus on addressing the challenges of attrition in the industry, the parties introduced Action Plan 3 with a focus on reducing the overall physical strain when erecting and dismantling scaffolding. Among other measures, the agreement includes a plan to fully implement Action Plan 1, the involvement of employees in occupational health and safety planning in the company and future work to change the pricing in the piecework system to make it more expensive to erect heavy scaffolding equipment to give employers a financial incentive.

The latter has just been implemented in the 2023 Collective Bargaining agreement negotiations. In these negotiations, the parties have reached an agreement that creates a financial incentive to use lighter scaffolding equipment rather than heavier ones to prevent attrition in the industry.

As part of Action Plan 3, a survey was also conducted to identify scaffolding workers in the industry in order in particular to strengthen retention. The survey showed that the average age is around 38 years and that the average scaffolder has been in the industry for around 11 years. At the same time, the study showed that around 51% of the participants had completed the entire 2-year scaffolder training programme, while around 27% had individual scaffolding modules that included, for example, apprentices. At the same time, the study provided insight into the geographical differences in the level of education and use of technical aids in the industry. The survey showed, in particular, that on a national average, cranes or similar technical aids were made available in 64% of the aisles, ranging from 91% in North Jutland to 38% in South Jutland.

# 2.3 Prevention action of Unions or authorities

The action plans agreed by the parties have a key role to play in preventing accidents and attrition in the industry. The parties also jointly finance the "Industry Community for the Working Environment in Construction" with a remit to focus on improving the working environment throughout the construction industry. The industry community also runs the Construction Industry Working Environment Bus, which visits construction sites and shares best practices for an improved working environment, and an annual Working Environment Meeting around the country.

In addition, the Danish Working Environment Association for the Construction Industry has produced a number of industry guides for scaffolding. An industry guide is a set of guidelines that has been reviewed by the Danish Working Environment Authority. This ensures that content related to occupational health and safety issues meets the requirements of the occupational health and safety legislation. In industry guides, the social partners provide joint guidance on current occupational health and safety issues. An industry guide expresses the social partners' common understanding of what constitutes good health and safety standards and practices within the industry.

The following industry guides can be found within scaffolding (See Annex 4 for an example):

- Erecting and dismantling scaffolding
- Standard blades for system scaffolding
- Construction site roads scaffolding access roads
- Industry guide on fall protection equipment
- Set-up, dismantling and use of trestle scaffolding
- Set-up, dismantling and use of wide rolling scaffolding
- Use of work platforms

# 2.4 Framework conditions like weather conditions, traffic, climate, interaction with other trades or work activities - and the specific prevention measure

#### Weather conditions

Employers are required to provide personal protective equipment for the given weather conditions according to occupational health and safety legislation. The main rule here is that employees must be protected from external influences, such as weather conditions. This also means that the employer is required to protect the employee from exposure to, for example, solar radiation.

#### Traffic

Scaffolding in cities often presents challenges when it comes to traffic and safety. Traffic in Denmark is governed by various public authorities, such as the Danish Highways Directorate or the individual municipalities and cities. Scaffolding work in cities and traffic areas creates major nuisances and challenges when it comes to the working environment and safety of the scaffolder. The particular nuisances and challenges in cities and traffic areas arise as a result of not allowing the establishment of welfare facilities such as toilets, sheds, etc. as well as the establishment of storage space for equipment or securing scaffolding contractors by cordoning off work areas. Traffic flow considerations are very much prioritised, and this often results in municipal authorities not granting permission for the necessary traffic areas to be used for cordoning off and establishing welfare facilities. This can result in scaffolding being erected from the back of trucks or with only a limited working area, causing inconvenience to the scaffolder.

Welfare facilities are also not set up at the workplace itself, but often further away if they are set up at all.

In cities and urban areas, scaffolding contractors also have a special focus on road users such as cyclists and pedestrians. In some types of jobs, scaffolding is erected over pedestrians and cyclists, which is why special attention must be paid to the safety of these road users when erecting scaffolding.

