SCO RGB

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Industrial Design

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ABSTRACT

This project investigates the design of a future self-checkout solution for retail environments for Ergonomic Solutions through small changes. The company has experience in modular mounting systems for point-of-sale hardware, particularly through their well-known SpacePole product line. However, when entering the self-checkout (SCO) market, it became clear that the requirements for these solutions extend beyond modular hardware integration and include stronger demands for aesthetics, user experience, and spatial integration in stores.

Through competitor analysis, insights from Danish retail employees, and an examination of the recently introduced European Accessibility Act (EAA), the project explores how self-checkout solutions must respond to diverse user needs while remaining feasible within existing production methods. The project looks into how design principles such as modularity, accessibility, and manufacturability can coexist without compromising the visual and experiential qualities of the product.

The outcome of the project is a design proposal concept of the SCO machine that through small changes reimagines the produtct in a more seamless light. The product improves accessibility and usability while still supporting flexible implementation across different retail contexts while remaining compatible with Ergonomic Solutions' manufacturing capabilities.

STRATEGY & BUSINESS

Ergonomic Solutions

Over the past 25 years, Ergonomic Solutions has refined the SpacePole, a universal mounting system designed to support essential point-of-sale hardware such as receipt printers, payment terminals, and similar devices. Emphasizing modularity and durability, the SpacePole has helped establish Ergonomic Solutions as a trusted name within the retail industry. In addition, the company's in-house steel manufacturing and made-to-order production approach enable quick response times, even when developing customized solutions. A few keypoints of their role and main strengths:

Reputation: Known within the industry

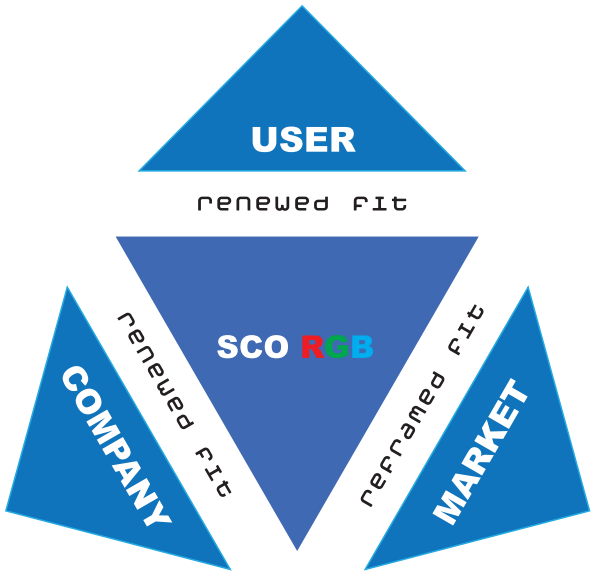
Manufacturing and response time: In-house production. Can adapt and customize according to clients needs.

Modularity: Fits a lot of hardware within their own system and industry hardware.

In recent years, Ergonomic Solutions has observed the rapid growth of the self-checkout market. This appeared to be a natural area for expansion, given the company's existing expertise in mounting POS hardware. However, according to the design team, the first SpacePole SCO Kiosk did not achieve the expected success. The design placed too much emphasis on modularity, which ultimately came at the expense of aesthetics. In other words, customers have different expectations for SCO solutions than for the traditional SpacePole system.

This realization led to the development of the current product, SCO Flex, which places greater emphasis on visual design and a more integrated presentation of hardware components. But still, when examining the competitors and similar solutions currently used in Denmark, it becomes evident that aesthetics are only part of the challenge. In grocery stores, kiosk-style SCO units in vertical, pillar-like designs with attached tables are not particularly popular, and existing solutions vary significantly in form and configuration.

Interviews with Danish retail employees and management further highlight that different retail chains approach SCO implementation in very different ways, meaning that no single solution fits all contexts. At the same time, the recently introduced European Accessibility Act (EAA) introduces a set of requirements aimed at ensuring accessibility for products of this type.



Strategic positioning

The current situation indicates a misalignment between the product and the market. Existing self-checkout solutions are often large and bulky, while also struggling to fully meet the requirements introduced by the European Accessibility Act (EAA). At the same time, a gap has come between the company's core services and the types of products it is increasingly asked to deliver. Ergonomic Solutions is more and more involved in producing custom kiosk furniture, even though its primary strength lies in modular mounting systems for POS hardware.

Furniture elements such as tables, bases, and store-specific add-ons like queue management lights or bag holders vary significantly between stores, making it difficult to standardize complete solutions. In response to this challenge, the project explores a reframing of the ***product–market fit***. The proposed concept focuses on a compact and accessible SCO mounting unit as the central component, while the surrounding elements, the table and bottom part, are designed as part of a flexible system that can adapt to different contexts. By emphasizing the mounting unit as the core element while supporting a system design, the concept builds on Ergonomic Solutions' strengths in modular solutions while allowing adaptability to diverse store environments.

Design brief

Design Brief Ergonomic Solutions X AAU

Ergonomic Solutions develops and produces self-checkout solutions used in retail across Europe – from supermarkets to convenience stores. Our solutions must function in thousands of different store environments and be used by all types of customers: young people, elderly customers, and individuals with reduced mobility, vision, hearing, or cognitive challenges.

We aim to create the self-checkout of the future that is aesthetic, user-friendly, and accessible to everyone — without compromising modular design principles or production efficiency.

1

Self Checkout 2.0 - AEE-ready (accessibility requirements) checkouts: When regulation meets design.

Retrofit for already produced checkout products so they comply with AEE requirements.
Working from the principle of "design for all" – no special solutions, but principles that can be integrated into all of our kiosk solutions.

2

Next Gen Checkout – What does future solutions look like?

With design, aesthetics, and usability in mind, present your vision of what the self-checkout of the future will look like.

3

From e-paper to eco-mounts – design for a greener future

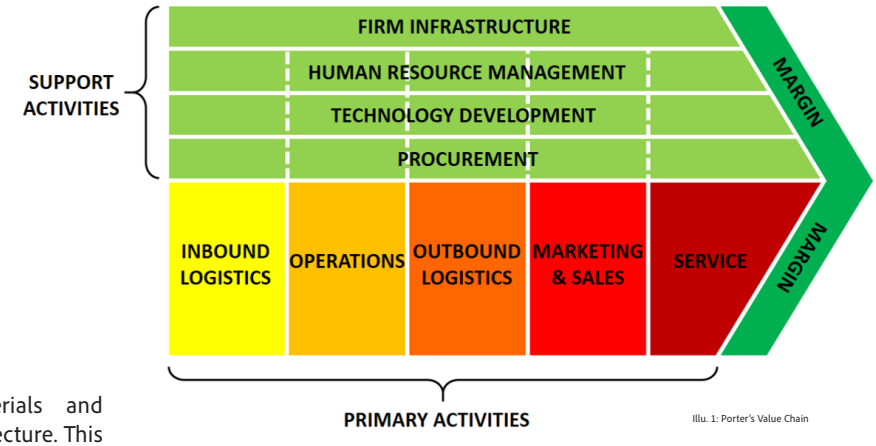
How can we incorporate sustainability and the circular economy into our products?
Design solutions that support a greener retail experience – for example, lower energy consumption, fewer components, or smarter assembly.

Case specification

This project will be working with case number 2, focusing on what the next gen self-checkout machine will look like. The scope will be in the near future, focusing on cost effective changes while refining the current design into a more future proof design.

Value Chain

Ergonomic Solutions' value creation is centered on modular design, efficient manufacturing, and fast delivery. This enables flexibility and long-term customer value. Using Porter's Value Chain framework (Lucidity, 2025), the company's activities are divided into primary and support activities.



Illu. 1: Porter's Value Chain

Primary activities:

1. Inbound Logistics

Ergonomic Solutions uses standardized materials and components which support modular product architecture. This reduces complexity in inventory management and enables consistent quality. This approach supports short lead times, and the strategic contribution enables modularity and quick configuration without supply-chain dependency.

2. Operations (Manufacturing & Assembly)

The core operational strength of Ergonomic Solutions is the manufacturing processes, which include laser cutting, steel bending, and modular assembly. These processes allow the company to produce components without redesigning the entire system. Manufacturing is optimized for flexibility rather than mass production, supporting fast response to customers and shorter delivery times. The strategic contribution supports differentiation through speed, quality control, and adaptability while maintaining plug-n-play compatibility.

3. Outbound Logistics

Finished products are shipped directly to customers within 4–6 weeks, faster than competitors with offshore production. The strategic contribution creates fast delivery, reduces customer project risk, and improves perceived reliability.

4. Marketing and Sales

Marketing and sales activities emphasize modularity, ergonomics, lifecycle adaptability, and Total Cost of Ownership (TCO) rather than lowest price. Ergonomic Solutions uses their reputation in POS mounting from SpacePole to build credibility in the SCO market.

5. Service

Post sales service includes installation support, reconfiguration, replacement of parts, and upgrades. Because products are modular, customers can adapt existing installations over time rather than replace entire setups, reinforcing long-term customer relationships. The strategic contribution strengthens customer relations and supports the TCO-based values.

Secondary activities:

1. Firm Infrastructure

Ergonomic Solutions maintains centralized management of their design, engineering, and quality standards (Ergonomic Solutions, 2025, a). The structure supports cross-functional collaboration between design, engineering, and production, enabling rapid iteration without disrupting manufacturing workflows.

2. Human Resource Management

The company relies on expertise in mechanical engineering, industrial design, and ergonomic standards. Skilled and specialized employees is key to maintaining product compatibility across modular systems.

3. Technology Development

Their technology development is primarily focused on mechanical design, modular architecture, and ergonomics rather than software or hardware. They prioritize compatibility with third-party hardware and manufacturability. The strategic contribution enables differentiation through physical design while preserving operational efficiency.

4. Procurement

Procurement focuses on long-term supplier relationships for standardized materials and components, which reduces variety and supports predictable production planning, contributing to their stable lead times.

Summary

Rather than competing on cost leadership, the company creates value by aligning their design, manufacturing, and service activities around flexibility and reliability. **The design proposal aims to strengthen this value chain by increasing perceived quality and brand coherence without disrupting existing operations, thereby reinforcing the company's differentiation and focus strategies.**

Porter's Generic Competitive Strategies

Porter's Generic Competitive Strategies framework identifies three strategic positions through which companies may achieve competitive advantage: 1. cost leadership, 2. differentiation, 3. cost focus, and differentiation focus (Faljic, 2025). This section applies the framework to analyze the competitive positioning of Ergonomic Solutions and their self-service kiosks, based on its production methods, market behavior, and value proposition.

1. Cost Leadership

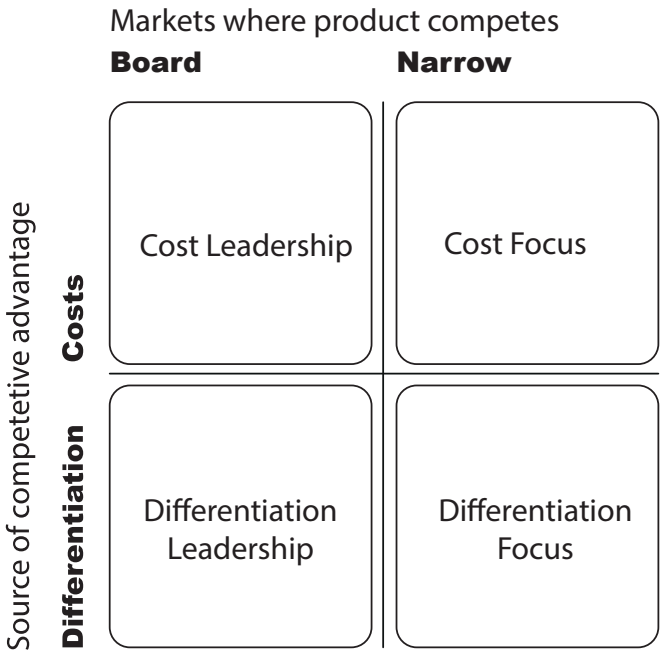
Ergonomic Solutions does not pursue a cost leadership strategy. The company's products are positioned at a higher price level compared to several competitors. Rather than minimizing unit costs, Ergonomic Solutions prioritizes flexibility, quality, and rapid delivery. Therefore the cost leadership is not aligned with the company's operational structure or strategic objectives.

2. Differentiation Leadership Strategy

Ergonomic Solutions primarily competes through a differentiation strategy. A central element of this strategy is the company's significantly shorter delivery times. While competitors such as 10Squared manufacture products in China with lead times of approximately six to eight months, Ergonomic Solutions is able to deliver within four to six weeks. This advantage is achieved through the use of stable product designs, a high degree of modularity, and localized and near-market production.
The company's primary manufacturing processes laser cutting of steel and bending, enable rapid adaptation and efficient production without the need for extensive retooling. As a result, Ergonomic Solutions offers customers greater responsiveness and reliability, reducing project delays and uncertainty. This time-based differentiation represents a key source of competitive advantage.

3.1: Cost Focus Strategy: Total Cost of Ownership

Although Ergonomic Solutions does not compete on low upfront price, it adopts a cost focus strategy through Total Cost of Ownership. The company's SCO Flex system is designed to be modular and adaptable throughout the product's lifecycle. Their clients can reconfigure the same system to serve different functions, such as converting a pedestal into a cash rack or a wall-mounted solution, without replacing the entire setup.
This modularity reduces long-term costs associated with manufacturing, installation, service, and disposal. While the initial investment may be higher, the ability to adapt the product to changing needs would result in lower overall costs over time. Ergonomic Solutions delivers cost efficiency within a focused market segment that values long-term flexibility.



Illu. 2: Porter's Generic Strategies

3.2: Differentiation Focus Strategy: Design and Modularity

In addition to the Cost Focus Strategy, their differentiation focus strategy showcases through its approach to design and modularity. Due to the company's emphasis on rapid development and delivery, existing solutions are often perceived as highly functional but visually fragmented, resulting from incremental and funktionality-based design decisions.
There is strategic potential in addressing this limitation through a more cohesive and unified design language. By maintaining the existing plug-and-play modularity while improving aesthetic consistency, Ergonomic Solutions can enhance its perceived value and brand identity. The intended design approach seeks to combine the flexibility of modular systems with a refined and coherent visual expression through small but impactful design decisions, ensuring that functionality and aesthetics are not mutually exclusive.
Such a design-led differentiation would strengthen the company's competitive position within a focused segment of customers who value both operational efficiency and high-quality design.

Summary

Ergonomic Solutions does not align with a cost leadership strategy. **Instead, the company's competitive advantage is primarily derived from differentiation through rapid delivery, modular production, and flexibility**. This is complemented by a cost focus strategy based on Total Cost of Ownership, as well as a differentiation focus strategy centered on design coherence and modular aesthetics. Together, these strategies position Ergonomic Solutions as a holistic, adaptable, and time-efficient solution provider within its market.

MARKET & USER

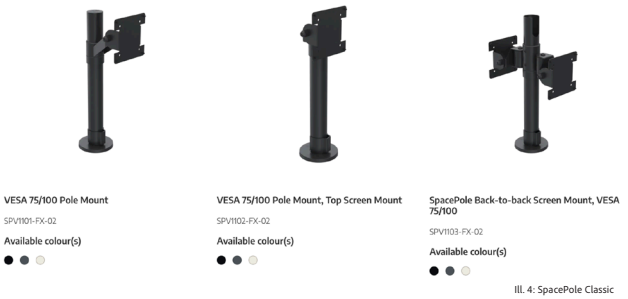
Self-checkout trend

Self-checkout (SCO) systems emerged as a response to increasing cost pressures and efficiency demands within the retail industry (Viscovery, 2024). Early adoption was primarily driven by retailers' need to reduce labor costs, increase checkout throughput during peak hours, and optimize floor space by enabling one employee to supervise multiple checkout stations. From a consumer perspective, SCO addressed the growing demand for faster transactions, shorter queues, and greater autonomy during the checkout process, particularly for customers purchasing a small number of items (Ibid., 2024). SCO systems has generally through time come with a limited emphasis on aesthetics or design coherence, as the primary objective was to streamline the transaction process and maximize productivity.

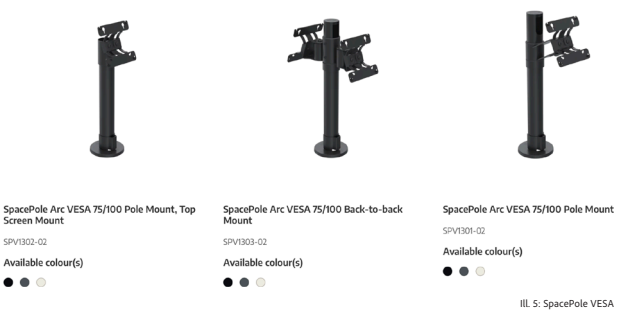
In the current state of self-checkout retailers are moving away from purely efficiency-driven products toward products that emphasize reliability, accessibility, and customer experience. Problems related to shrinkage, customer trust, and operational complexity have increased, SCO systems are expected not only to function efficiently but also to integrate seamlessly into the retail environment and communicate clarity and legitimacy through their physical presence (VerifiedMarketReports, 2025). AI software, RFID technology and new hardware solutions are constantly emerging in this market, but due to the project frame the goal is to remain focused on the current design SCO Flex and the self check-out as is, as the product and the company is new within this segment of the market. Within the general context, Ergonomic Solutions' strategic advantages like rapid delivery, modular production, and lifecycle adaptability remain highly relevant.

Ergonomic Solutions as a competitor

Ergonomic Solutions is a global leader in mounting and mobility solutions, and best known for its SpacePole range used by over 60 % of the world's top 50 retailers (B, Ergonomic Solutions, 2025). They have more recently entered the self-checkout and self-service kiosk market with its modular SpacePole Kiosk platform in 2022 (C, Ergonomic Solutions, 2022). As a new competitor, Ergonomic Solutions' advantages include rapid prototyping, manufacturing, and modularity, allowing hardware integration of screens, payment terminals, and scanners into configurable SCO installations compatible with existing store hardware. By entering this market, they are up against competitors such as Pan Osten, a well established company in the market with 50 years of experience in this segment. Due to Ergonomic Solutions long track record in POS and payment mounting options, they get strong industry credibility and relationships as well as their in-house manufacturing in Denmark supports quality control and agility in customization (B, Ergonomic Solutions, 2025). These strengths position the company as a viable alternative to established SCO products, especially for retailers seeking flexible, plug-n-play solutions that can adapt to evolving store requirements. However, as a newer competitor in full self-checkout solutions, Ergonomic Solutions have less established SCO brand identity compared to others, limited market share, and the challenge of competing with companies that offer software ecosystems and loss-prevention technologies integrated into their SCO platforms. Furthermore, Ergonomic Solutions complained themselves that due to SpacePole being such a dominant part of their portfolio, their own SCO solution felt like a Frankenstein solution in the hurry to enter the market. Overall, Ergonomic Solutions' move into SCO reflects its evolution from mounts to broader retail technology platforms, but their success can depend on strengthening the product ecosystem and market perception beyond its traditional mounting strengths.

