

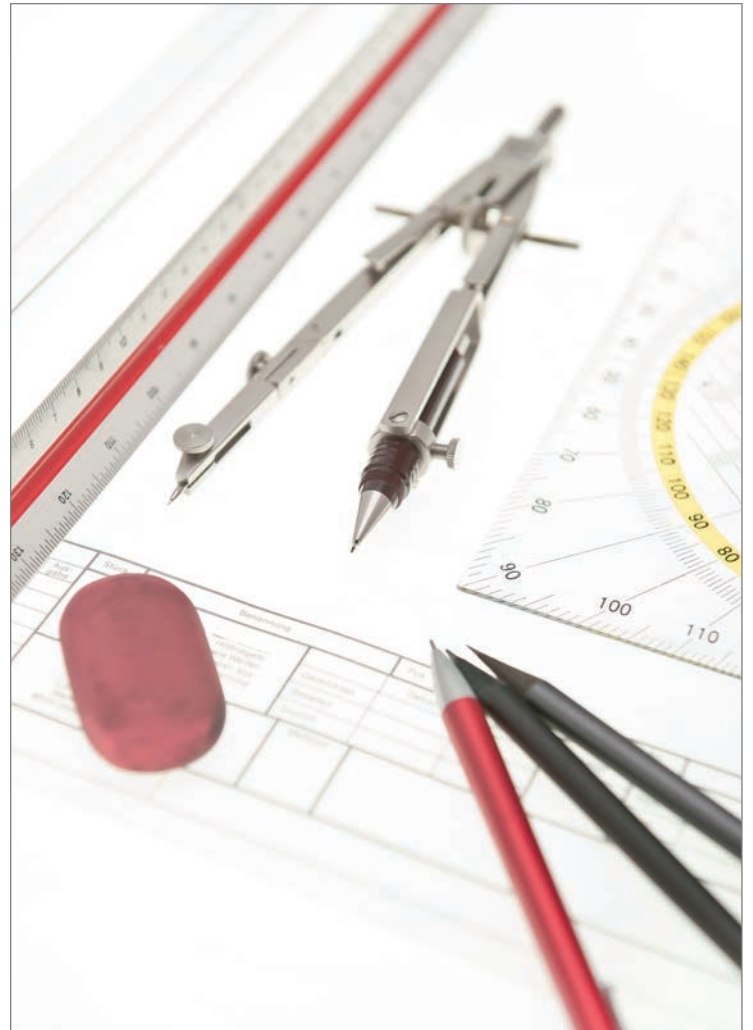
Workshop planning – custom-made room concepts



Package offer: workshop planning and -equipping

The workshop is the heart of each orthopaedic technical company. It must meet the economical, functional and technical requirements and also the manifold work safety standards of employers' liability insurance associations.

Thanks to our long experience in equipping orthopaedic technical workshops, we exactly know all working steps an orthopaedic technician does, enabling us to offer a comprehensive product- and service package - from the first preliminary plan in 2D and 3D up to installing the machines and equipment upon request.



Individual solutions for your company

The layout of modern store- and workshop rooms follow the same principles as an inviting apartment. The object or building should appear bright and calm; to convey the impression to the customer "You are in good hands with us". As it is not sufficient any more to be recognised just for excellent work only; the focus nowadays lies on the all-round-service to the customer.

A friendly and clean atmosphere will suggest the impression of professionalism and routine. The customer should feel comfortable and be happy to come back. A barrier-free entry is an important criterion for many customers.

The key rooms of the company – the workshop area – should be integrated into the all-over concept and be perceived as extension of sales- and fitting area. The same is of course the case for planning

the administrative and staff areas. These areas are the basis for motivated staff members and therefore are important for perfect customer service.

We will be pleased to help you to consider all relevant aspects and to find a tailor-made solution for your company. From preparing and effecting the planning with the help of modern 3D-software (such as AutoCAD for optimal visualisation) up to delivery, mounting and installation of our machines and equipment upon request – Streifeneder ortho.production GmbH will be always at your service!

Procedure of a workshop plan in 2D and 3D From checklist to delivery

In order to gather the important key data for a professional workshop planning project and to consider the individual requirements prior to the first concept scheme, you complete our “Checklist for workshop planning” (page 10 – 11).

The checklist is filled with facts of the existing space details, floor plan, focus on main activities and special demands. For example, will the building be remodeled, extended or is it a newly built house? If it is an old building, is it under monumental protection? Of course, our customer service will be pleased to assist you anytime in order to clarify any questions you might have.

Together with the completed checklist, you provide the layout of your workshop or building as dwg- or dxf-file. If a digital floor plan is not available, a simple sketch drawn by hand with room dimensions as well as information about installed elements such as windows, doors, heating radiators etc. is sufficient as well.