On motorways under the control of the Danish Highways Directorate, there are also traffic flow considerations. This also has an impact on blocking off and thus limiting the work area, and transporting materials to and from the site can be a challenge. Moreover, the speed on these types of roads has a major impact on safety, which is why work has to be carried out behind crash barriers and in speed-reduced zones. The rules for this are governed by the Danish Highways Directorate and the Highway Code Council.

To work on roads, especially state roads under the Danish Highways Directorate, it is often a requirement to have completed a course on the Highway as a Workplace.

# 2.5 Recognised occupational diseases for scaffolders?

See Annex 5 for all recognised occupational diseases in Denmark.

# 2.6 Level of absence, number recognised occupational diseases (by type)

The figures are not calculated exclusively for scaffolding workers, but the Danish Working Environment Authority has a subgroup called [9 - Other manual labour], which includes scaffolding workers. As can be seen below, the vast majority of the diseases in this group are so-called musculoskeletal diseases. The associated occupational diseases reported (i.e. not necessarily recognised) are broken down as follows:

Diseases and illnesses	2018-2022	2022	%
Musculoskeletal disorders	5,088	1,126	55%
Skin diseases	1,534	296	14%
Ear diseases	1,134	221	11%
Mental illnesses	733	163	8%
Other diseases	334	77	4%
Respiratory diseases	281	62	3%
Cancer diseases	115	20	1%
Neurological diseases	495	94	5%

Unknown	59	0	0%
Total	9,773	2,059	100%



The above graph shows the sickness absence rate in the scaffolding industry. It is important to emphasise that this is a small sector where large fluctuations are obviously significant.

# 2.6 Improvements in technical or organisational prevention concepts

It is a statutory requirement to elect a health and safety representative in all companies with more than 5 employees. The task of the health and safety representative is to participate in the preventive health and safety work in the company, including making use of technical aids based on the action plans, etc.

# 3.0 Training systems

# 3.1 Forms of apprenticeship

When you start as an unskilled worker in the scaffolding industry, there is an agreement between the parties to the collective agreement that after 3 months of employment you must be offered training as a scaffolder. Scaffolding fitter training is an industry training programme that consists of a practical and a theoretical part. As an apprentice, you will receive a full salary from your employer, who they can apply for a subsidy to finance it.

The social partners generally have a strong focus on having a qualified labour force in the construction industry. 3F Byggegruppen has always worked strategically to ensure education and training for its members, and thus also for scaffolding workers. Previously, the requirement was various ERFA courses for experienced scaffolding workers in the industry and so not an actual training programme. In 1992, the social partners established the 2-year contract training programme for scaffolders. In 1997, a statutory requirement for 3-week training in system scaffolding was introduced as a minimum requirement for scaffolders. From then on, things moved quickly, and the industry was in no doubt that training was the way forward and that all professional scaffolding workers in Denmark had to be trained. In the 2009 collective agreement renewal, the labour market parties accordingly agreed that the 2-year scaffolding training should be mandatory for all new employees in the industry.

Since the 2-year scaffolder training programme was introduced, the industry has been developing the programme and recognising the need for a well-educated workforce.

# 3.2 Basic information about the training system

The scaffolding fitter programme lasts 2 years and is structured so that you alternate between attending courses at the training centre and working in the company with which you have a training contract. The school stays last approximately 25 weeks in total, including certificates and a truck driving licence. The first three months of employment are a probationary period, which can be cancelled unilaterally.

The programme also provides insight into the working environment in the industry. The programme consists of a number of occupational health and safety training programmes that aim to ensure that you have completed a training programme or passed a test before you are allowed to perform work that can cause a significant risk of accidents or health hazards. The training requirements cannot be waived, so that work is not carried out under the so-called "instructions" of a site manager or similar, but rather it is the individual's educational qualifications that are decisive. The requirements for the educational elements that the scaffolding fitter training programme consists of are described in the "Operational procedure on Occupational Health and Safety Education", see Annex 6 for the qualification requirements for erecting scaffolding.