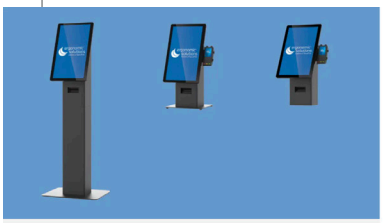


Ill. 4: SpacePole Classic



Ill. 5: SpacePole VESA

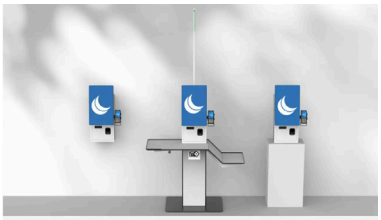
Ill. 3: Ergonomic Solutions SCO options



SpacePole Mini Kiosks

Maximise sales and streamline operations with the SpacePole Mini Kiosk - designed to enhance efficiency, boost customer satisfaction, and drive revenue in any environment. Our hardware-agnostic solutions adapt to your needs, ensuring seamless integration and maximum impact.

VIEW OUR MINI KIOSK RANGE



SCO Flex

SCO Flex is a modular self-checkout solution designed to meet the evolving needs of retailers. Built on a proven top module and customisable furniture, it enables rapid deployment, seamless integration, and tailored configurations to suit any retail environment.

VIEW OUR SCO FLEX

Key Competitors

Pan Osten

Pan Oston positions itself toward a futuristic, technology-forward aesthetic, with design cues inspired by the automotive industry. Pan Osten is a very established company in the market with over 50 years experience (Pan Osten, 2025). They have been part of the self-checkout market for a long time, compared to Ergonomic Solutions, who have entered the market recently besides their other very established products like Space Pole (B, Ergonomic Solutions, 2025). Pan Osten can be seen in retail stores such as Brugsen in Denmark.

Ill. 6: SCO details

Ill. 7: SCO blue

Ill. 8: SCO flat

Ill. 9: SCO slim

Ill. 10: SCO bench

Ill. 11: SCO express

Design & Form Language

The product's front-facing element is visually detached from the main body, creating the impression of a removable or modular component.

The separated screen resembles a robotic arm holding a display, reinforcing a high-tech narrative but also fragmenting the overall form.

The design language blends soft double-curved edges with straight surfaces, resulting in a form that feels ambiguous and not fully industrial nor sharply automotive.

While the intent to reference car-industry design is clear, the execution is arguably too soft, lacking the sharp edges or tension typically associated with automotive precision.

Functionality & Features

LED lighting is used effectively to communicate system states: Available, in use, and assistance required

This dual-purpose use of LEDs supports both futurism and usability, strengthening the interaction design.
It is possible to get the design colors.

Portfolio Gaps

Notably, no wall-mounted model exists in their lineup, limiting flexibility across retail environments.

Summary Insight

Pan Oston demonstrates ambition in futuristic expression and interaction cues beside functionality dominated design, but the fragmented form language and lack of sharper design tension weaken its overall look and series design. The absence of wall-mounted solutions represents a clear market gap.

10Squared

10Squared operates primarily as a cost-driven, outsourced manufacturing solution, positioning itself as a flexible but lower-end alternative.

Ill. 12: 10Squared clothing

Ill. 13: 10Squared hospitality

Ill. 14: 10Squared wal mount

Production & Business Model

Manufacturing is outsourced to China, enabling lower pricing. However, this comes with significant trade-offs: Longer lead times such as 6-8 months, no rapid prototyping options, and limited responsiveness despite customization claims.

Design & Brand Identity

Products appear highly customized per client, but this results in no consistent design language and no recognizable brand identity. Rather than feeling modular or adaptable, the portfolio feels fragmented and bespoke without cohesion.

Summary Insight

10Squared competes primarily on price and superficial customization. The lack of speed, prototyping flexibility, and a unified design identity positions them as a tactical supplier rather than a strategic design-led brand.

Diebold Nixdorf

Diebold Nixdorf is a well-established player in the POS market, with a strong focus on engineering reliability and modular hardware systems. They are also a partner and supplier of e.g. screens at Ergonomic Solutions.

Ill. 15: DN Series Easy One

Ill. 16: DN Series Easy One Pedestal

reddot winner 2023
industrial design

Ill. 17: DN Series Easy One Cashrack

Overall Portfolio

Most products follow a purely functional design philosophy. Aesthetics are secondary, resulting in solutions that look industrious and bulky.

DN Series Easy One

The DN Series Easy One is a notable exception:
Recipient of a Red Dot Design Award, and demonstrates a more considered approach to form, ergonomics, and visual appeal. The series is available in multiple configurations: Countertop, Wall-mounted, Pedestal, and Cashrack.

Design & Modularity

The system is based on a modular hardware architecture, reflecting Diebold Nixdorf's in-house hardware capabilities. While the pedestal version introduces a degree of sophistication, the cashrack remains highly traditional and boxy. The visual continuity between the pedestal and cashrack is weak, causing the overall design language to feel inconsistent.

Ill. 18: Easy eXpress cash

Ill. 19: Easy eXpress pedestals

Insights & opportunities

Design Identity Gap: No competitor fully delivers a unified design language across their product series (wall-mounted, pedestal, countertop).

Aesthetic vs Function Balance: The market is between over-engineering and somewhat fragmented futurism leaving room for a more balanced approach. Diebold Nixdorf and Pan Osten come close, as some of their newer designs consist of more clear identity and aesthetics combined with functionality. This showcases the opportunity for Ergonomic Solutions to follow suit as well.

Branding: Almost any SCO product series is presented as a blank canvas using colors like white and black. Often these become the end result, standing out in the retail stores, but there is a lot of oppertunity in utilizing better branding and colors as a communicator and marketing tool.

Strategic Implications

A product that combines cohesive, scalable design language with clear functional signaling like LED's and branding that also adds to the futuristic and modern design element.Modular architecture across multiple mounting options combined with sharper and more confident aesthetic would occupy a distinct and underserved position in the market.

Main learnings

The main learning is that Ergonomic is brand new in a very dominated market. They entered back in 2022 with their own kiosk solutions, as to preciously, they were and still are a very dominant player with their SpacePole modules. This still gives them edge in the market compared to completely new companies, that might makes designs and products with new hardware technology.

Competitors

Ergonomic Solutions are certain they are the best supplier of kiosk solutions on the market, even though they are somewhat new. Pan Osten is a very established player with 50 years of experience, and comparing their solutions has been a bit difficult. With limits of production methods and technologies, it was learned that the design must exploit their very best edge: fast production. This direction and limitation has resulted in a fairly simple product.

Users

Other main learnings is that the company does not really focus on end-users. To an extend they do, but their primary costumers are the retail stores, and in their mind it simply has to follow standards, space efficiency, and adaptability. This affected the decision making during the design process as well.

SCO RGB

Design

The SCO RGB is a streamlined gen 2 version of their current product and aims to strengthen the visual identity, perceived quality and brand cohesiveness in the self-scan market.

SCO RGB Slim

The SCO RGB Slim version is the "full package" consisting of the top, table and bottom modules. This is the most frequently seen constellation used in retail stores. It allows users to place basket with items on the left on a lowered platform. Then they can scan and pack their items in one movement.

SCO RGB Essence

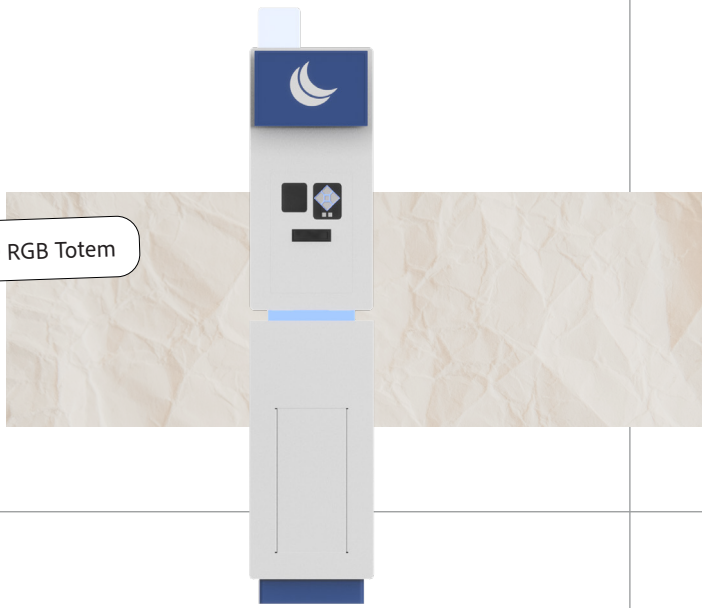
The SCO RGB Essence consists only of the main module: the top. All critical components, reciept printer, scanner, keypad device is integrated for a quick purchase experience.

SCO RGB Counter

The SCO RGB Counter is basically the Essense version, merely placed on a counter top instead. This version increases rapid adaptability within the store drastically. This is the most flexible solution on the get go.

SCO RGB Totem

The SCO RGB Totem configuation is for a quick purchase experience, and can be used for express lanes. The Totem delivers a fuller product experience, as it will light the way for costumers.



The top is the main element in the system supported by the table and bottom part. Visual cues like the platforms that lift both bottom and top ensure design continuity. The foot on the top part is a functional and aesthetical design choice as they make the product appear more subtle and not heavy while being able to communicate machine status. Rounded corners and the s-curve insinuates soft and lightness while still maintaining stringent surfaces.

Small changes - big impact

The backside is straightened up and made a part of the overall shape while keeping the iconic 20 degree angle at the front. This keeps the design recognizable and allows better integration with the bottom. The straight back enables the design to be placed comfortably back to back in scenarios where it is needed, avoiding awkward void spaces. Mounting the SCO RGB on the wall further avoids empty space behind the product due to this subtle change.

Main learnings

Ergonomic Solutions are new in the SCO market with their own kiosk solutions. During the process it was learned that the company thought their design was a Frankenstein contraption due to their SpacePole products sticking out like arms and attachments. They have had problems giving contradicting feedback regarding the ability to renew or redesign their current solution, and that their product werent ready for a retrofit, but that it should fit retrofit? The proposed product ended up renewing it instead of creating a whole new lineup. Unfortunately this still means that SpacePole products will be attachments that stick out. Though one could argue that it is their main product througout the last 25 years, and needs to be implemented for recognition.

New technology

A lot of new AI, anti theft, and survaillience technology are emerging in the SCO market. It has been difficult to decide whether to implement some of these solutions or not, due to learning that the company thinks their own product is too new for adding new hardware. This has resulted in a much simpler product close to the current solution, but changed in the details to visually look more cohesive.

Branding

Branding is underserved in the SCO market, the SCO RGB is illustrated in Ergonomics Solutions own brand colors to gain a strategic edge. This communicates clearly to current and potential costumers that their SCO machine is easy to brand through the use of colors. They already have solutions in retail stores such Alnatura (Ergonomic Solutions, 2025, c), where they have experimented effects such as this. Implementing the SCO RGB would further strengthen Ergonomic Solutions and Alnatura with a more cohesive product design.

Ill. 21: COOP SCO

Ill. 20: Alnatura SCO

Ill. 22: SCO RGB in føtex

Ill. 23: SCO RGB in tjæpt

Future proof system

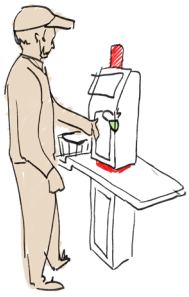
Depending on needs, the system can be configured in different ways and has the ability to be upgraded or changed depending on future needs.

The top is the main part of the product. It can be adapted into a wall mounted, pedestal, cashrack, slim, and counter version without losing the overall design language and premium feel of a finished product. The table and legs are furniture that supports the main system.

1. Customer easy to check out

2. Scans item to buy

3. Machine is in need of assistance



4. Staff helps the user to continue

5. The customer is able to finish purchase

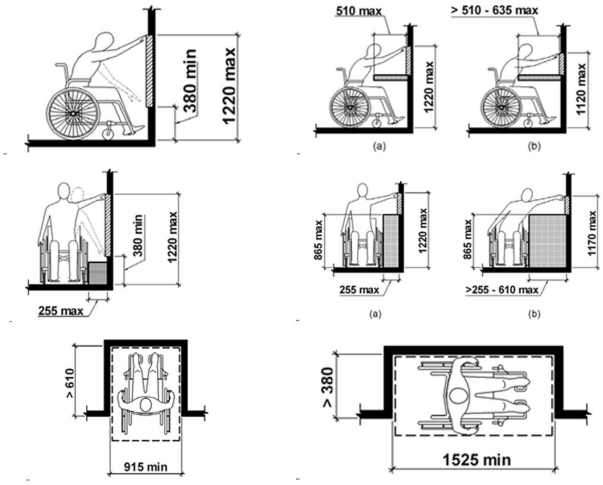
1. Technician press the click magnets to open

2. Inside technician gets access to wires and bolts that keep the three modules assembled

The system is intuitive to use for an end-user perspective. The lowered platform of the table ensures clear communication. The LED's indicate machine status whether it is available (green), in need of assistance (red), or in use (blue). The LED help with flow and communication in the POS area of retail stores.

For more technical interaction, e.g. then the LEDs are red, the bottom is easy to detatch from the module using click magnets and the top latch is easily removable with the use of strong regular magnets.

Accessibility



Ill. 24: Accessibility technical sheet

Ill. 25: Storm Interface AudioNav

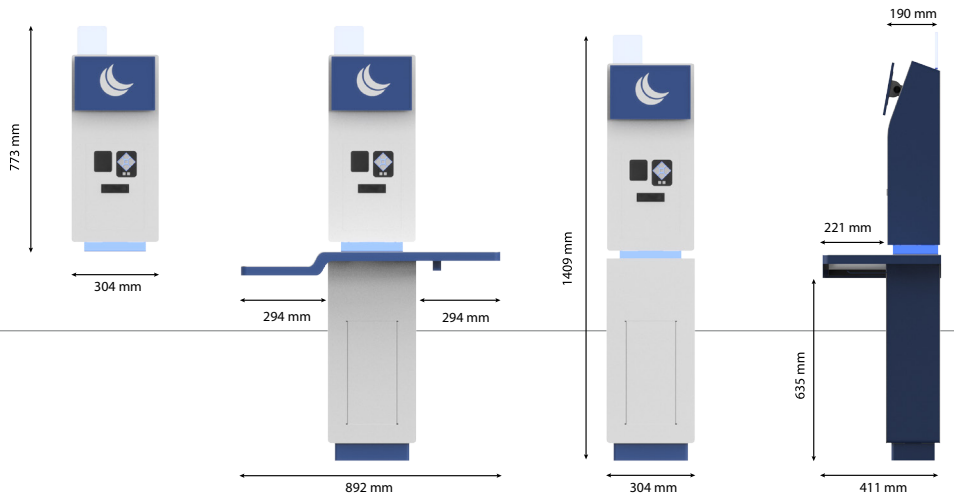
The European Accessibility Act (EAA) introduces requirements for information and communication technolog, which also includes self-checkout systems. These requirements cover both software and hardware aspects. While software primarily relates to interface design and digital interaction lies outside the scope of Ergonomic Solutions' hardware-focused expertise, the physical accessibility of the SCO unit is highly relevant to consider.

Key hardware related requirements is reachability and physical interaction, particularly ensuring that wheelchair users can reach essential functions and that systems can be operated without relying solely on vision. According to accessibility guidelines and technical standards such as ETSI EN 301 549 (Etsi.org, 2026), self-service products should support non-visual interaction, allowing blind or partially sighted users to navigate the system through tactile and auditory feedback.

These principles are closely aligned with the Web Content Accessibility Guidelines (WCAG) (Charlietango.dk, 2026), which outline international standards for accessible digital interfaces. Although originally developed for web environments, WCAG principles are being applied to self-service technologies. The principles of perceivable, operable, understandable, and robust interaction focuses the importance of providing multiple input and output in the product, such as tactile controls, audio guidance, and clear physical navigation cues.

One commonly used solution is AudioNav (Storm interface, 2026), a tactile keypad developed by Storm Interface that integrates audio navigation and tactile controls in a compact device. This hardware enables non-visual interaction with SCO systems and helps meet accessibility requirements. However, when examining implementations from various manufacturers, including earlier solutions from Ergonomic Solutions, these devices are often attached to the kiosk or surrounding furniture as external add-ons. As a result, they can appear visually disconnected from the overall design and may not provide an optimal interaction experience, particularly for standing users. This also makes it difficult to standarize setups, as the device seems to be an obstacle that needs to be plastered on afterwards.

From a retailer's perspective, the options are therefore limited to purchasing SCO units with integrated accessibility hardware or retrofitting such devices onto existing kiosks or furniture, an approach that is currently common in many stores. Alternative retail models, such as fully attended checkouts or hardware-free systems like scan-and-go solutions, may reduce reliance on SCO kiosks. However, as soon as even a single self-checkout terminal is installed in a store, accessibility hardware that enables non-visual operation is generally required to comply with current accessibility regulations.



Main learnings

Learning that the target group is retail stores as costumers, end-users has not been activated throughout the process. Still, one of the main learnings when determening placement of modules was accessability standards and what measurements needs to be included, in order to accomodate e.g. wheelchair users.

Many SCO solutions does not exploit branding more actively. Maybe it is not showcased on their websites, but looking into case-studies of competitors, it looks underwhelming. Utilizing Ergonomic Solutions ability to use all RAL colors, this product proposal is presented using their own brand colors. Many companies present SCO solutions with black and white colors, Ergonomic Solutions as well, even though they have all RAL colors. With this knowledge, this proposal aims to exemplify the ability to do branding with colors.