According to your demands, special requirements for new machinery or equipment will be integrated in the plan. If existing machines or installations must be included, we need a list with the main dimensions and the electric parameters – for machines to be later connected

to a dust collector, we additionally need the diameter of the suction nozzles.

Based on the checklist and the floor plan or the sketch, we can work out the complexity for the initial 2D-plan and inform you of the planning charges. This depends on the size of the workshop and the existing rooms. If greater adjustments should become necessary for the 2D-plan, the planning charges will be adapted accordingly. Finally, if requested, the 2D-plan can be converted into a descriptive 3D-plan. We will be pleased to also create the room book with a detailed description of the finished workshop. The room book describes among others the details of floor surfaces and walls and necessary illumination.

If an order for equipping the workshop is placed, the planning charges will be deducted from the order value. If requested, we can provide an installation team to assist you with delivery, mounting and installation of our machines and equipment.

Workshop planning at a glance

1. Complete the checklist
2. Send your floor plan or a sketch
3. Receive your plan in 2D or 3D
4. Place the order
5. Equip your workshop

Benefits of a 3D workshop plan

- Machinery and equipment are shown 1:1 – with all details such as knobs, levers or hand wheels
- you receive an impression about the free space to move in the workshop – to satisfy your customers and staff members
- 3D-pictures can be created from all perspectives
- Upon demand, a 3D-video tour through the workshop can be prepared

Thoughts prior to planning

Following up, we have gathered some important criteria to help develop a first basic concept at the beginning of the planning.

1. Floor space utilisation and allocation

As a first step, following points must be considered for all plans in the orthopaedic technical workshop area:

- local building regulations
- legal workplace regulations with directives for dust removal, air supply and ventilation, noise pollution and lighting
- legal regulations for fire protection, environment protection and health protection
- construction adapted to the needs of disabled persons

2. Finding a building

When you are looking for a proper building, you should bear following in mind:

- stairs and elevators
- existing installations for electricity, gas, heating, water and waste water
- load capacity of each floor
- parking space
- barrier-free restrooms
- accessibility
- adjoining rooms and storage space

3. Corporate structure

The business structures and competence field must be considered in the plan. They influence the plan in all aspects and should be defined in order to ensure the long-term orientation of the object.

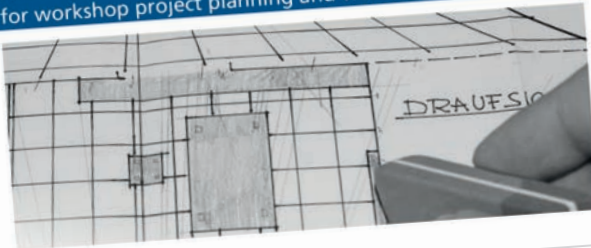
- number of employees relating to room size; machinery- and workshop equipment
- proportional division of business fields such as the challenging range of prosthetics and orthotics; small orthopaedics, clinical orthopaedics etc.
- division into orthopaedic technology, orthopaedic shoe technology; health store and rehabilitation aids
- patient structure and expected changes
- cooperation with hospitals resp. medical specialists

4. Planning the rooms

The individual room plans must fulfill today's ergonomic requirements. The floor plan details are determined by the working procedures within the shop and the functional areas as well as orthopaedic technology specialties, for example:

- determination of required and existing electric voltages
- placement of equipment, machines, work benches and their specific connections
- installations of electricity, compressed air, vacuum devices, water, waste water, telephone system, illumination etc.
- floor construction and floor coverings for the different rooms according to intended use
- casting room: grid plate in the tiled area, plaster separator, plaster sink
- short walking distance to the fitting area
- short walking distance to the machinery area
- separation of the noise- resp. dirt zone from the patient area
- separation of the dust suction device

Checklist for workshop project planning and workshop equipment



Contact data

Company name

Contact person

Street, Number

Phone

E-Mail

VAT ID-Number

Zip code, city

Fax

Website

For a more effective support, please fill in all the fields correctly.

Premises

Do you already have rooms?

If yes, how big are these?

Room width m Room length m Ceiling height m

Max. load per sqm? kg Year of construction?

Where are doors? Width: Height:

Where are windows? Width: Height:

Possibility of an exhaust air device? If yes, where?

For existing buildings

Is the building classified and protected as historical building?

How was the building used before?

Are there water connections? If yes, where?

Could existing walls (e.g. plasterboard walls) be moved or removed?

Noise and odours

Do you have neighbours sensitive to noise? e.g. doctor's offices or pharmacies

Do you have any soundproof rooms in your existing building?

Do you have any neighbours sensitive to odour? e.g. adhesives, casting resin odours

What are the focal points of your activities? Please rate in percent.