These qualification requirements also apply to foreign labour coming to Denmark to work in the scaffolding industry. Thus, these are the requirements a foreign employee must meet in order to have their competences in scaffolding assembly recognised. The operational procedure has been prepared by the Danish Working Environment Authority and is based on the modules in the scaffolding fitter programme.

Furthermore, there are specific qualification requirements for scaffolding for own work, i.e. smallscale scaffolding used by other construction professionals. Thus, all types of scaffolding require different levels of training.

Duration

#### Scaffolding fitter programme - structure 2023

Title

Number

Below are all the modules that the Scaffolding Fitter programme currently consists of.

		days
Module 1		
49866	Calculation-requiring scaffolding - intro, step 1	5
49883	Calculation-requiring scaffolding - decking, step 2	5
46588	Evacuation and rescue in construction and assembly	2
40392	Ergonomics in skilled and unskilled jobs	1*
47136	The highway as a workplace - Certificate	2
Module 3		
47592	Forklift trucks	7
Module 5		
49884	Enclosures step 3	10
Module 7		
48644	Mobile cranes >8-30 tm_with integrated crane base	10
Module 9		
49886	Pipe, coupling, free standing. And facade scaffolding, step 4	5
49888	Pipe, coupling and hanging scaffolding, step 5	5
Module 11		
20902	Extended system scaffolding step 6	14
40392	Ergonomics in skilled and unskilled jobs	1*
Module 1	3	
20903	Special scaffolding step 7	9
43577	Start-up of building and construction projects	1
Module 1	5	
20904	Total enclosure step 8	15

# Module 17

43692	Scaffolding assembly coordination	5

30

# 47854 Freight transport by truck (category C) <u>must</u> are offered

# 3.3 Types of certificates

Certificates are awarded for all completed courses. Once the apprentice has completed all courses, a final examination is held, which results in certification as a scaffolder.

# 3.4 Length of training and additional or specialised trainings

See section 3.2.

# 3.5 Curriculum - what what it is terms of practical and theoretical knowledge and skills

The scaffolding fitter programme provides competencies to erect, cover and secure scaffolding. You will learn how to plan complex scaffolding tasks that require strength and stability calculations. The programme provides an in-depth insight into:

- How to cordon off and signpost the site before work begins
- What loads the scaffolding must be able to withstand and how it is secured
- How e.g. height, surface, roofing and weather conditions affect the stability calculation

In addition to scaffolding knowledge, general skills such as customer service, co-operation and understanding drawings are acquired.

The programme works with, in particular:

- System scaffolding
- Pipe and coupling scaffolding
- Setting up special scaffolding
- Enclosure and total enclosure scaffolding
- Coordinated scaffolding assembly

In addition, it is mandatory to obtain the necessary licences to drive forklifts, work with cranes and comply with the safety requirements for working on roads.

# 3.6 What has changed over the last years?

The latest initiatives between the parties are that the collective agreement in 2023 introduced provisions to take into account the possibilities for further training and upskilling in the event of work stoppages and being sent home due to weather and other conditions, and that it is possible for employees to appoint a training manager in the individual companies to focus on training and further training.

The collective agreement in 2023 also creates an incentive to include apprentices in the pricing of on-the-job training, see Annex 7. The incentive consists of trained scaffolders receiving a so-called

"mentor supplement" for taking on apprentices. This is intended to motivate more scaffolders to take on apprentices for training with the aim of retaining apprentices in training and getting more trained scaffolders, as well as strengthening the industry in the long term.

# 3.7 Are there any plans to change in the near future?

The parties in the scaffolding industry work together to ensure retention in the industry. Unfortunately, many people do not complete the entire scaffolder training programme because they leave the industry. We know that the average scaffolder stays in the industry for 11 years. The trend shows that those who stay in the industry complete the programme, but unfortunately, there is also a very high turnover rate.

In addition, the programme is continuously being modernised to adapt it to developments in the industry, including new materials, technological developments, health and safety requirements, etc.