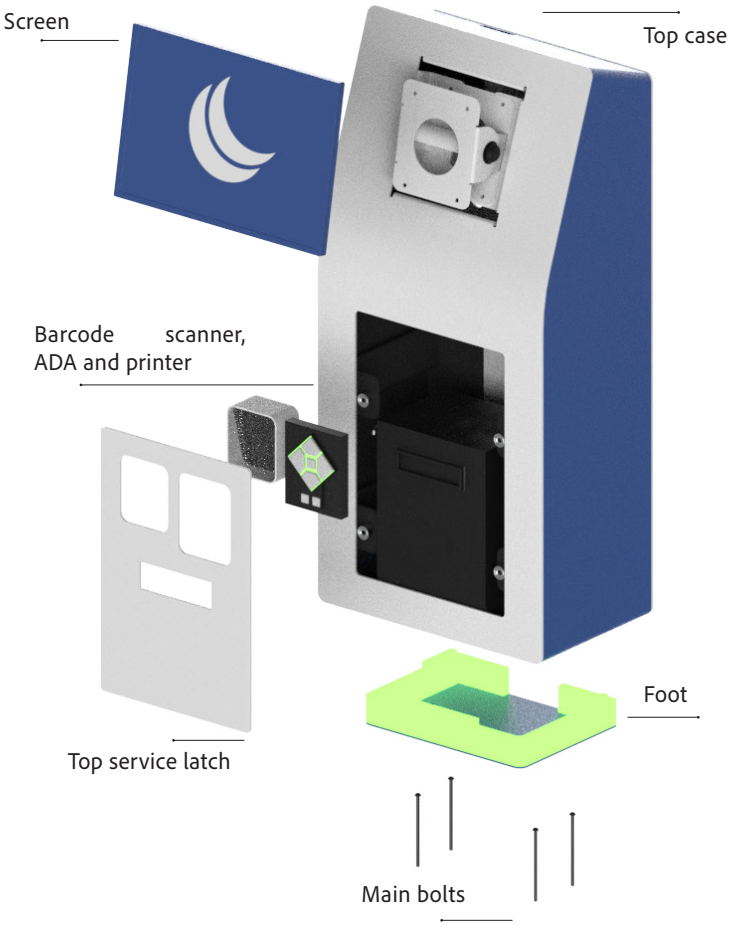
Material selection:

The main material used is steel in the shape of sheet metal. Steel is a sturdy and strong material that ensures long-lasting properties. It can be laser cut and bent into the desired shapes, and as they primarily work with "simple" bent constructions, it is easy and fast to prototype and manufacture as a whole. Furthermore, steel is 100% recyclable without losing any of its properties (Genanvendelighed.dk, 2024). Laser cut is a very precise method and with the use of nesting, parts can be placed strategically to avoid excess material waste (Metmac, 2024)

The secondary material used in the product is acrylic in both frosted and clear finish. These are used in a small amount only for the register number and foot of the top part. It is a light material and since it is a thermo plastic it can be turned into granules and melted into new acrylic sheets. The process of recycling acrylic and making new sheets is less energy intensive than processing virgin material (Acrylite, 2025), reducing carbon emissions and conserving valuable resources.

Standard parts:

The product overall consists of multiple different materials coming from the receipt printer, barcode scanner and ADA device. These are materials such as glass, plastic, silicone and electronic parts. These are outsourced products as Ergonomic Solutions does not produce hardware, but has suppliers from partner companies such as Samsung, Apple, Diebold Nixdorf etc. (Ergonomic Solutions, 2025)



Price

Material cost

Steel cost on average 5 DKK pr. kilo (Jactio, 2023), and SCO RGB uses around 60 KG which results in a cost of 300DKK pr. unit.

Powder coating would be around 900 DKK for 6m2 pr. unit (Metal Fabrications LT, 2025). It could be more, but due to not being able to see the exact amount, it is merely estimated.

The assembly is more time cosuming and will be paid in working hours. As production is locally in denmark, the hourly wage is about 250 DKK/h. The amount of time is estimated to be around 1-2 days of work, which is roughly 10 hours, resulting in 2.500 DKK pr. product.

Worthy of note is that the design resembles the current very much, which would mean the amount of material and processes are the same. The cost of manufacture would not be an additional amount in their processes beside the addition of acrylic.

The total cost pr. fully assembled machine is estimated to be 3.700 DKK. The cost is upscaled by 3 times to a total retail cost of 11.100 DKK and a 200% profit margin. With little knowledge of the actual selling prices of SCO machines is on the market due to the lack of information, ergonomic Solutions say their products are more expensive than competitors but better quality and faster production.

Transportation, electricity, packaging, and perhaps other mahcine usage will affect the price. The focus has been on the main processes and wages. Welding time and manual labor has been considered as part of the overall time and wage of the workers.

Key information

Materials

58 kg steel

1,73 m^2 3 mm sheet metal

0,85 m^2 2 mm sheet metal

Operations

27 Standard bends

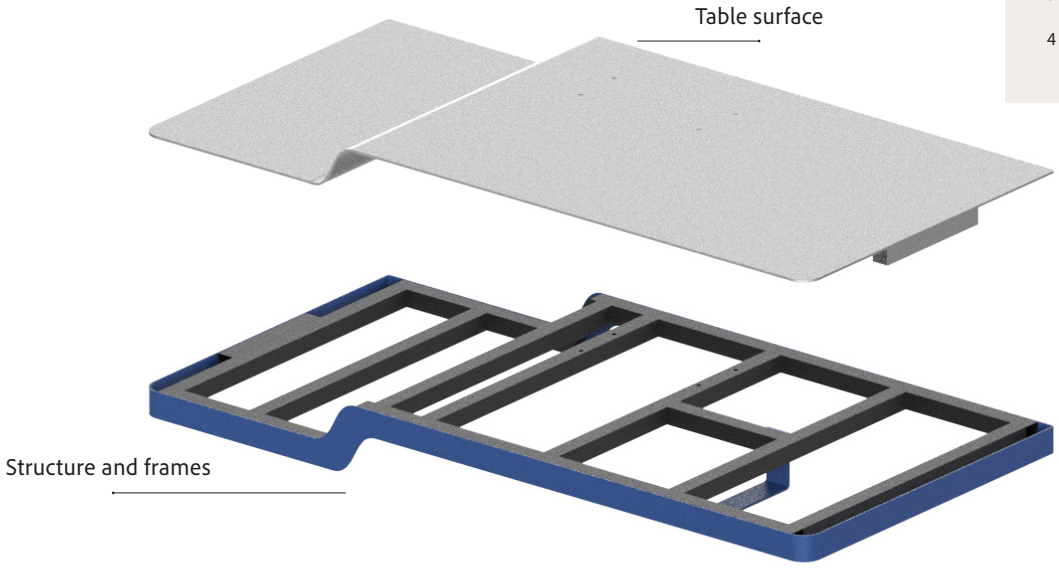
120 Tack welds

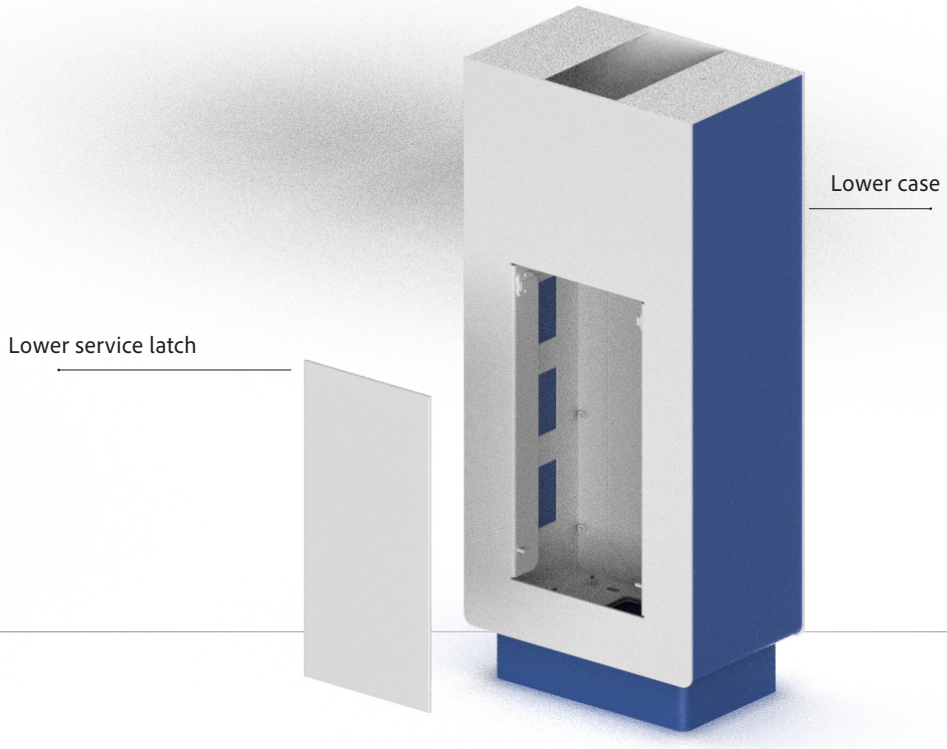
9 20 mm bends

Fasteners

54 Nuts

4 Hex bolts

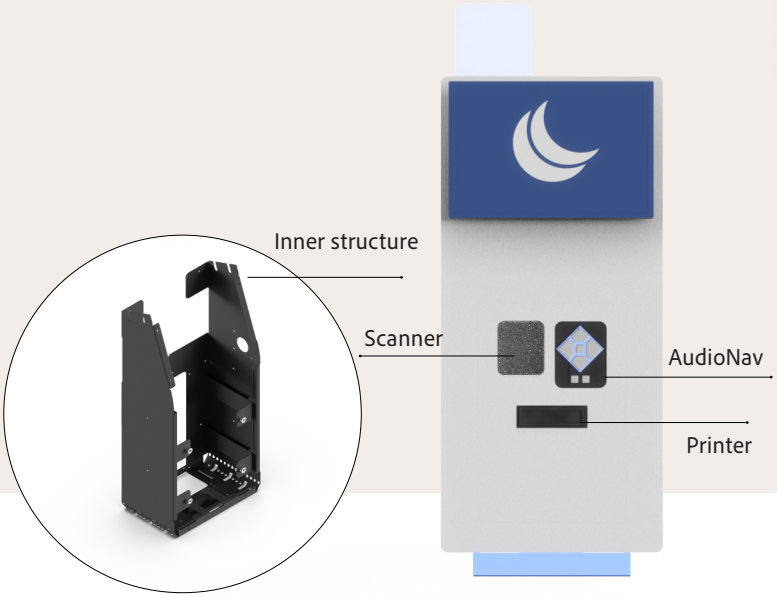




Top

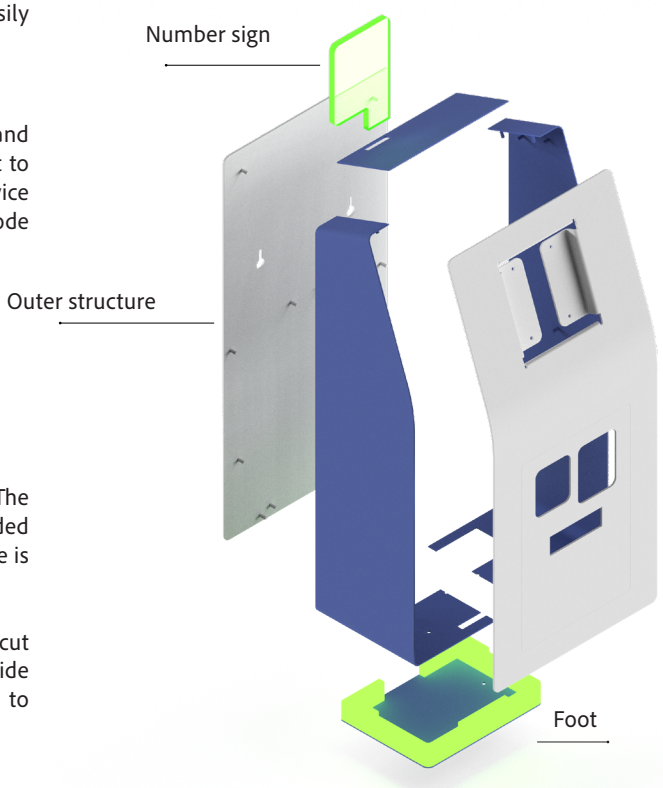
This is the main part of the product. Even though the overall design has few but noticeable changes, the primary way of manufacturing it remains the same. The overarching method is metal bending, which is a process they already use. The structure of the top part consists of the following constructions:

Inner structure: This part has high complexity and takes up the main portion of production. It is lasercut, bended, welded, and works as an internal skeleton. It is designed by looking closely at their current solution. The main change is removing the angle to a straight back side from their current product to this design proposal. The inner structure contains anker points for possible attachments such as the space pole or number antenna, to ensure correlation with their workings with modularity. Extra parts such as the platform for the receipt printer, LEDs and magnet holders are welded into the structure.



Outer structure: These sides are primarely for aesthetics. This part has low complexity and laser cut followed by bending. To ensure correct placement onto the internal structure, rods for bolts are welded in place marked by the laser. This makes the part easily detachable, in case a client would like to add a spacepole.

Front and backside: Low complexity parts. They are laser cut and only the front is bent by a 20 degree angle. The angle is kept to ensure continuity with the current product line up. The service latch is cut out from the same piece and openings for the barcode scanner, ADA device and receipt printer are cut as well.



Foot: The other main change is the added foot to the top part. The foot is made of 20 mm thick acrylic, which is heated and bended into position. The acrylic is of frosted finish so the wiring inside is not visible, while still being able to light up.

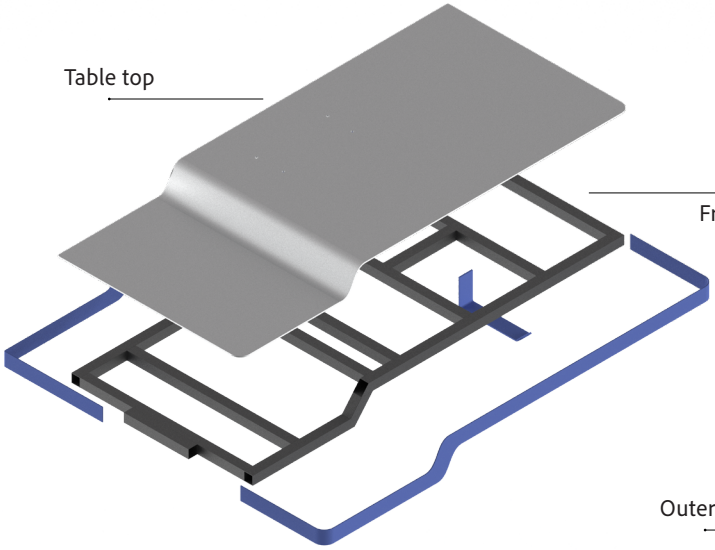
Number sign: A simple piece of clear 20 mm acrylic. It is laser cut and placed through the hole on top, resting on the top and inside the top part of the internal structure where LEDs are wired to reflect the light through the material.

Table

Structure: The table is made up of 20 mm steel square rods welded together. The structure is of lower complexity, though the middle part that allows the s-curve is at an angle. This requires it to be cut into right angles and then welded together. This can be done by a cold saw to acquire high precision, but can also be done by hand.

Frames: Low complexity part. The frames are laser cut and then bent to fit around the structure. As the radius of the bend makes the frame wider than the frame, extra square rods are welded onto the structure, making the frame able to be attached and welded together.

Table top: The top consists of a laser cut and bent 2 mm surface. It is welded onto the structure from the bottom.

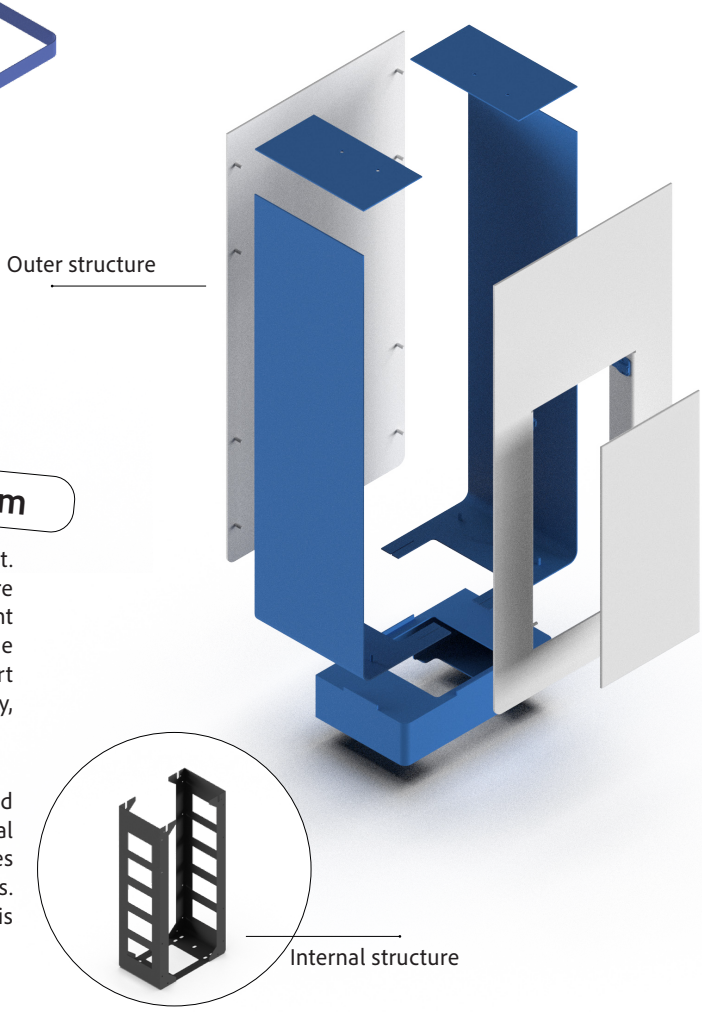


Bottom

Internal structure: Medium complexity. It is laser cut and bent. The part is of the same construction like the top internal structure but with lower complexity. The design follows the current construction closely to ensure plug-n-play. Most parts in the internal structure on the bottom are welded into place, as this part of the product does not require the same amount of modularity, and primarily functions as "furniture".

Front and backside: The back is merely laser cut. The front and bended in the middle to enable the servicelatch. As the internal structure has lower complexity than the top, the bottom uses standard click magnets to avoid further manufacturing processes. This is the current solution of the SCO Flex and is repeated in this design.