Orthotics	<input type="text"/> %	Children's orthotics	<input type="text"/> %	Silicone / epitheses	<input type="text"/> %
Prosthetics	<input type="text"/> %	Arm prosthetics	<input type="text"/> %	Insoles	<input type="text"/> %
Orthopaedic shoe production	<input type="text"/> %	Rehabilitation technique (wheel chairs, moulded seats)	<input type="text"/> %	Health store goods	<input type="text"/> %

Employees

How many employees does your company presently have resp. will your company have in the future?
Please divide into the fields such as orthopaedic technicians, office staff etc.

Existing furnishing / equipment

Do you already own furnishing / equipment, which must be included into the new planning?
If yes, what kind of furnishing / equipment?
Please indicate carefully dimensions, and for workshop machines voltage, year of construction etc.
If possible, please send us digital photos.

Work processes

Are there any work processes in your company that are rather unusual for orthopaedic workshops and which must be considered in the planning?

Construction plans of new buildings

Usually, there are digital construction plans for new buildings.
If there are, please send them as .dxf or .dwg file.

Construction plans of existing buildings

If the building has been constructed before 1995, there are most likely paper construction plans.
Please send one copy indicating all dimensions and scale.
If you have a digitalised plan, please send it in format .dxf or .dwg.

Very important: Please clearly indicate the available power supply:

Number of phases Volt Hertz
Possibly existing special voltages

Premises

Following rooms are part of the planning.
Which of the below mentioned rooms have high priority, which ones have low priority, which ones are not needed?
Please rate in numbers: 1 = absolute priority 2 = possibly needed 3 = not needed

Health store with dressing rooms	<input type="text"/>	Orthopaedic shoe production	<input type="text"/>
Patients' plaster cast room	<input type="text"/>	Insole production	<input type="text"/>
Patients' dressing room	<input type="text"/>	Plastics room	<input type="text"/>
Walking lab	<input type="text"/>	Plaster cast room	<input type="text"/>
Showroom	<input type="text"/>	Silicone production	<input type="text"/>
Reception	<input type="text"/>	Machine room	<input type="text"/>
Orthopaedic workshop	<input type="text"/>	Room for air exhaustion	<input type="text"/>

Date

Signature

Our free checklist for workshop planning is available on T +49 8141 6106-0 or service@streifeneder.de.