# 3.8 Trade union or employer positions

The programme is developed and financed jointly by 3F Fagligt Fælles Forbund and the Danish Construction Industry Association's Scaffolding Section.

# 4.0 OSH Training

See more about the working environment in section 3.

- 4.1 For scaffolders
  - 4.1.1 Special courses content?
  - 4.1.2 Regularly repeated?
  - 4.1.3 Length?
  - 4.1.4 Organisational framework
- 4.2 Precondition to work as scaffolder or casually trained
- 4.3 What is the training content for?
  - 4.3.1 the competent person / advisor
  - 4.3.2 the user of scaffolds
  - 4.3.3 the trainer
- 4.4 Other aspects

# 5.0 Technical composition of scaffolds and used tools

#### Remove the middleman

To reduce attrition in the scaffolding industry and thereby retain scaffolding workers with skills and experience, Denmark is investing in technical aids and training.

One of these initiatives is so-called electric lifts.

The primary technical aid for vertical transport of scaffolding materials is electrically powered material lifts. Only in a very few cases where the use of electric lifts is not possible, are manual lifts used by exception. Material is never manually raised from one level to another by a crew.

The investment in electric hoists, lifts or bottom-mounted wire rope hoists quickly pays for itself, as more is produced per hour per employee. At the same time, labour costs are significantly reduced as fewer employees are needed per task.

In addition, the working environment is significantly improved, which translates into reduced sickness absence and enables employees to stay in the profession longer.

Retaining experienced colleagues in the profession makes investment in scaffolding worker training more attractive and provides a greater return over time due to the scaffolder's abilities to independently solve tasks within all types of scaffolding work.

In Denmark, scaffolding is built by two to a maximum of three men, with one at the bottom emptying/loading the lift and one to two at the top building the scaffolding. The number of scaffolding operatives building the scaffolding is the same irrespective of the height of the scaffolding.

#### 5.1 Description of the type(s) of scaffoldings mainly used in the country

System scaffolding: Layher, 8, Hünnebeck (Bosta), Haki, MJ, Stepup octo, Altrad, Alfix, etc.

#### 5.2 New technologies

Cranes, forklift/telescopic loader, material hoist, hand tools

#### 5.2 New tools or machinery used in the scaffolding work

Cranes, forklift/telescopic loaders, material hoists, drills and screwdrivers, impact wrenches and scaffolding spanners

#### 5.3 Are drones used in scaffolding work and, if yes how (descriptive)?

Drones are slowly gaining ground in terms of documentation and planning.

5.4 Are there any discussions or practical steps to use robots or co-bots in scaffolding work? No, the closest thing is the development of more versatile exoskeletons.

#### 5.5 The ergonomics of any new type of tool or machinery

Remote-controlled cranes are used to load from the truck bed to the technical equipment used to transport the scaffolding material to the hoisting point.

The truck/telescopic loader can unload the scaffolding truck bed and transport the scaffolding material to the hoisting point.

Material hoists (lift or wire hoist) transport the scaffolding material vertically to the top man (the man dismantling/assembling the scaffolding goes to the top).

Cordless drill/drivers, impact wrenches and scaffolding spanners are used by the top man to anchor scaffolding and tighten/loosen nuts for various fastenings.

Exoskeletons are not used, as we do not have exoskeletons that are versatile enough to suit scaffolding work from foot to head.

# 6.0 Social Dialogue

# 6.1 Does an employer organisation exist?

The employers in the scaffolding industry, the Scaffolding Section, are organised in the Danish Construction Industry Association.

# 6.2 Which trade union(s) represent scaffolders

As of 1 June 2023, 3F Byggegruppen represents 2,272 scaffolders. In addition, some special groups are organised in 3F Industri, see below. The Danish scaffolding industry is defined by a high degree of unionisation (94%) and an industry where the social partners have a tradition of close cooperation.

# 6.3 Does a specific structure or social dialogue exist for the Scaffolding sector

For the service-oriented scaffolding industry in Denmark, there is a specific culture and structure for how work in connection with collective agreements is realised.