Outer structure: Primarily for aesthetics and continuity with the top design. It is laser cut and bent. Rods for bolts are welded onto the inside, so when attaching it to the structure it is at the current placement and merely tightened into place.



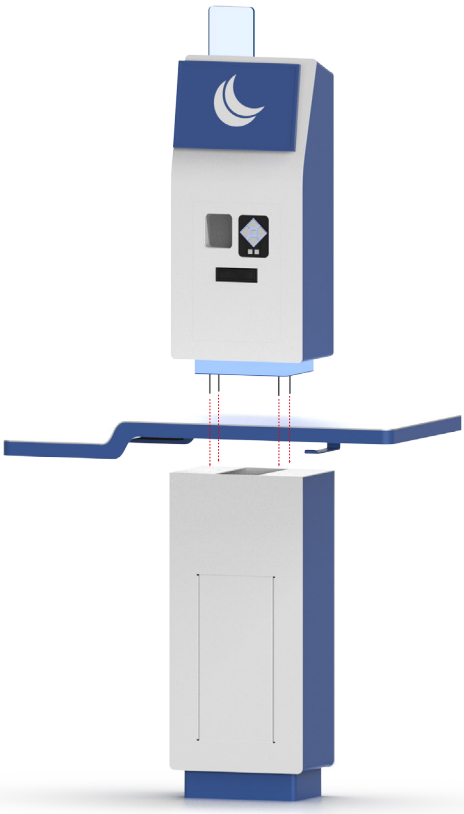
Foot: As a bigger change like the top part a foot is added for flair and aesthetical effect. The foot is simply a piece of metal laser cut into size and bent. A bottom piece is laser cut as well and welded onto the foot to achieve better strength and balance.

Setting it up

As of right now, Ergonomic Solutions sends out their SCO machines fully assembled on pallets. It is proposed through SCO RGB that the machine is sent in three parts. All three parts are assembled in house, then packed and transported to the store. The parts can all be placed upon each other then fastened with four long nuts and screws at the same time. This enables the client to purchase and only do the final assembly at arrival.

This way, if the client only buys the Counter, Essence or Totem version, Ergonomic Solutions would be able to pack the product more strategically.

Illu. 26: 2 SCO on one pallet - current solution



Main learnings

During the design phase, it was decised to work as closely to Ergonomic Solutions own production methods, to ensure realistic and relevant manufactuing. This desicion might have limited creativity from early on, but an important aspect of the presented value propersition was plug-n-play, and the companys' own desire for rapid production. A lot of time has been spent on observing the lent product from the company, while gaining understanding of how metal bending works. It has been somewhat confusing to figure out how specifik bends e.g. the front plate actually works. Since the company already are able to do these bends by manual and automatic machines, it was determined fine to go forward.

Cost estimation

Again, to ensure low production cost, the way of manufacturing remains the same, and bout the same amount of materials are used. Ergonomic Solutions has already experimented with acrylic, but is still yet to be a bigger part of their production, and results in a bigger startup cost in that specifik area. Understanding what goes into the cost estimation has been quite overwhelming, as much of this project focused on designing and refining the small details. The cost estimation has been an addition afterwards, and information on what goes into the estimation and lack of information from the company, the estimation has added sources of error.

EPILOQUE

Reflection

Process

The overall structure of the project has been a personal challenge. Transitioning from working in groups to being solely responsible for both the direction and progress of a project proved difficult. Having to rely on my own judgement while also managing the entire process introduced a new level of responsibility. Throughout the project, my role shifted between several positions: project manager, team member, and facilitator. Balancing these roles pushed me well outside my comfort zone.

The project was structured around three pitches, each followed by a development period. While this provided clear milestones, it also created the feeling of working towards fixed endpoints. Each pitch often felt like a hard deadline, after which the next phase required a partial restart rather than a continuation of the previous work. This structure contributed to hesitation throughout the process, which ultimately led to a rushed maturation phase and potentially affected some design decisions.

Business driven innovation

Working with a design brief provided by a company was a new experience. Learning how to interpret the brief and navigate both its opportunities and limitations was both exciting and challenging. The scale and complexity of the product, combined with the nature of the brief, created the impression that there was limited room for user involvement, which ultimately became minimal in this project.

During the first weeks, end-users, retail staff, and management from several local stores were interviewed, observed, and shadowed. The collected insights were analysed and provided a valuable understanding of the retail environment. However, due to uncertainty about how to apply this knowledge within the framework of the project, the insights were not actively used in the later design stages, even though they formed an important foundation.

Through discussions with Ergonomic Solutions and project supervisors, it felt like direct user needs were not the primary focus in this particular case. This created a degree of confusion, as user-centered design is typically central to industrial design practice. Designing products for people and understanding how they interact with them is often considered a fundamental motivation for the discipline. While it could be argued that user involvement should have remained a stronger focus regardless, uncertainty about the project direction ultimately led to these aspects being cast aside.

One element of the brief involved incorporating accessibility requirements based on the European Accessibility Act (EAA). However, these requirements functioned more as a technical checklist than as a complete framework for inclusive design. Since Ergonomic Solutions' direct clients are other companies rather than end-users, accessibility considerations became more closely tied to compliance and business requirements than to direct user engagement.

Future prospects

The proposed design introduces relatively small but targeted changes intended to improve the product while remaining compatible with Ergonomic Solutions' existing design language and manufacturing system. It could be argued that the intervention is modest, and throughout the process the question of whether the changes were enough remained present.

Ergonomic Solutions entered the self-checkout market in 2022 and is still a relatively new actor within a highly competitive field. According to the company itself, the current product is still too new to undergo major redesigns. This perspective influenced the design process, leading to a concept that stays relatively close to the existing solution in order to maintain compatibility and potential for immediate implementation.

SCO RGB should therefore be seen as a refinement rather than a complete redesign. It represents a step in the right direction rather than a final solution. Ergonomic Solutions is still in the process of defining its identity in SCO, and the current product has been described internally as somewhat of a "Frankenstein solution" developed through rapid iterations.

Looking ahead, the future of self-checkout solutions may involve even more compact systems focused primarily on the upper part of the unit, where the interaction with the customer takes place. In that scenario, the table and base components could become less central. Retail stores will then have the opportunity to decide the furniture themselves and storage solutions, where the SCO unit will be provided by Ergonomic Solutions, then mounted in the decired setup. In retrospect, more time could therefore have been spent refining the upper module, as it represents the main focal point of the product.

Another aspect with potential for further exploration is branding. Branding plays an important role in retail environments, yet it remains relatively underutilized in the self-checkout hardware market. While branding is often present in software interfaces, the physical products themselves are typically visually neutral. Simple elements such as colour and material variation could provide opportunities for companies like Ergonomic Solutions to differentiate themselves within the market.

Litterature

AI usage: AI has been used to review and grammatically correct language in this report.

A, Ergonomic Solutions, 2025, “Quality assurance”, found on: https://ergonomic.solutions/about/quality-assurance

B, Ergonomic Solutions, 2025, “About company”, found on: https://ergonomic.solutions/about/company

C, Ergonomic Solutions, 2022, “SpacePole Kiosk”, found on: https://ergonomic.solutions/knowledge-hub/press-releases/spacepole-kioskJactio.com, 2023, “Prisen på konstruktionsstål i 2023”, found on https://jactio.com/da/the-cost-of-structural-steel-per-kg/

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Illustrations

AI: Artificial intelligence has not been used to generate illustrations and renderings of own production.

Illu. 1: Porter's Value Chain. Sourced from: https://www.business-to-you.com/value-chain/#google_vignette 6
Illu. 2: Porter's Generic Strategies. Own illustration. 7
Ill. 3: Ergonomic Solutions SCO options. Sourced from: https://ergonomic.solutions/products/spacepole-kiosk/sco-flex 8
Ill. 4: SpacePole Classic. Sourced from: https://ergonomic.solutions/products/spacepole-point-of-sale/vesa-mount-spacepole-classic-1 8
Ill. 5: SpacePole VESA. Sourced from: https://ergonomic.solutions/products/spacepole-point-of-sale/vesa-mount-spacepole-arc-1 8
Ill. 6: SCO details. Sourced from: https://panoston.co.uk/products/slim/self-checkout 9
Ill. 7: SCO blue. Sourced from: https://panoston.co.uk/products/slim/self-checkout 9
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Ill. 21: COOP SCO. Sourced from: https://ergonomic.solutions/knowledge-hub/case-studies/superbrugsen 16
Ill. 22: SCO RGB in føtex. Rendering from keyshot, original photo sourced from: https://ballerupcentret.dk/butikker/fotex 16
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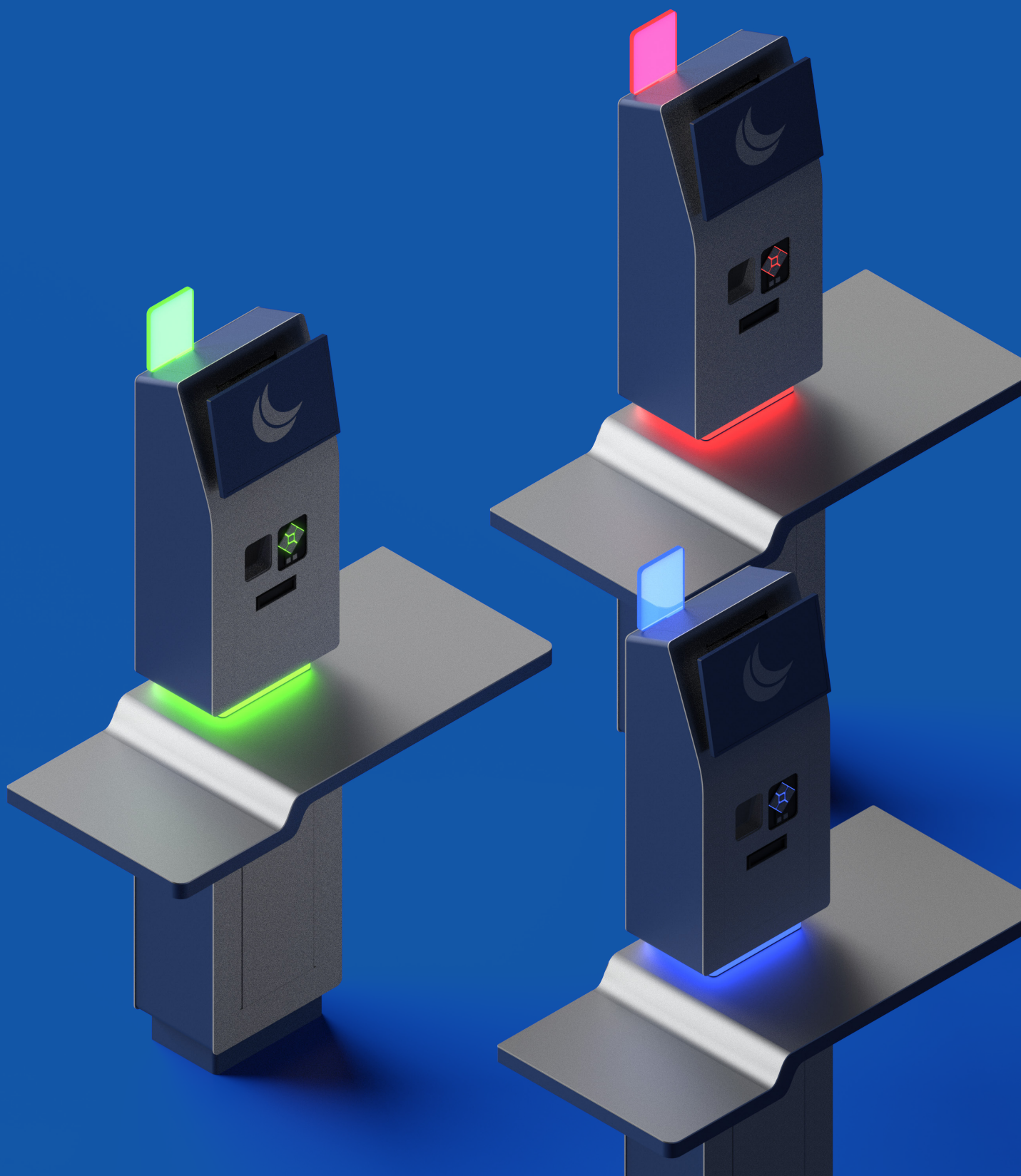
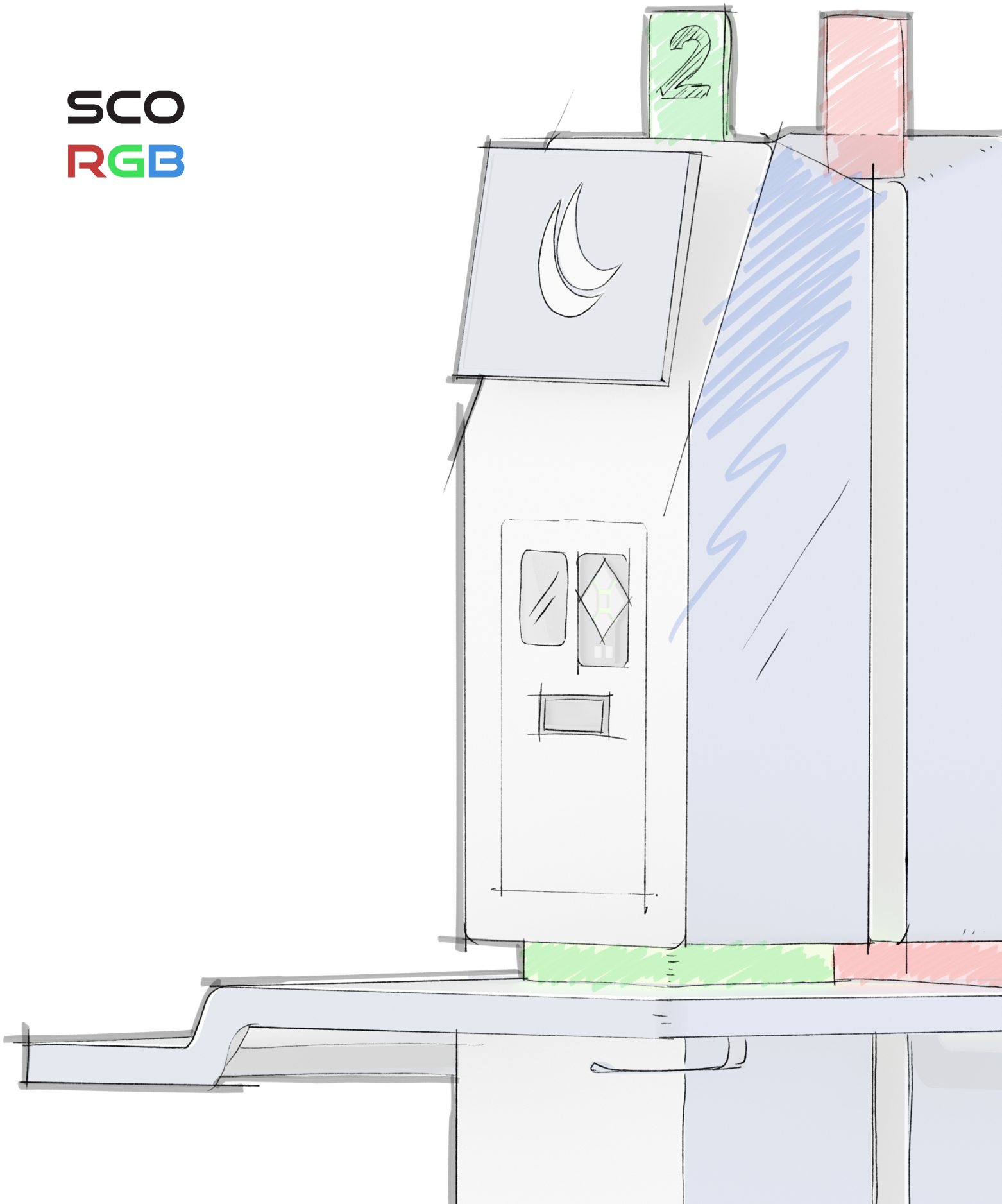
Ill. 20: Alnatura SCO. Sourced from: https://ergonomic.solutions/knowledge-hub/case-studies/alnatura 16
Ill. 24: Accessibility technical sheet. Sourced from: https://panoston.co.uk/articles/blogs/accessibility-of-self-service-solutions 18
Ill. 25: Storm Interface AudioNav. Sourced from: https://shop.storm-interface.com/audio-nav-6-key-green-mic-support.html 18
Illu. 26: 2 SCO on one pallet - current solution. Own Illustration. 24

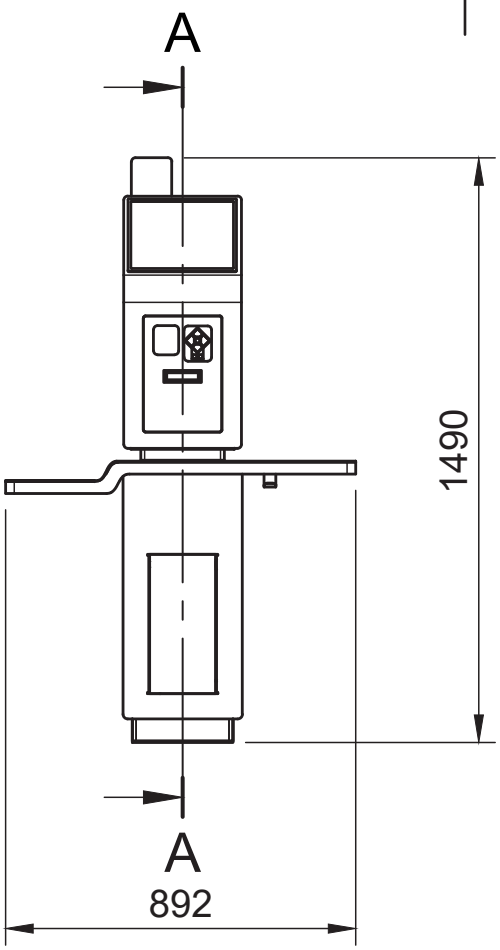
AALBORG UNIVERSITET



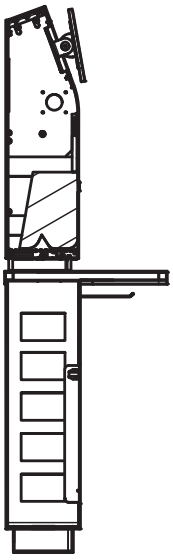
TECHNICAL DRAWINGS

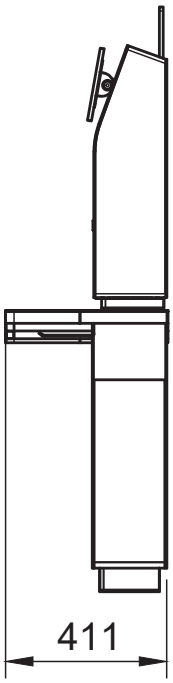
SCO
RGB





A-A (1:20)