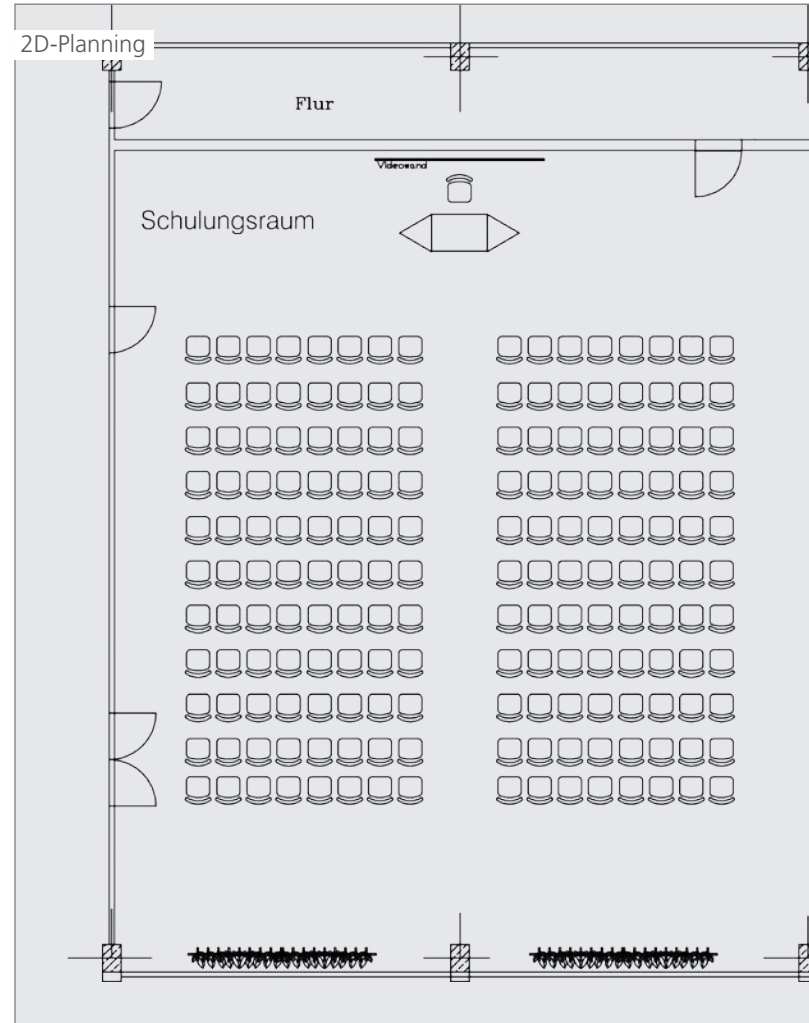
Planning example

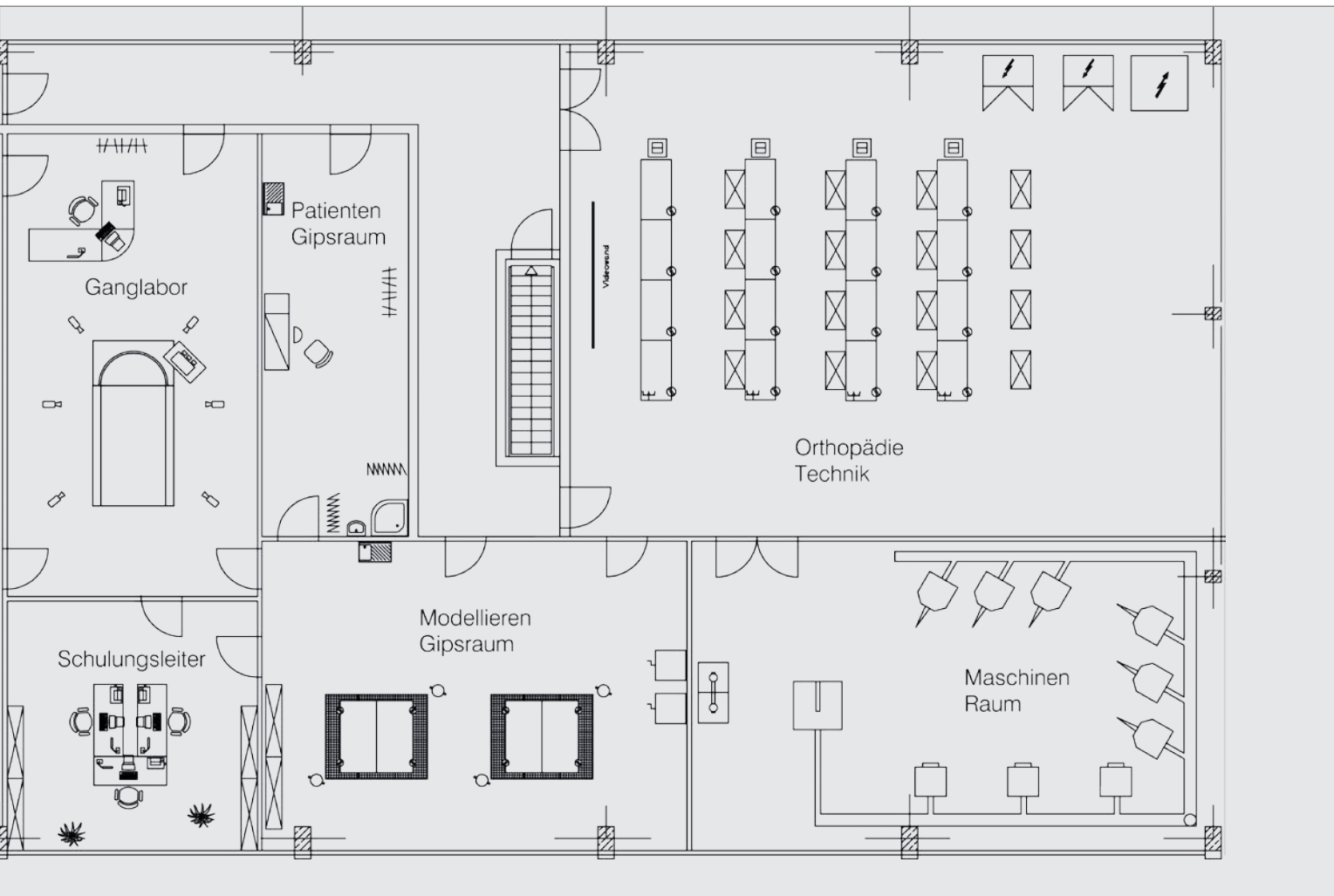
Object: Training Centre Streifeneder ortho.training