In order to safeguard the interests of the parties in the best possible way, a national association has been established for scaffolding workers, as well as local associations throughout Denmark. Similarly, the employers have their own section under their employers' organisation, which consists of around 70 member companies.

Between the parties to the collective agreement, a jointly composed Price List Committee has been set up with representation from the parties to the collective agreement 3F Byggegruppen and Dansk Industri Byggeri, Scaffolders' National Association and the Scaffolding Employers' Section.

The committee has regular meetings and agendas and deals with disputes that have arisen between scaffolding contractors and scaffolding employers in the industry in relation to piecework and the use of price lists when erecting scaffolding.

The committee also deals with occupational health and safety initiatives or challenges in relation to the parties' agreed piecework and price lists, and is in dialogue with the Danish Working Environment Authority on this.

In addition, a training committee has been set up between the parties. The committee deals with cases that arise in connection with the training relationship, e.g. whether learning objectives have been achieved, and with training agreements in connection with the 2-year scaffolding training, and is also in ongoing dialogue and contact with schools about the content of the training.

There is accordingly close co-operation between the parties within the scaffolding industry.

#### 6.4 Do specific collective agreements exist for the sector?

The Danish labour market is regulated by collective agreements between the parties (collective bargaining agreements). There are 2 main organisations in Denmark for employees and employers that regulate labour market conditions for the private labour market, namely the Confederation of Danish Trade Unions and the Confederation of Danish Employers.

The trade union 3F Fagligt Fælles Forbund and the employers' organisation Dansk Industri, which are the organisations that primarily cover the scaffolding sector, are organised under these main organisations.

In addition, the trade union 3F Fagligt Fælles Forbund has launched collective agreements with other organisations.

The labour market in Denmark is regulated by the so-called "Danish Model", which in short means that the labour market parties themselves make agreements on labour market conditions, more specifically collective agreements, and that the collective system covers wages and working conditions.

The trade union 3F Fagligt Fælles Forbund and the employers' organisation Dansk Industri have one collective agreement that covers and deals with service-oriented scaffolding work.

For the service-oriented scaffolding industry, which makes up the largest part of scaffolding workers and scaffolding work in Denmark, it is the Building and Construction Collective Agreement. The Building and Construction Collective Agreement has associated price lists and training agreements that regulate these labour market conditions through the collective agreement.

Scaffolding workers are represented in collective bargaining by the political leaders of 3F Byggegruppen for the collective bargaining area, but the industry is also represented through their national union in that the chairman is automatically represented in 3F Byggegruppen's congresselected negotiating committee with representatives from all trades and industries.

In addition to the Building and Construction Collective Agreement, there are several collective agreements in the other construction and industrial areas under which scaffolding can also be performed. This scaffolding work is covered by the other collective agreements concluded between the parties, including the Bricklayer and Bricklayer Labour Agreement, the Building Agreement, the Industrial Agreement and the Insulation Agreement.

However, it should be noted that scaffolding work performed under these collective agreements is basically scaffolding erected for own work or as part of own production, thus not service-oriented scaffolding.

The primary collective agreement for scaffolding work in Denmark is accordingly the Building and Construction Collective Agreement.

A special area is Off-shore, and it should be noted that the labour conditions for this work are regulated by law and collective agreements.

# 6.5 If yes, description of the content

The following elements are regulated in the collective bargaining agreement:

- Employment conditions and employment contract, dismissal
- Provisions on working hours and forms of working time
- Public holidays, collectively agreed, as well as national statutory holidays
- Hourly wages and salary negotiation, payroll, supplementary payments, etc.
- Performance pay and piecework rules
- Pension and illness
- Holidays, contractual holidays, public holidays
- Union rules, co-operation
- Training and agreements

- Trade union rules for handling industrial disputes
- Young workers and apprentices
- Occupational health and safety

6.6 Does a paritarian organisation exist? If yes, please describe See, in particular, section 2.3.

- 5.1 its functions
- 5.2 its financing
- 5.3 its work mode