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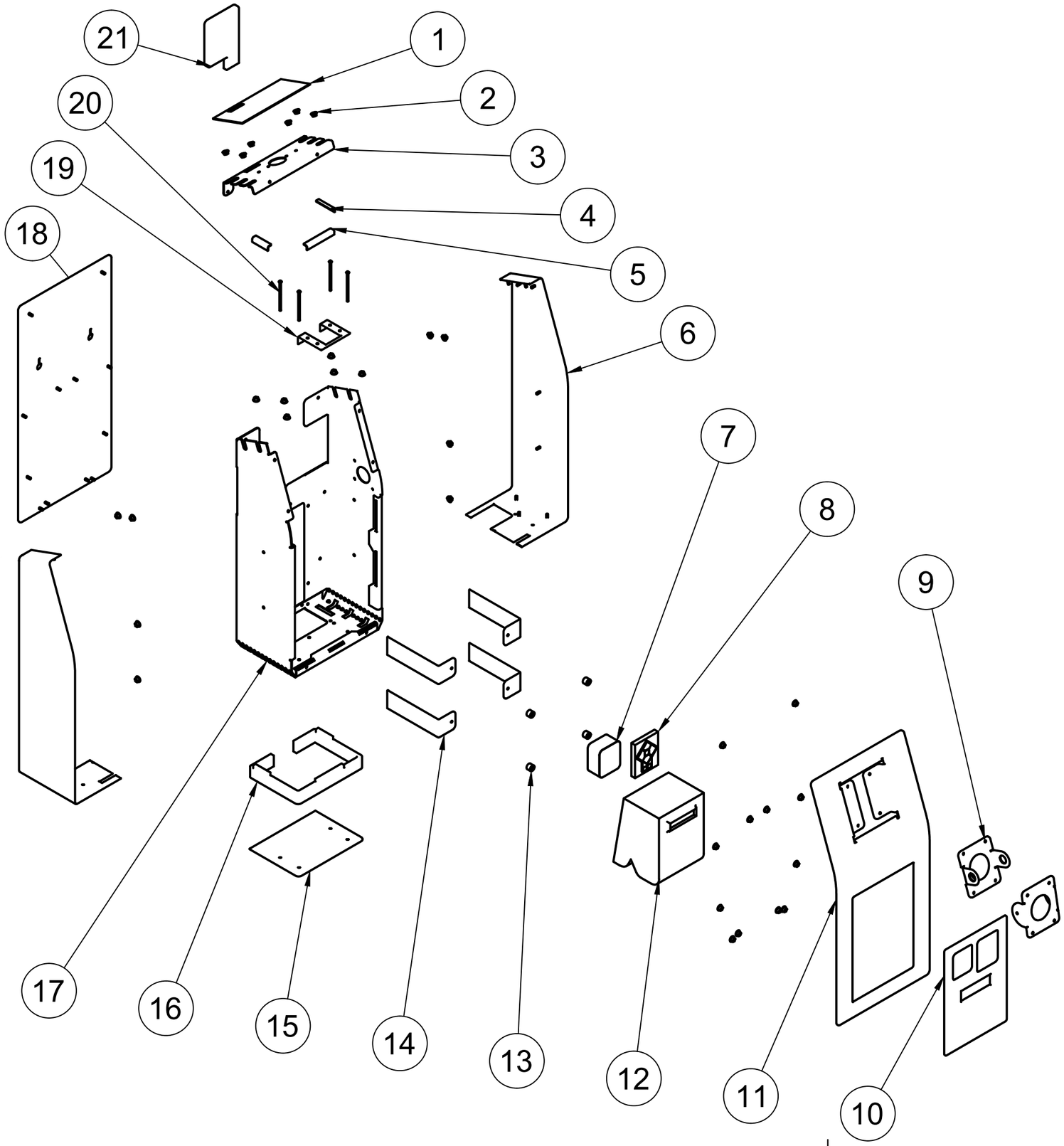
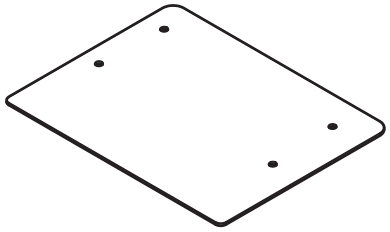
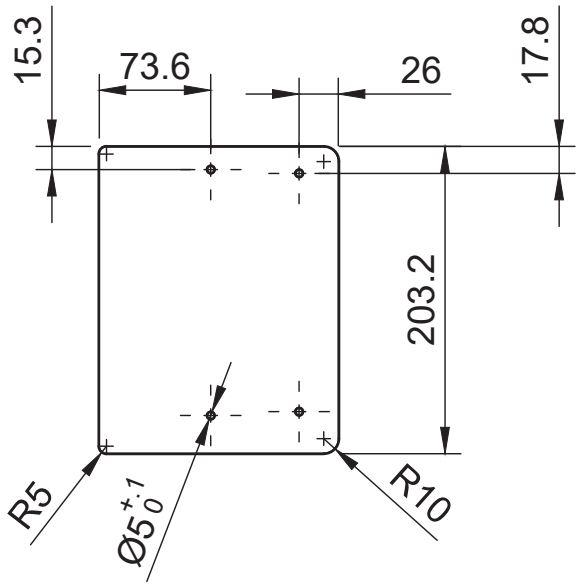
Material:	**Drawn by: David Nocis** **Date: 17-12-2025**
	Standard: ISO 2768
	Drawing No.01
Paper: A4	**Sheet: 01 of 01**

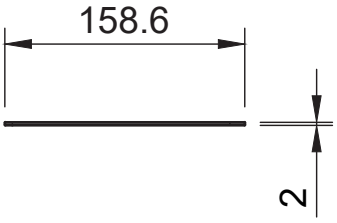


Parts List			
Item	Qty	Part Name	Material
1	1	top panel	Stainless steel
2	32	bolt	M5
3	1	internal top panel	Stainless steel
4	2	LED holder short	Stainless steel
5	1	LED holder long	Stainless steel
6	2	side panel	Stainless steel
7	1	barcode scanner	Outsource
8	1	AudioNav system	Outsource
9	1	screen attachment	Stainless steel
10	1	service latch	Stainless steel
11	1	front panel	Stainless steel
12	1	reciept printer	Outsource
13	4	magnet	Outsource
14	4	magnet holder	Stainless steel
15	1	acrylic leg cap	Stainless steel
16	1	acrylic leg	Acrylic
17	1	internal shell	Stainless steel
18	1	back plate	Stainless steel
19	1	reciept holder	Stainless steel
20	4	hex bolt	M5
21	1	cash register number	Acrylic

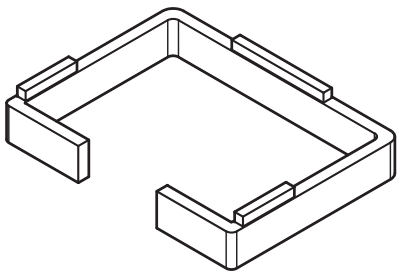
Scale: 1:10 **Unit:** **Drawing Type: Exploded**	**Part Name: RGB Top**
Material:	**Drawn by: David Nocis** **Date: 17-12-2025**
Assembled using bolts and tack welding	**Standard: ISO 2768**
Paper: A3	**Drawing No. 02** **Sheet: 01 of 01**

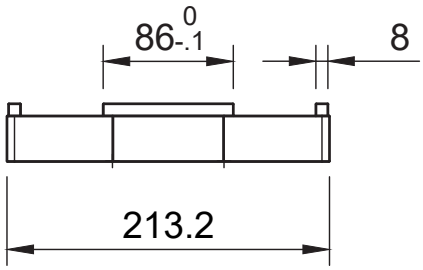


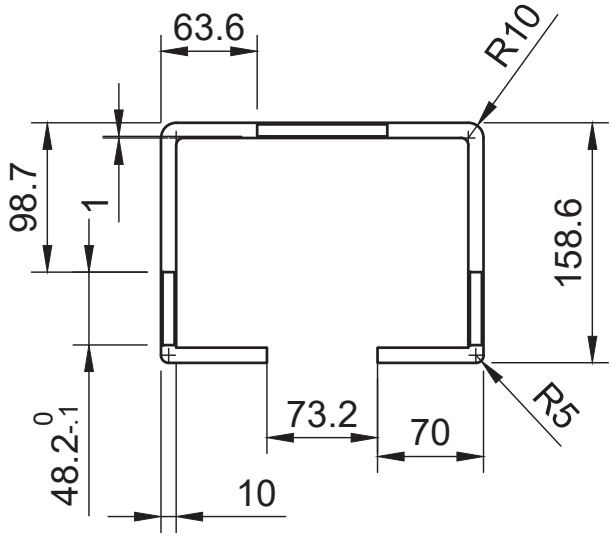




Scale: 1:5 **Unit: mm** **Drawing Type: Detail**	**Part Name: 15 - acrylic leg cap**
Material: Stainless steel	**Drawn by: David Nocis** **Date: 17-12-2025**
	Standard: ISO 2768
	Drawing No. 03
Paper: A4	**Sheet: 01 of 01**

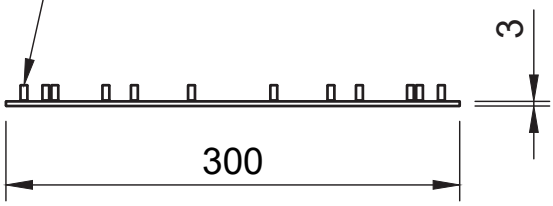


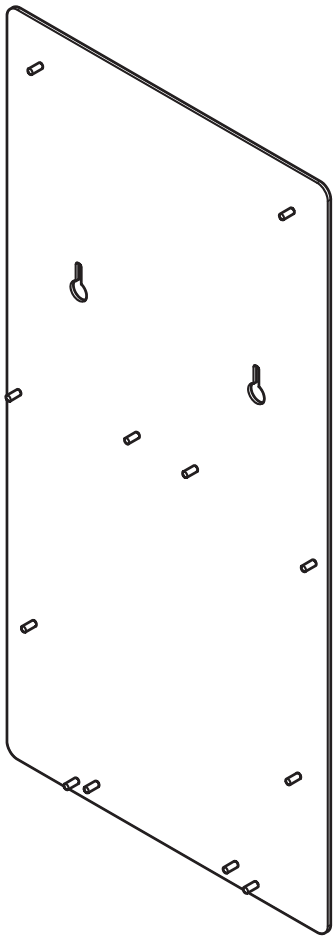


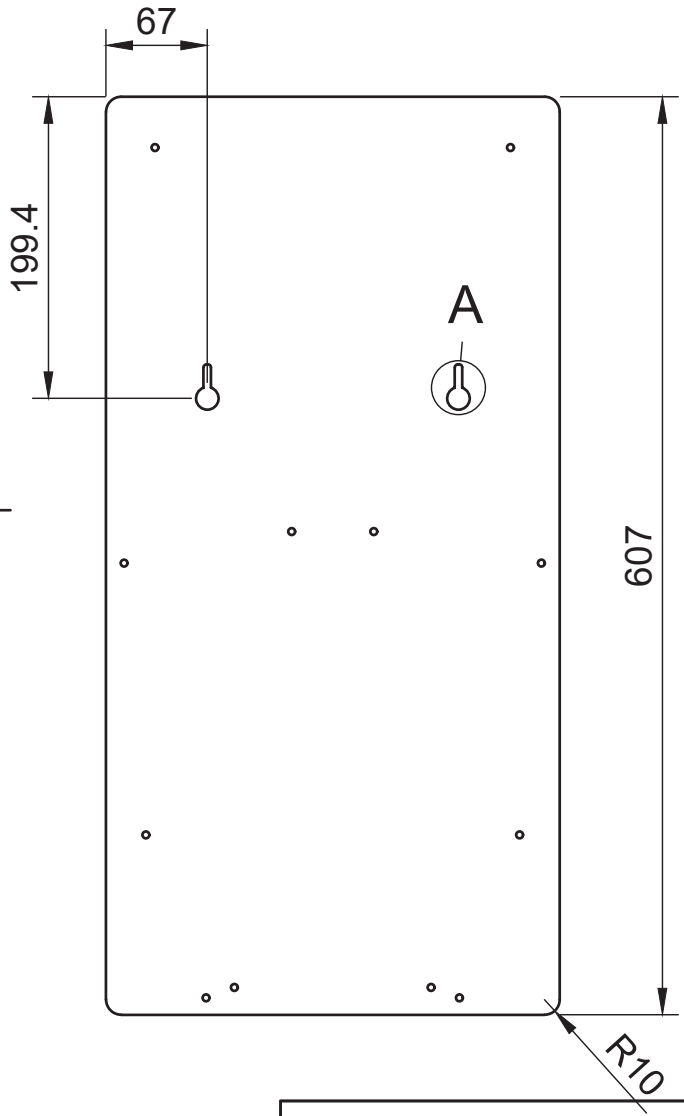


Scale: 1:5 **Unit: mm** **Drawing Type: Detail**	**Part Name: 16 - acrylic leg**
Material: Acrylic	**Drawn by: David Nocis** **Date: 17-12-2025**
Lasercutted and heatbended	**Standard: ISO 2768**
	Drawing No. 04
Paper: A4	**Sheet: 01 of 01**

Threads for M5 bolts. Placement edge into part during manufacturing from CAD file







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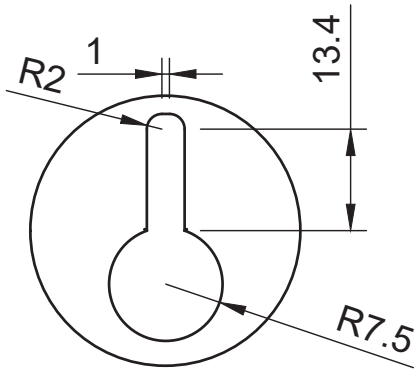
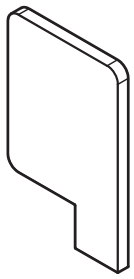
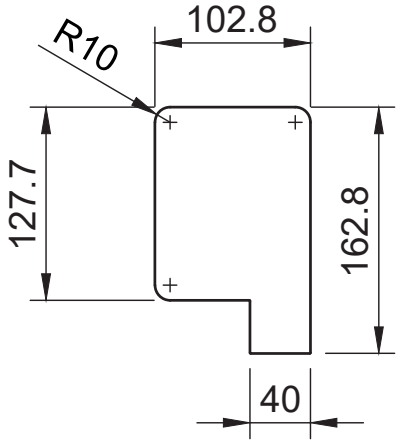
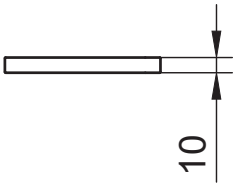


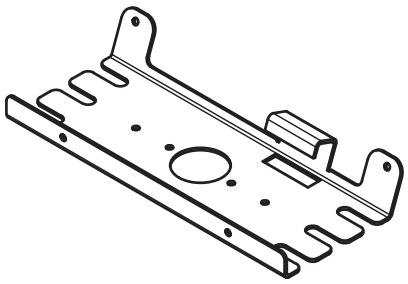
Scale: 1:5 **Unit: mm** **Drawing Type: Detail**	**Part Name: 18 - back plate**
Material: Stainless Steel	**Drawn by: David Nocis** **Date: 17-12-2025**
Stud welding for bolt	**Standard: ISO 2768**
	Drawing No. 05
Paper: A4	**Sheet: 01 of 01**

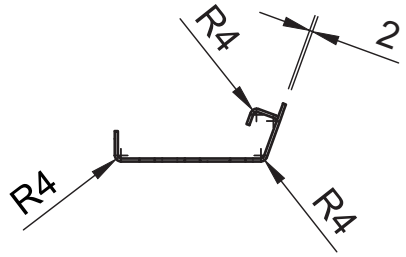


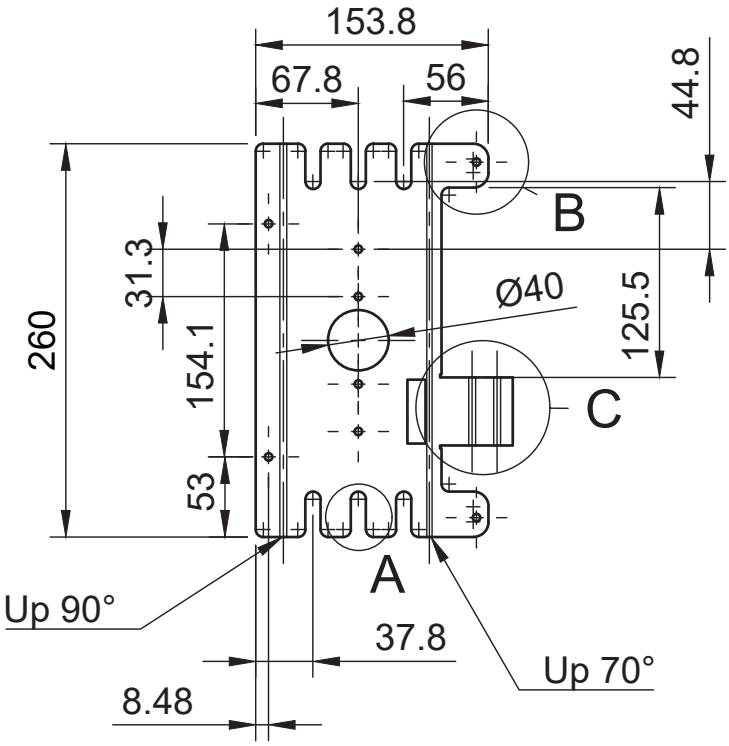




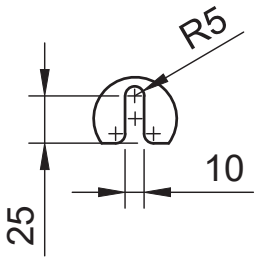
Scale: 1:5 **Unit: mm** **Drawing Type: Detail**	**Part Name: 21 - cash register number**
Material: Acrylic	**Drawn by: David Nocis** **Date: 17-12-2025**
Lasercutted **Numbers etched**	**Standard: ISO 2768**
	Drawing No. 06
Paper: A4	**Sheet: 01 of 01**