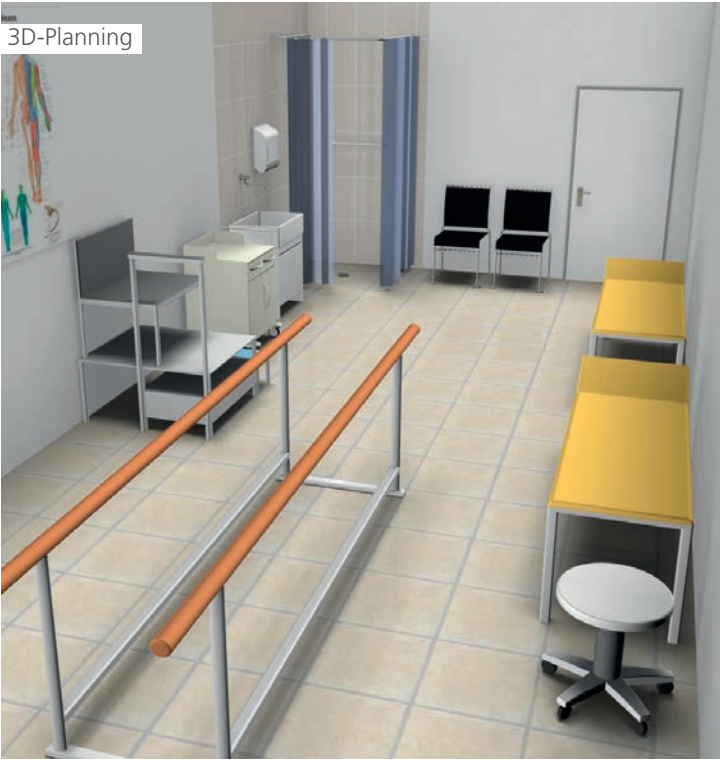
City: Emmering

Space: 1.000 sqm

The training centre Streifeneder ortho.training offers a wide range of seminars for orthopaedic technicians and orthopaedic shoe technicians all around prosthetics, orthotics, gait analysis and material processing. The special requirement to the planning technicians was to create sufficient space for large student groups; to provide a discrete atmosphere for attending test patients and besides a fully equipped workshop area with plaster- and machinery room, to install a modern gait lab.







Patient room

Training Centre Streifeneder ortho.training

Many of the practical seminars held, are done with the help of test patients, who will be supplied with the most different orthopaedic technical aids. The patient room is functionally equipped and adapted to the needs of the disabled with examination couch, measuring chair and parallel bars. As the room is also used for plaster casting, of course a patient shower room is provided as well.



Plaster room

Training Centre Streifeneder ortho.training

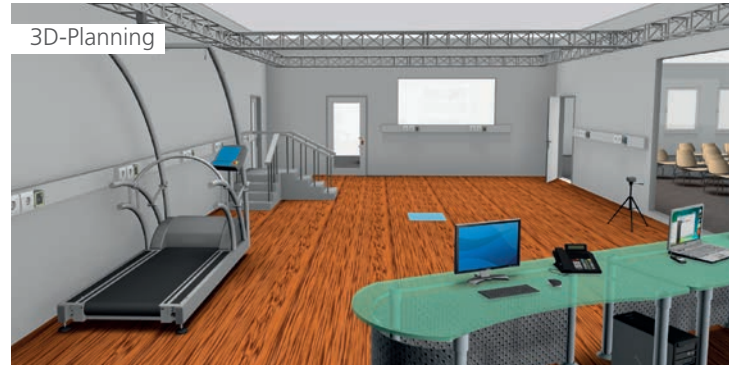
Due to the generous space of 75 sqm and the functional room division, the technicians are able to efficiently produce very work-intensive plaster models in the plaster room. It contains 8 work spaces for casting and modeling. The grids integrated in the floor remove dropped plaster residues to keep working areas and floors as clean and as slip-proof as possible. Cables and hoses are stowed away safely in the energy cubes installed above the tables, without obstructing the technician during his work.

Gait lab

Training Centre Streifeneder ortho.training

The modernly equipped gait lab contains all necessary devices to effect a professional gait analysis in 2D and 3D; six cameras for recording motion sequences, a treadmill with reversible direction and variable adjustment of slopes as well as a power measuring plate to record forces and to calculate torsion impact on the joints. In order to imitate the loads of every-day situations during the practically oriented seminars, the gait lab is equipped with stairs and a sloped surface for the test walkers. The measurements recorded in the gait lab may be transmitted directly onto the monitors in the workshop.

3D-Planning



Project Realisation



Workshop

Training Centre Streifeneder ortho.training

Besides ten resin lamination work stations with exhaust arms and table suction devices, the training centre provides all necessary equipment for orthopaedic technology, such as a convection oven and an infrared oven, a silicone roller and sewing machines.

As various hazardous materials are processed at the resin lamination work stations, factors such as exhaust power and air recirculation had to be considered. These factors are regulated by work safety regulations of the employers' liability insurance association; and also by local and national emission laws.

The height-adjustable work stations provide relief to the participants who must work in standing position, especially during seminars lasting for several days. One of the highlights is the modern multimedia-device, which enables external live-broadcast of seminars.

3D-Planning



Project Realisation



Machinery

Training Centre Streifeneder ortho.training

The machinery is located in the room next to the workshop. The room has been equipped according to the latest regulations and laws and provides socket routers in various types, a surface grinding machine, a combination grinding machine and band saw as well as additional machinery for the orthopaedic shoe technology.