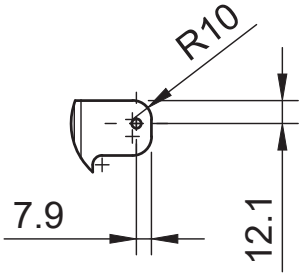




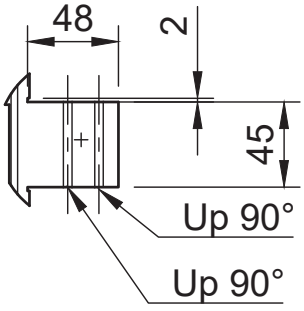
A (1:4)



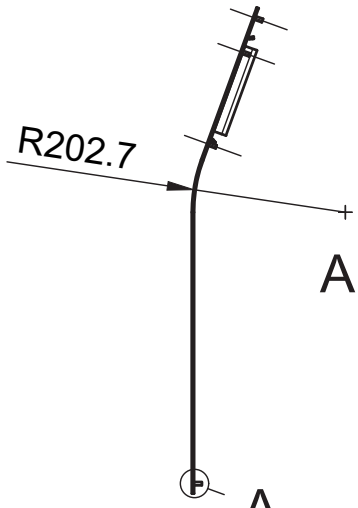
B (1:4)



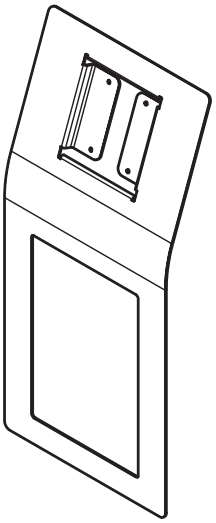
C (1:4)

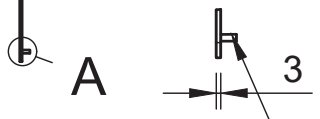


Scale: 1:5 **Unit: mm** **Drawing Type: Detail**	**Part Name: 03 - internal top panel**
Material: Stainless Steel	**Drawn by: David Nocis** **Date: 17-12-2025**
	Standard: ISO 2768
	Drawing No. 07
Paper: A4	**Sheet: 01 of 01**



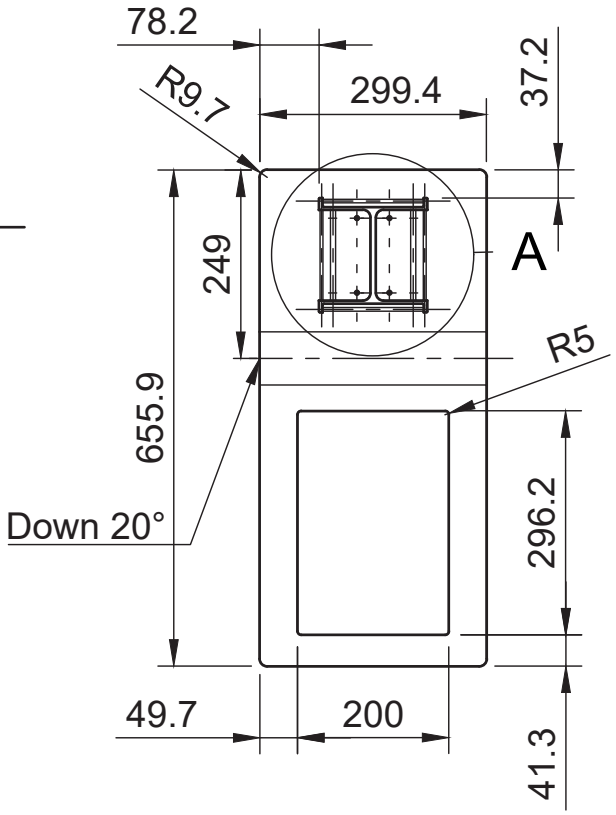
A (1:5)

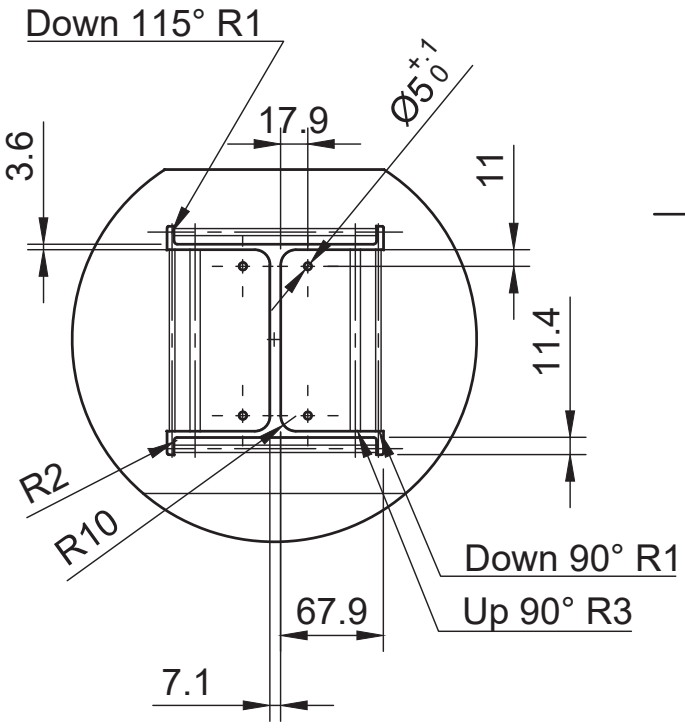




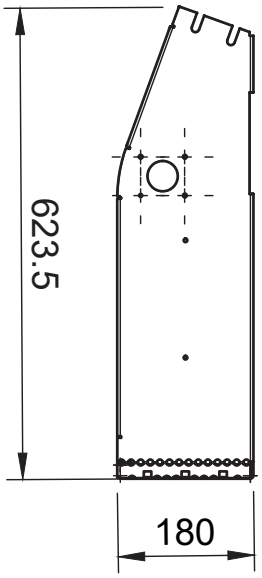
Threads for M5 bolts. Placement edge into part during manufacturing from CAD file

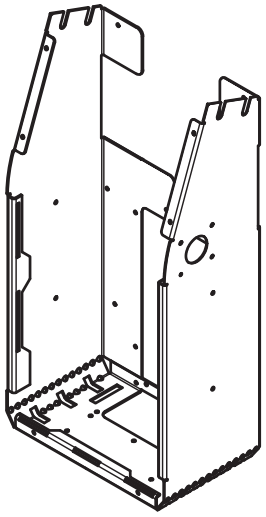
A (1:5)

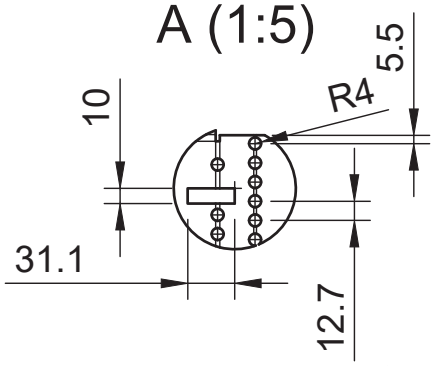


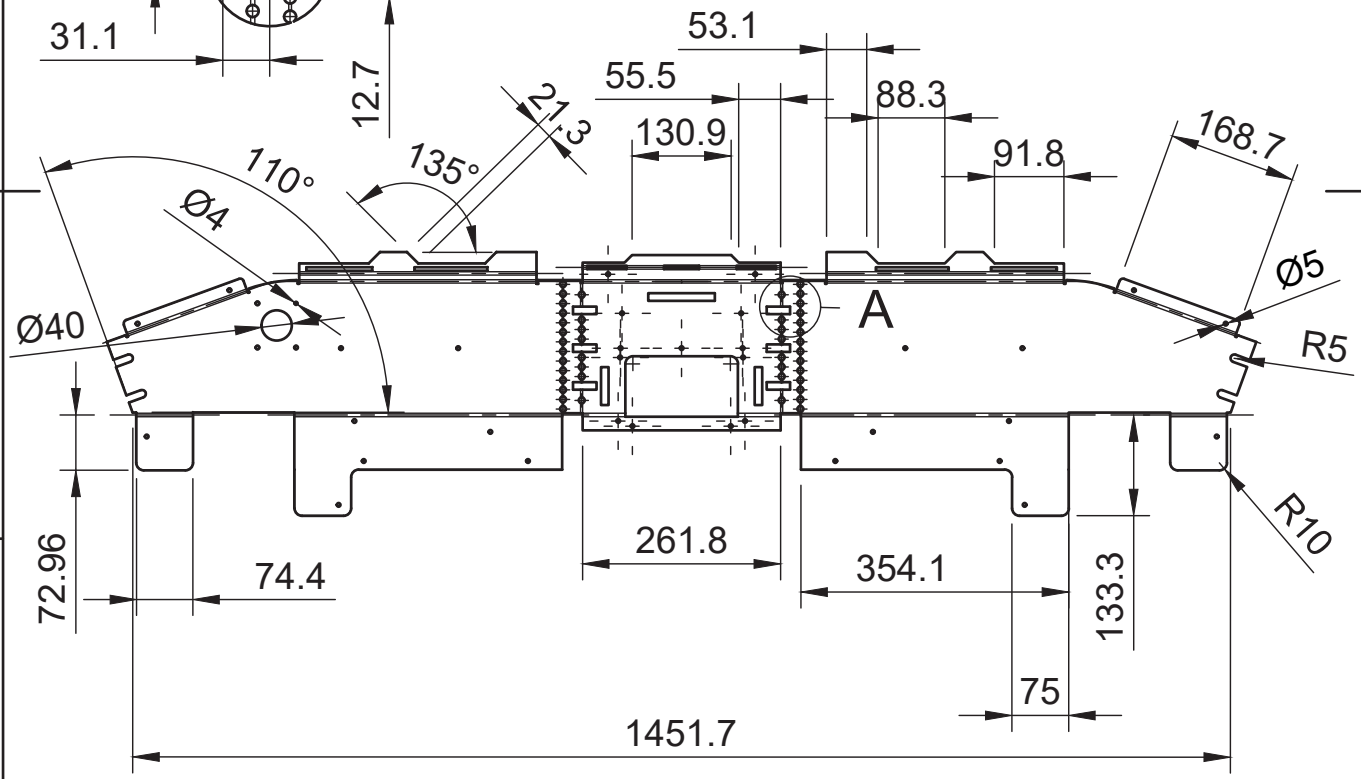


Scale: 1:10 **Unit: mm** **Drawing Type: Detail**	**Part Name: 11 - front panel**
Material: Stainless Steel	**Drawn by: David Nocis** **Date: 17-12-2025**
Stud welding for bolt	**Standard: ISO 2768**
Paper: A4	**Drawing No. 08** **Sheet: 01 of 01**

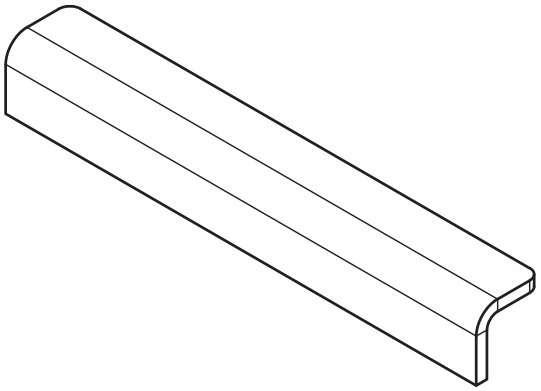


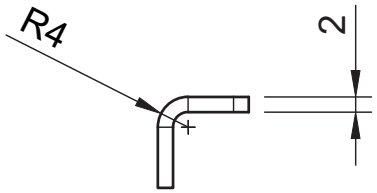


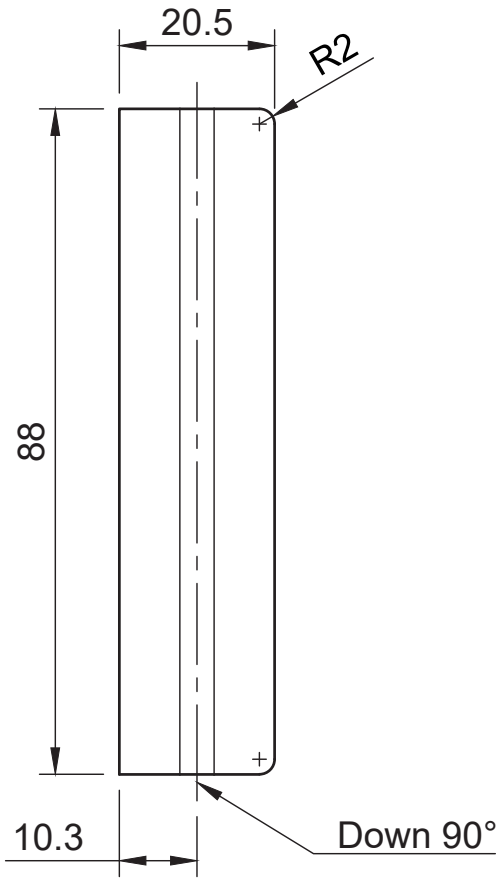




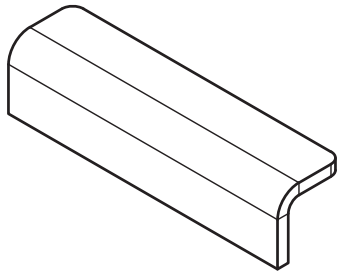
Scale: 1:10 **Unit: mm** **Drawing Type: Detail**	**Part Name: 17 - internal shell**
Material: Stainless Steel	**Drawn by: David Nocis** **Date: 17-12-2025**
	Standard: ISO 2768
	Drawing No. 09
Paper: A4	**Sheet: 01 of 01**

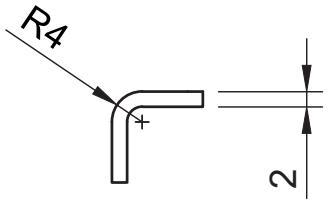


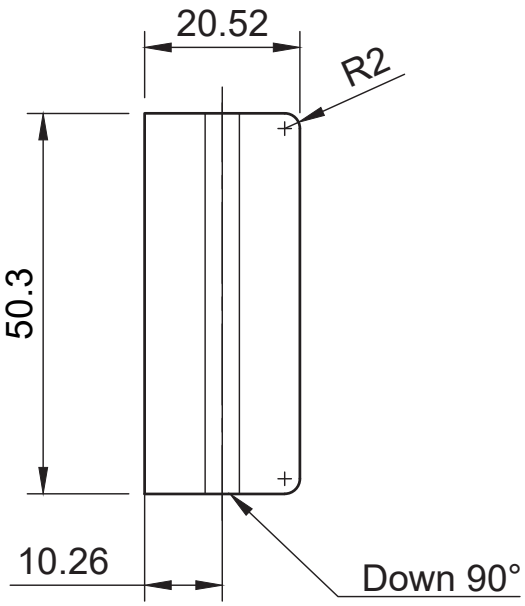




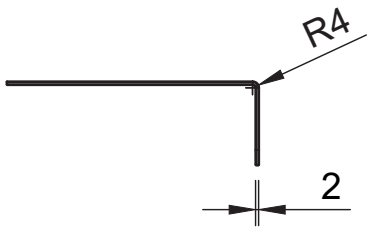
Scale: 1:1 **Unit: mm** **Drawing Type: Detail**	**Part Name: 05 - LED holder long**
Material: Stainless Steel	**Drawn by: David Nocis** **Date: 17-12-2025**
	Standard: ISO 2768
	Drawing No. 10
Paper: A4	**Sheet: 01 of 01**

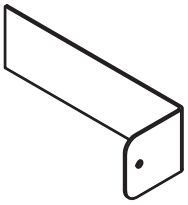


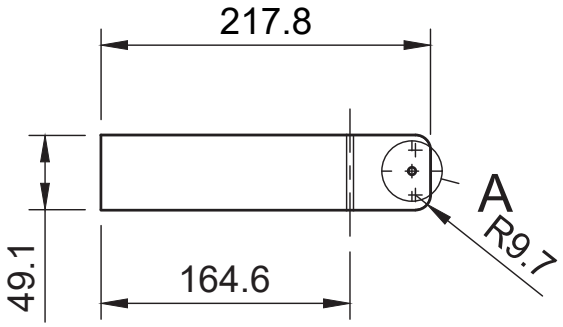


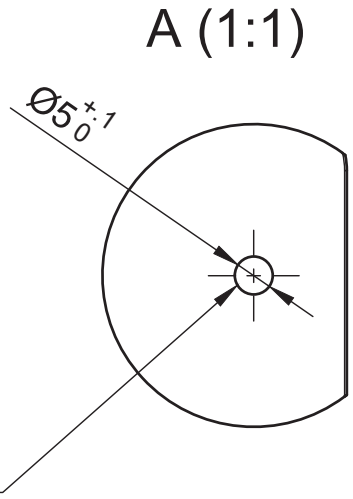


Scale: 1:1 **Unit: mm** **Drawing Type: Detail**	**Part Name: 04 - LED holder short**
Material: Stainless Steel	**Drawn by: David Nocis** **Date: 17-12-2025**
	Standard: ISO 2768
	Drawing No. 11
Paper: A4	**Sheet: 01 of 01**

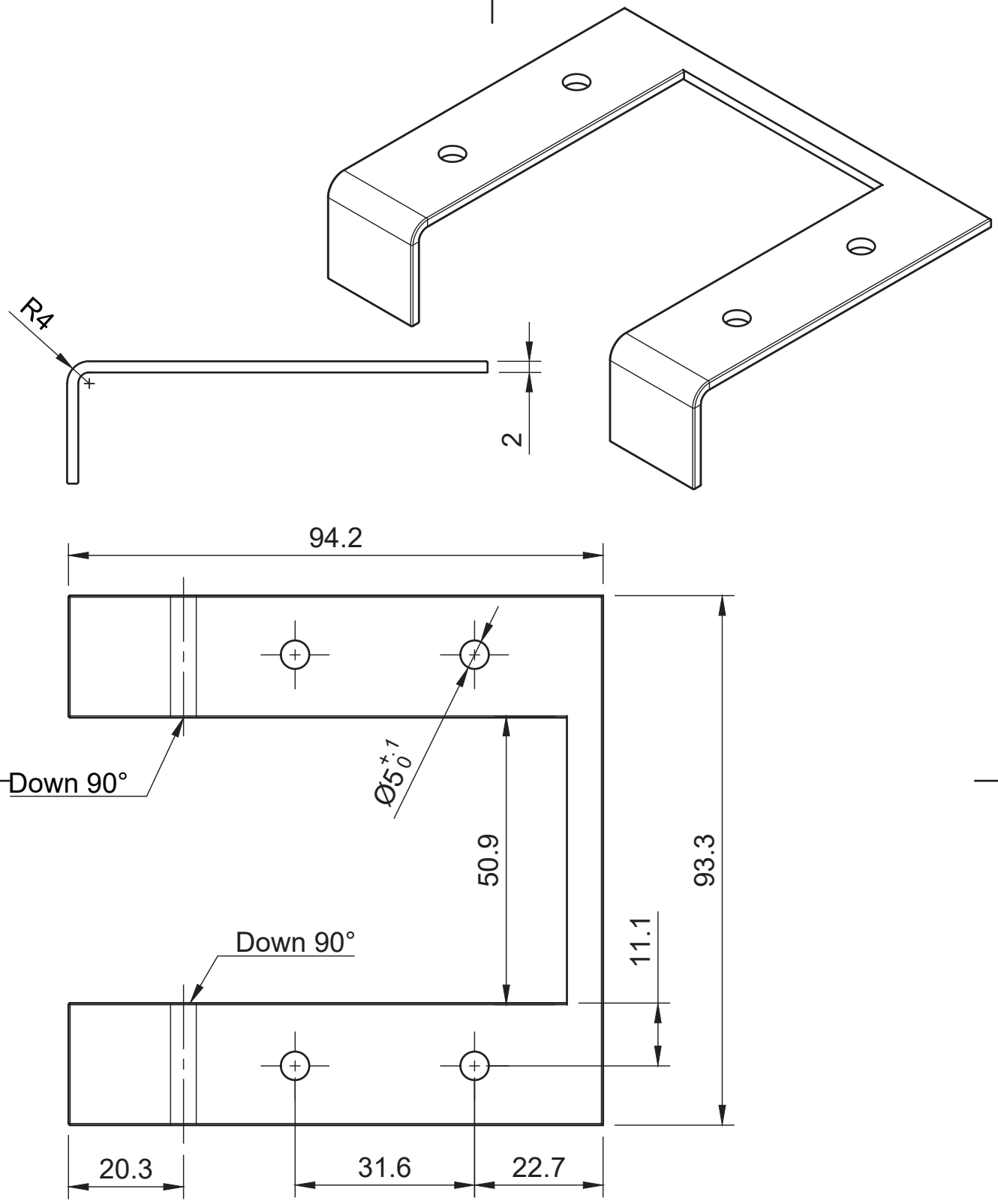




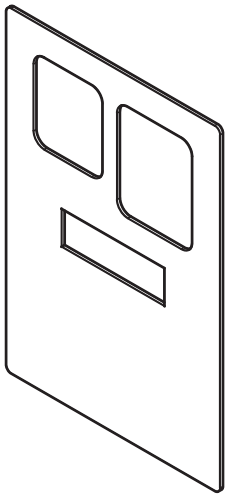


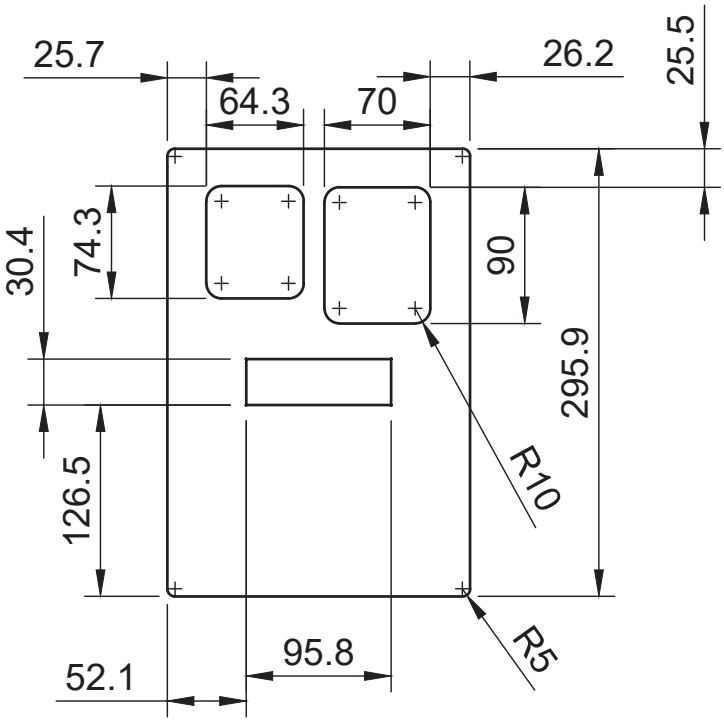


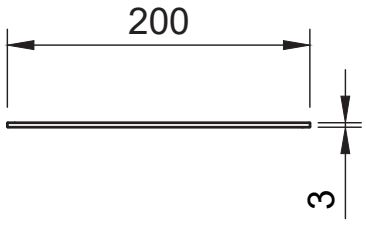
Scale: 1:5 **Unit: mm** **Drawing Type: Detail**	**Part Name: 14 - magnet holder**
Material: Stainless Steel	**Drawn by: David Nocis** **Date: 17-12-2025**
	Standard: ISO 2768
	Drawing No. 12
Paper: A4	**Sheet: 01 of 01**



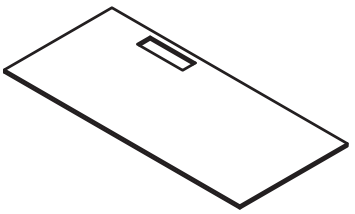
Scale: 1:1 **Unit: mm** **Drawing Type: Detail**	**Part Name: 19 - reciept holder**
Material: Stainless Steel	**Drawn by: David Nocis** **Date: 17-12-2025**
	Standard: ISO 2768
	Drawing No. 13
Paper: A4	**Sheet: 01 of 01**

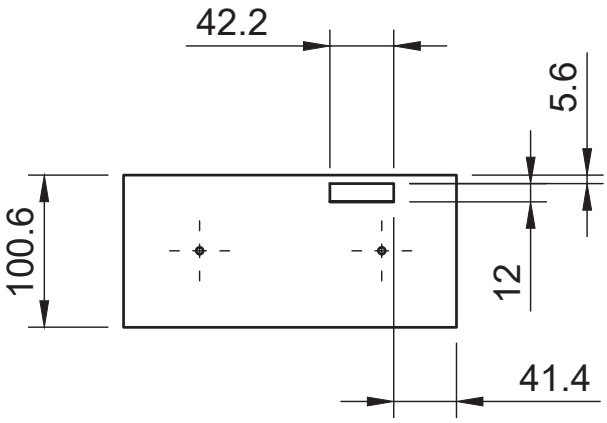




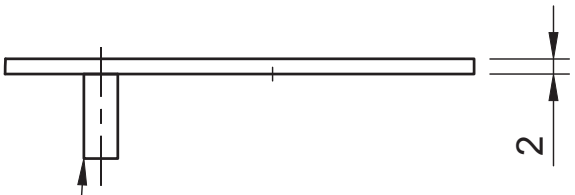


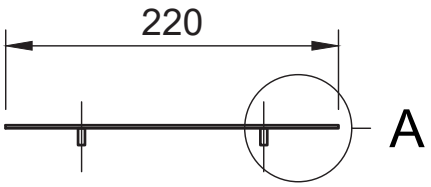
Scale: 1:5 **Unit: mm** **Drawing Type: Detail**	**Part Name: 10 - service latch**
Material: Stainless Steel	**Drawn by: David Nocis** **Date: 17-12-2025**
	Standard: ISO 2768
	Drawing No. 14
Paper: A4	**Sheet: 01 of 01**





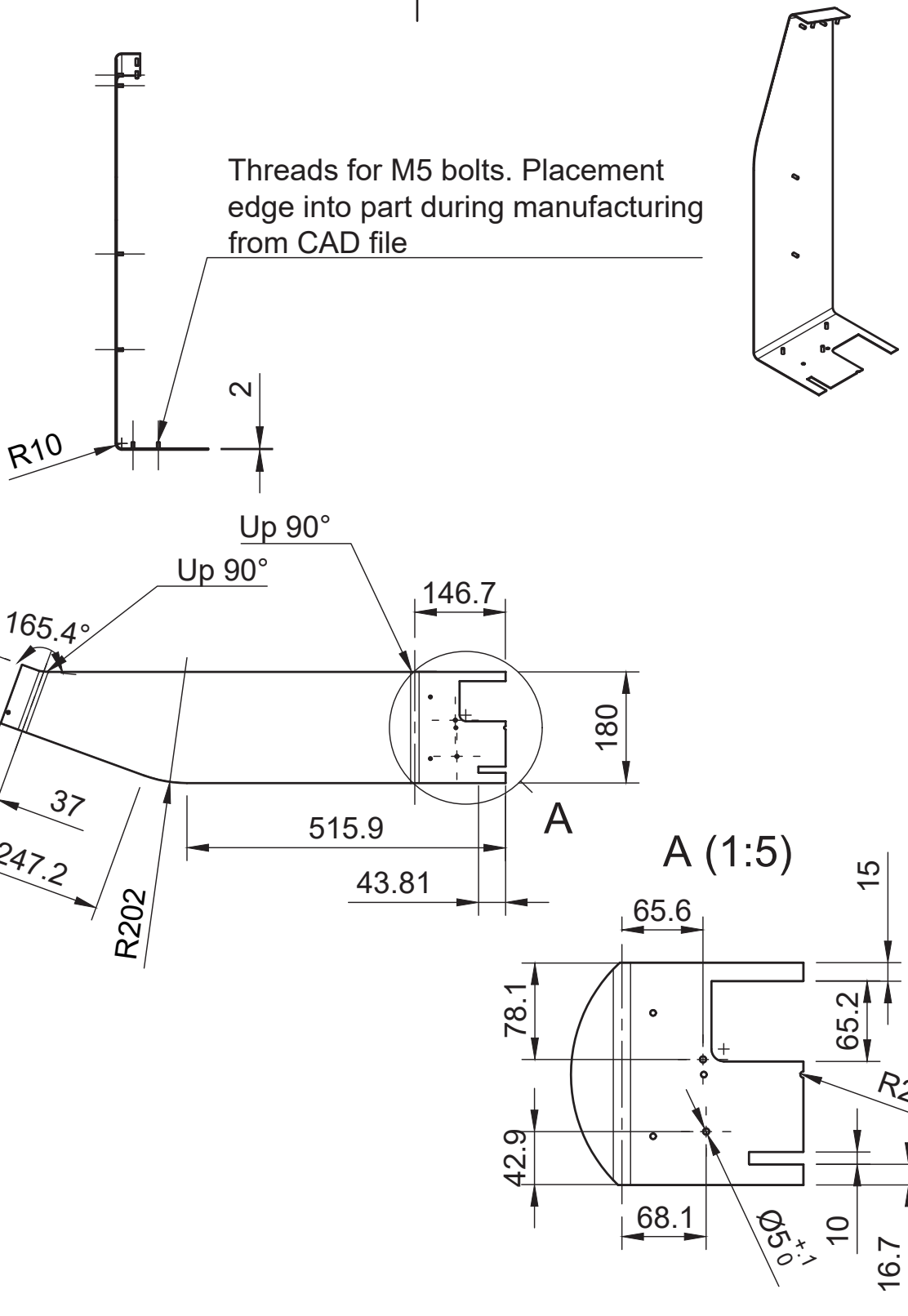
A (1:1)



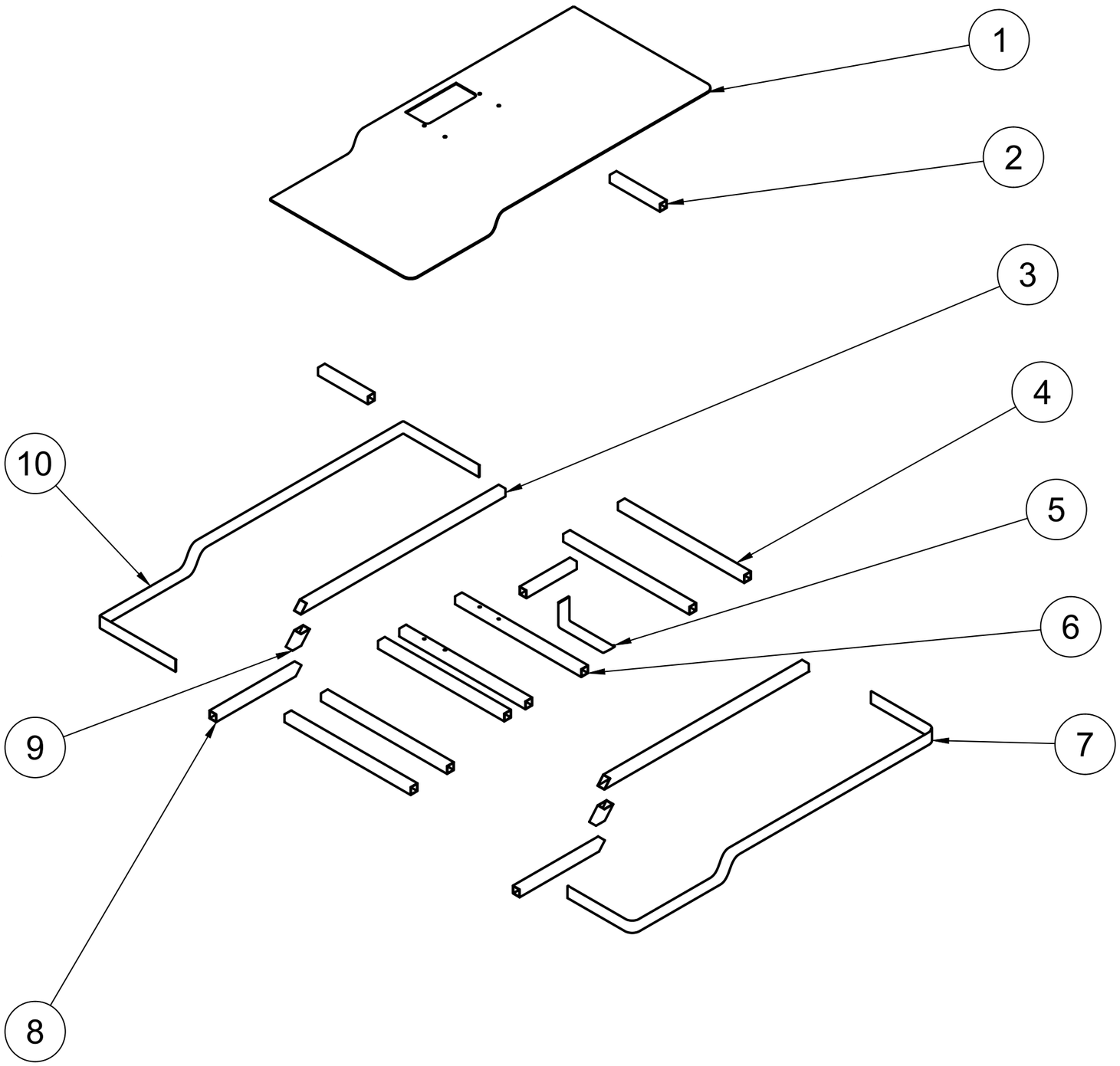


Threads for M5 bolts. Placement edge into part during manufacturing from CAD file

Scale: 1:5 **Unit: mm** **Drawing Type: Detail**	**Part Name: 01 - top panel**
Material: Stainless Steel	**Drawn by: David Nocis** **Date: 17-12-2025**
Stud welding for bolt	**Standard: ISO 2768**
	Drawing No. 15
Paper: A4	**Sheet: 01 of 01**

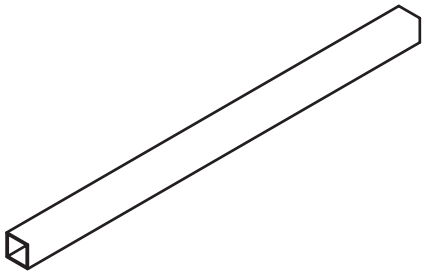


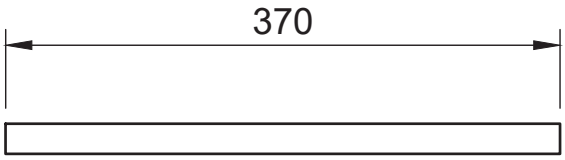
Scale: 1:5 **Unit: mm** **Drawing Type: Detail**	**Part Name: 06 - side panel**
Material: Stainless Steel	**Drawn by: David Nocis** **Date: 17-12-2025**
Stud welding for bolt	**Standard: ISO 2768**
	Drawing No. 16
Paper: A4	**Sheet: 01 of 01**

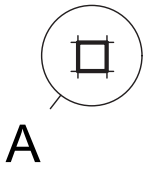


Parts List			
Item	Qty	Part Name	Material
1	1	tabletop	Stainless steel
2	3	distance Block	Stainless steel
3	2	frame beam long	Stainless steel
4	5	cross beam	Stainless steel
5	1	hook	Stainless steel
6	2	cross beam with mounting hole	Stainless steel
7	1	frame front	Stainless steel
8	2	frame beam short	Stainless steel
9	2	frame connector	Stainless steel
10	1	frame back	Stainless steel

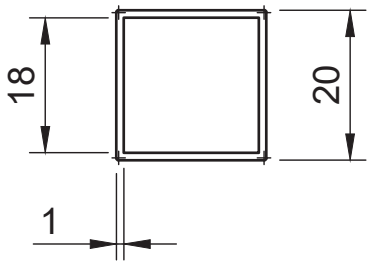
Scale: 1:10 **Unit:** **Drawing Type: Exploded**	**Part Name: RGB Table**
Material:	**Drawn by: David Nocis** **Date: 17-12-2025**
Assembled using tack welding	**Standard: ISO 2768**
	Drawing No. 17
Paper: A3	**Sheet: 01 of 01**