3D-Planning

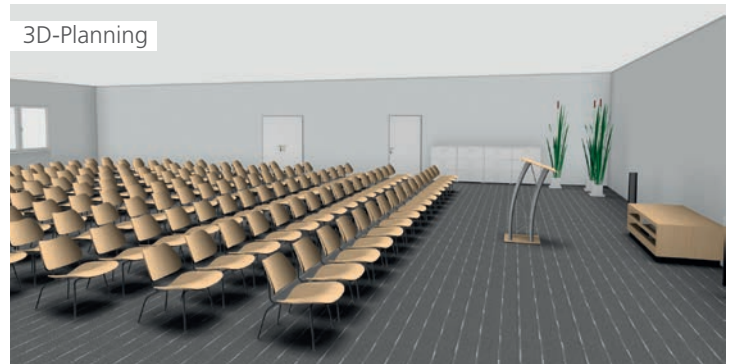


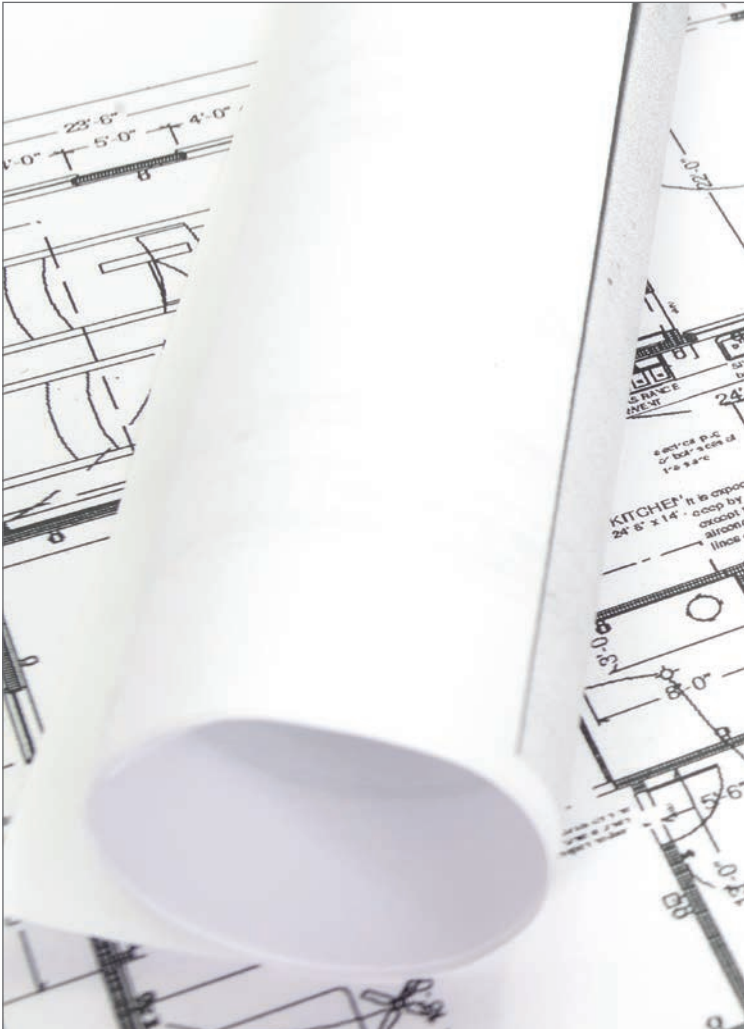
Project Realisation

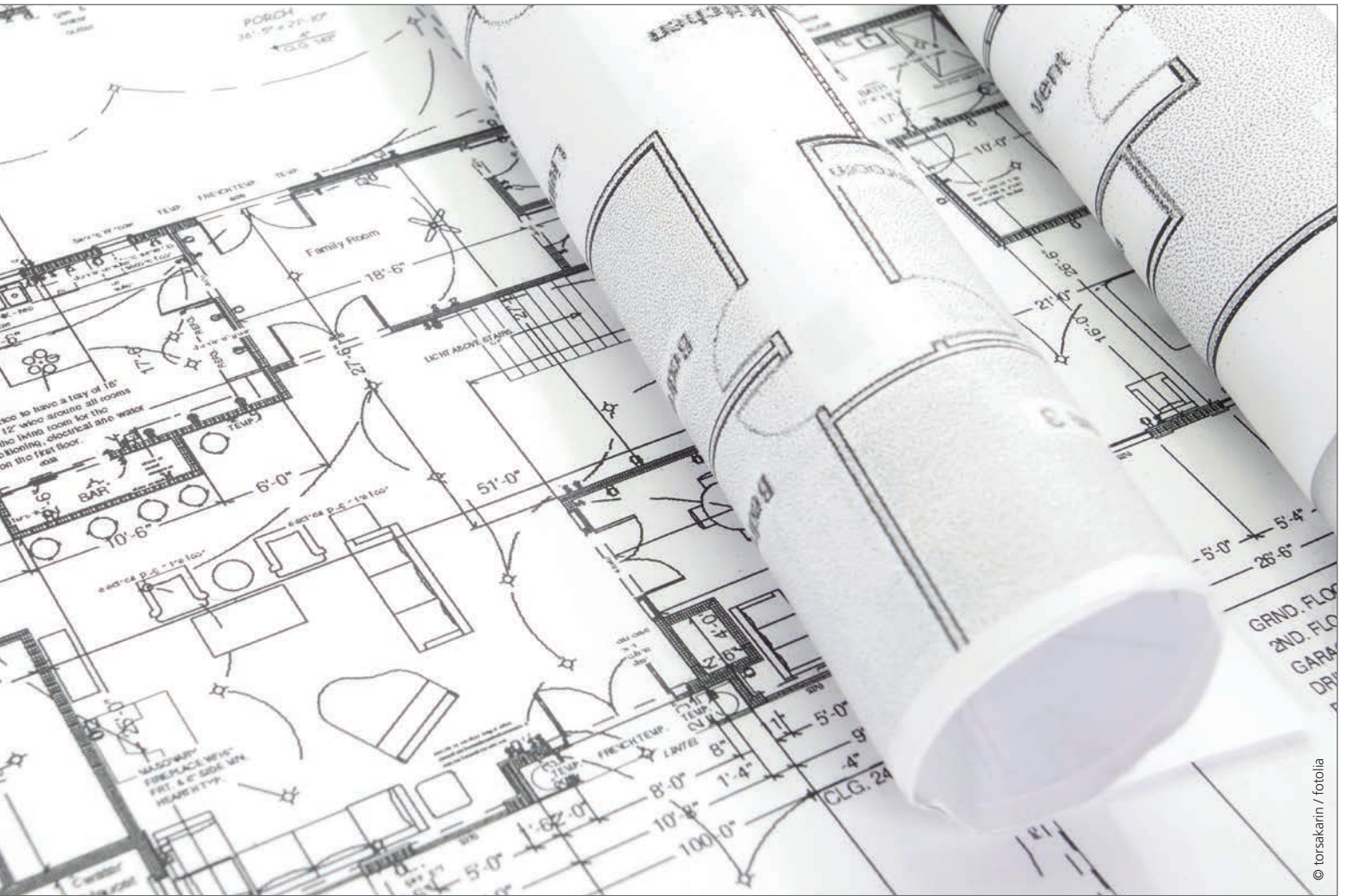


Seminar room Training Centre Streifeneder ortho.training

The main setting for all seminars is provided by the well lit and comfortably equipped seminar room „Audi Max“ with 160 seats and adequate seminar material. Beamer, headset and hand-held microphone for the teachers are part of the equipment as well as the multi-functional control device for the entire media processor from acoustics to room illumination. No matter whether the seminar is held as lecture or as inter-active event; due to the mobile seating, the room can be flexibly equipped with seating rows or in circle setting.







2D-Planning

2

3

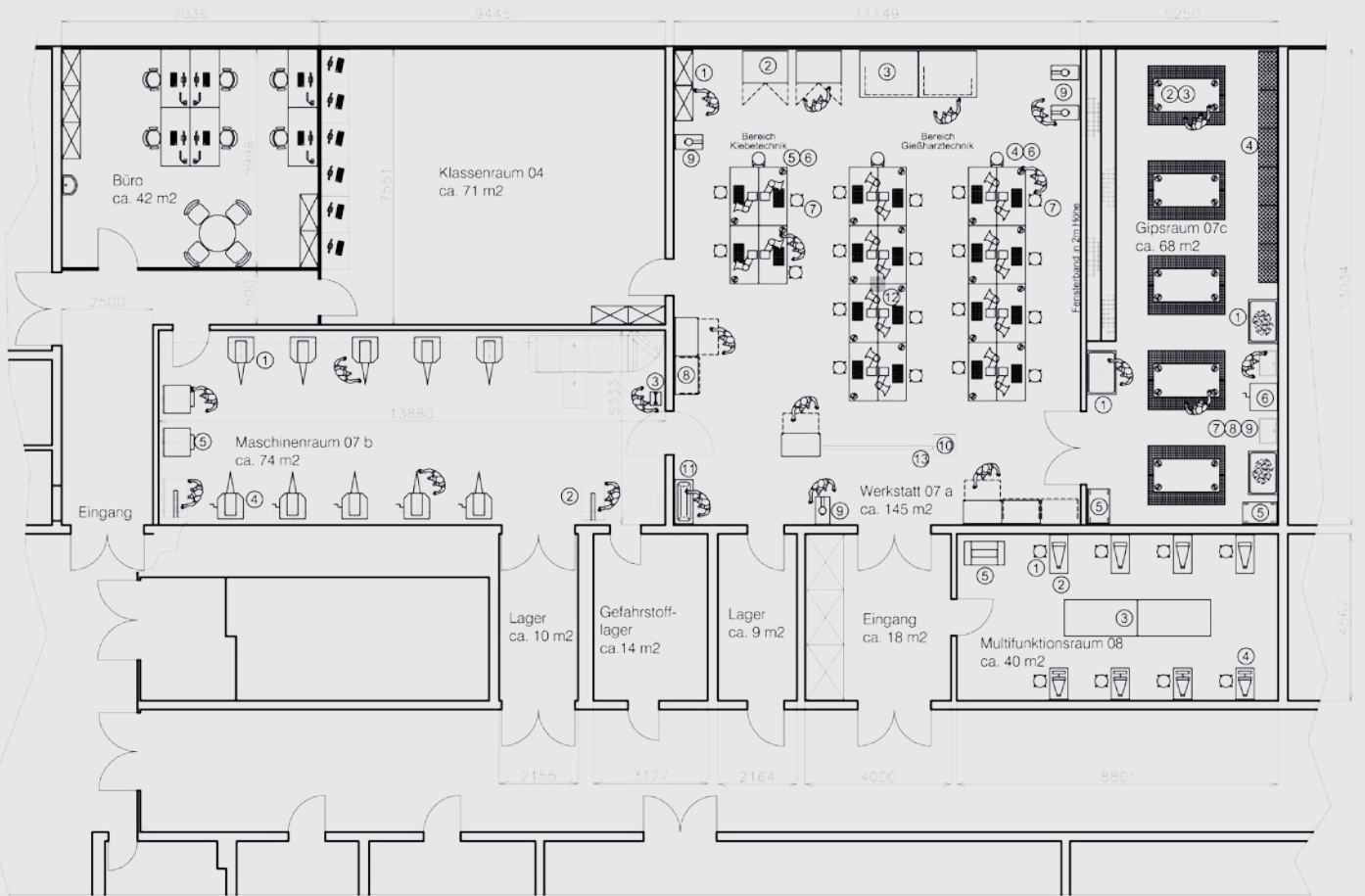
4

5

6

7

8



Planning example

Object: Federal Vocational School for Manufacturing
Engineering and Aircraft Technology – Ernst Mittelbach – (G15)

City: Hamburg

Space: approx. 500 sqm

Among others, the Federal Vocational School for Manufacturing Engineering and Aircraft Technology – Ernst Mittelbach, teaches health-technology professionals, for example orthopaedic technology mechanics.

Plaster room
Federal Vocational School for Manufacturing
Engineering and Aircraft Technology – Ernst Mittelbach – (G15)

Especially in the plaster casting and plaster modeling room, it is essential to optimise work procedures as the processes are complex and time-intensive. Due to the functional floor plan and room equipment, even large groups of up to 20 students can be trained in Hamburg to accomplish demanding plaster tasks and to store the created plaster models neatly and orderly.

The equipment of the plaster casting area always requires special considerations during planning phase, as special on-site provisions must be observed, such as the inclusion of angled frames in the concrete floor surface.



Workshop

Federal Vocational School for Manufacturing Engineering and Aircraft Technology – Ernst Mittelbach – (G15)

In order to optimally prepare students with practice-oriented training for their professional life, the school offers vocational trainee-instruction in close cooperation with experienced master orthopaedic technicians. The training takes place in the workshop (G15) and contains among others, seminars in synthetic material processing and modern technologies in prosthetic and orthotic manufacturing. To be able to study all work processes in orthopaedic technology, the 20 work spaces have been set up as multi-function work spaces. Among others, the room provides resin lamination- and adhesive work stations and various types of heating ovens. The training contents can be reflected on a screen by means of the beamer installed at the ceiling. The modern ergonomic work space layout corresponds to the manifold work protection demands of the employers' liability insurance associations.



Machinery room

Federal Vocational School for Manufacturing Engineering and Aircraft Technology – Ernst Mittelbach – (G15)

A pleasant work atmosphere, modern machines and clean air have been considered in the machinery room to meet all legal demands. In order to process many different materials, the room has been equipped with sturdy machines and devices, such as socket routers, grinding machines and band saws.





Workshop equipment – our product range

Being a full-range supplier with extensive professional knowledge about machines, work stations, tools and devices for orthopaedic technology and orthopaedic shoe technology, we offer a comprehensive product range in following areas:

- patient & care area
- plaster casting and plaster modeling
- orthopaedic shoe technology
- silicone processing
- resin-lamination work stations and deep-drawing technology
- vacuum- and compressed air technology
- plastic material- and metal processing machines
- exhaust devices
- small electric tools, manual tools, work protection

For further information, please see our main catalogue “Machines and Tools” at www.streifeneder.com/op

Contact us

For any questions regarding workshop planning and -equipping, please contact your personal customer service clerk or contact us by phone: +49 8141 6106-0
or by e-mail: service@streifeneder.de

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