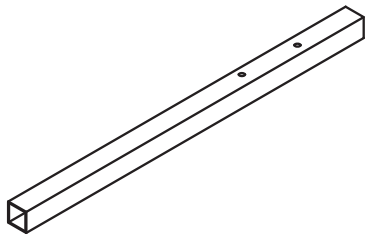


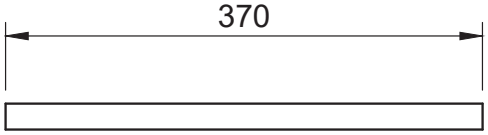


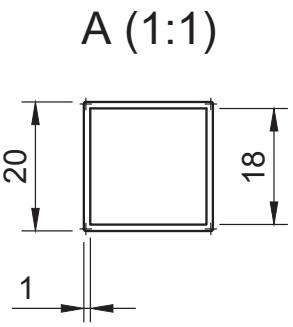
A (1:1)

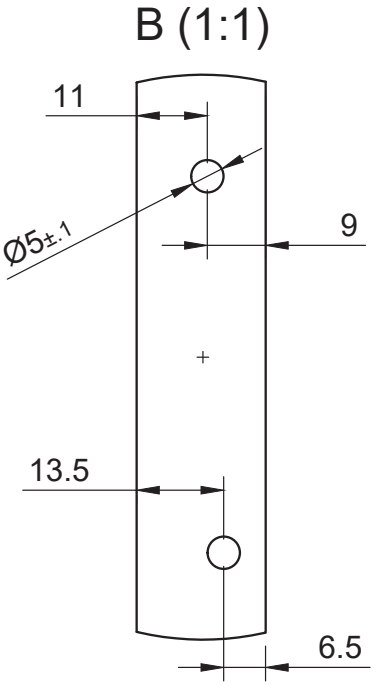


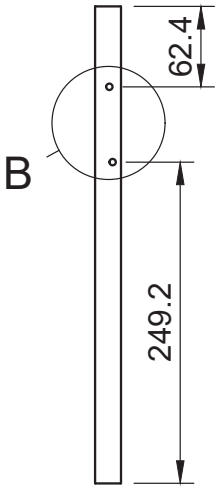
Scale: 1:5 **Unit: mm** **Drawing Type: Detail**	**Part Name: 04 - cross beam**
Material: Stainless steel	**Drawn by: David Nocis** **Date: 17-12-2025**
	Standard: ISO 2768
	Drawing No. 18
Paper: A4	**Sheet: 01 of 01**



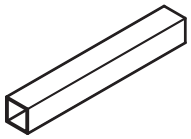


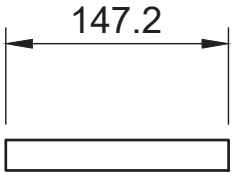


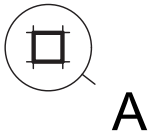




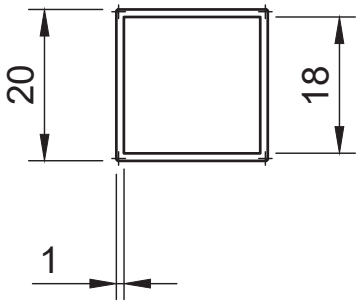
Scale: 1:5 **Unit: mm** **Drawing Type: Detail**	**Part Name: 06 - cross beam with mounting hole**
Material: Stainless Steel	**Drawn by: David Nocis** **Date: 17-12-2025**
	Standard: ISO 2768
	Drawing No. 19
Paper: A4	**Sheet: 01 of 01**



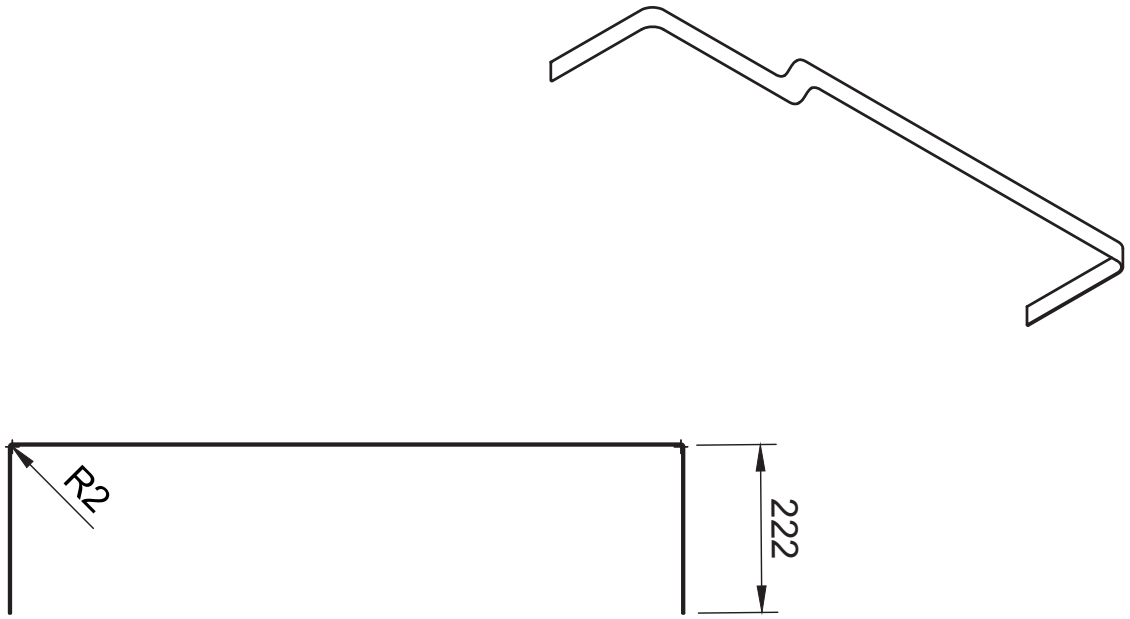


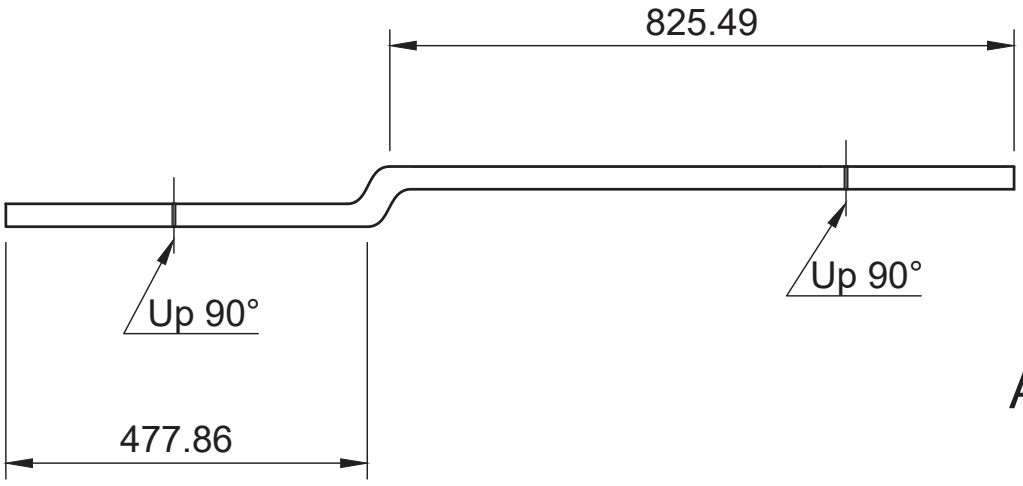


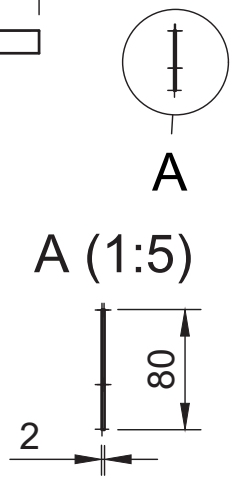
A (1:1)



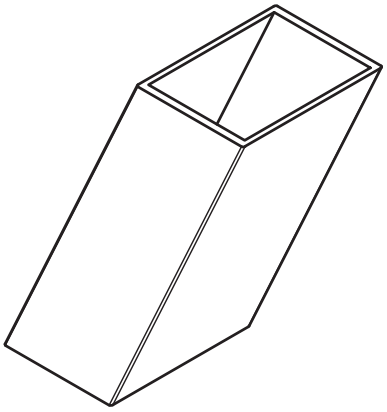
Scale: 1:5 **Unit: mm** **Drawing Type: Detail**	**Part Name: 02 - distance block**
Material: Stainless Steel	**Drawn by: David Nocis** **Date: 17-12-2025**
	Standard: ISO 2768
	Drawing No. 20
Paper: A4	**Sheet: 01 of 01**

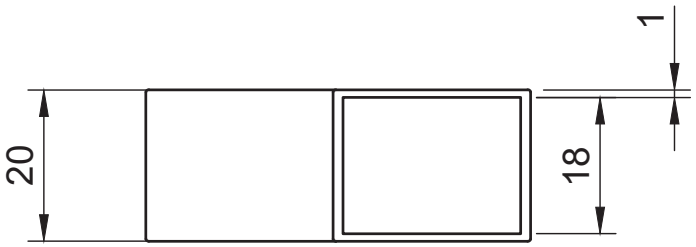


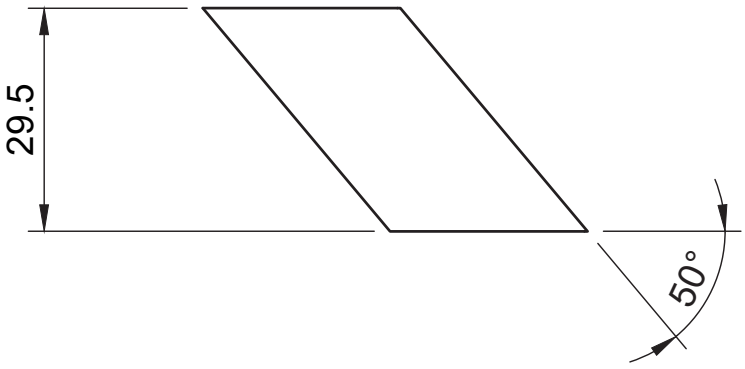




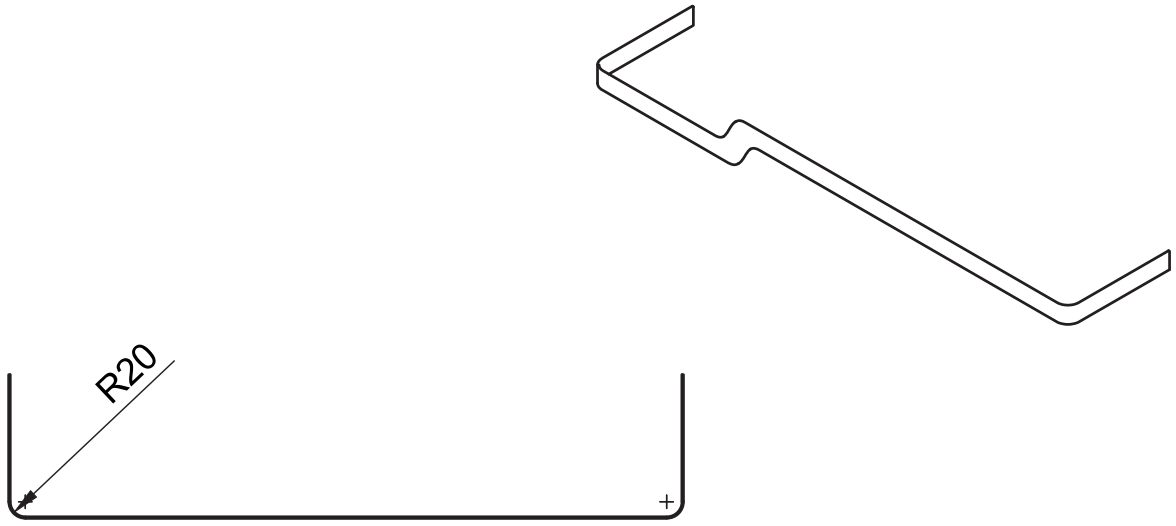
Scale: 1:10 **Unit: mm** **Drawing Type: Detail**	**Part Name: 10 - frame back**
Material: Stainless Steel	**Drawn by: David Nocis** **Date: 17-12-2025**
	Standard: ISO 2768
	Drawing No. 21
Paper: A4	**Sheet: 01 of 01**

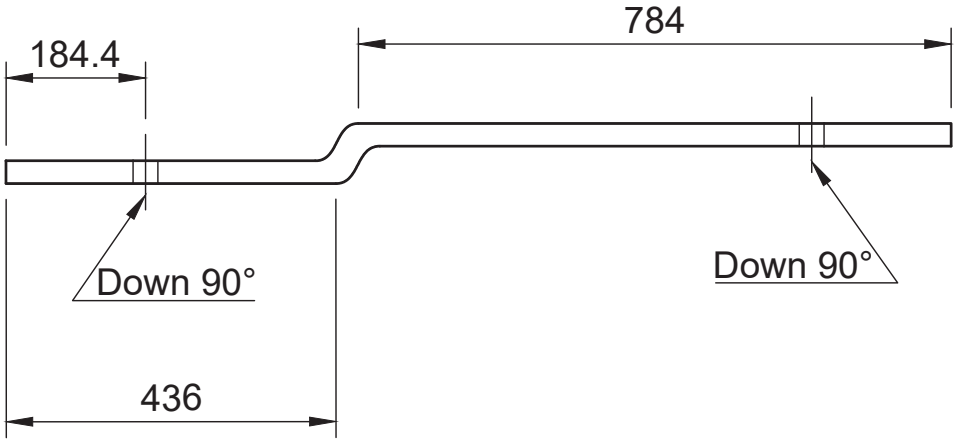






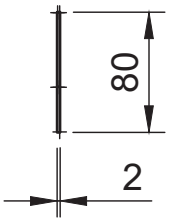
Scale: 1:1 **Unit: mm** **Drawing Type: Detail**	**Part Name: 09 - frame connector**
Material: Stainless Steel	**Drawn by: David Nocis** **Date: 17-12-2025**
	Standard: ISO 2768
	Drawing No. 22
Paper: A4	**Sheet: 01 of 01**



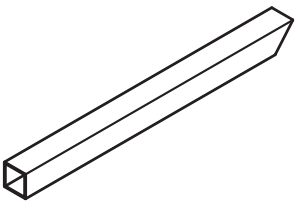


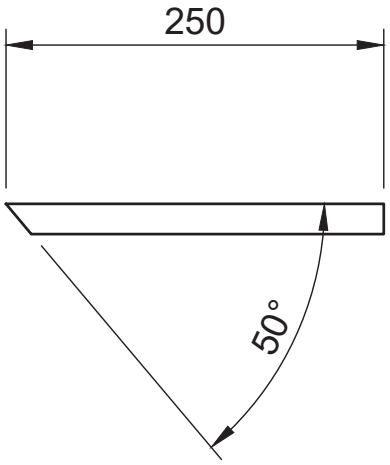
A

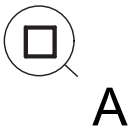
A (1:5)



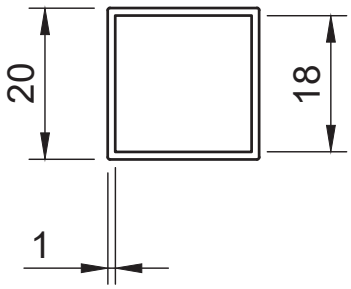
Scale: 1:10 **Unit: mm** **Drawing Type: Detail**	**Part Name: 07 - frame front**
Material: Stainless Steel	**Drawn by: David Nocis** **Date: 17-12-2025**
	Standard: ISO 2768
	Drawing No. 23
Paper: A4	**Sheet: 01 of 01**



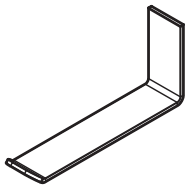


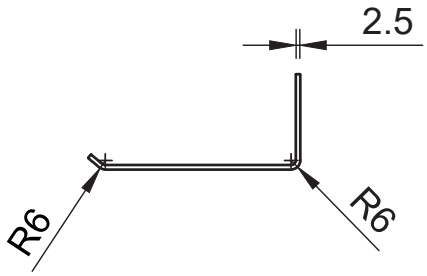


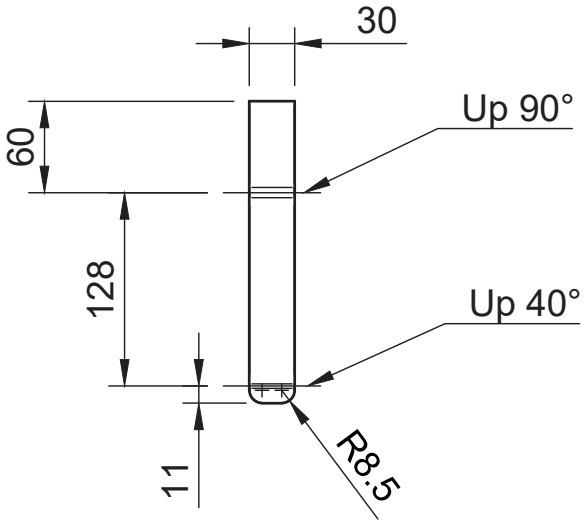
A (1:1)



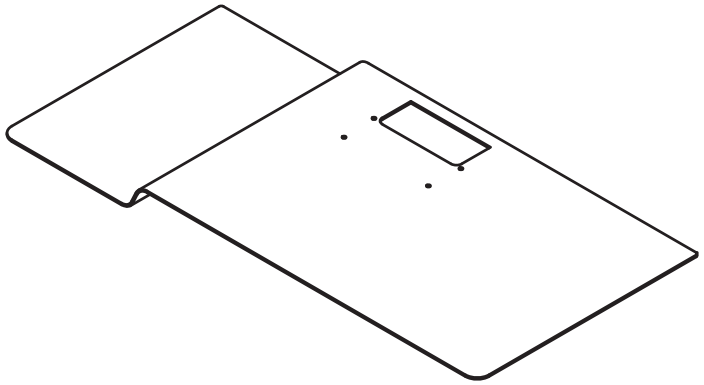
Scale: 1:5 **Unit: mm** **Drawing Type: Detail**	**Part Name: 08 - frame beam short**
Material: Stainless Steel	**Drawn by: David Nocis** **Date: 17-12-2025**
	Standard: ISO 2768
	Drawing No. 24
Paper: A4	**Sheet: 01 of 01**

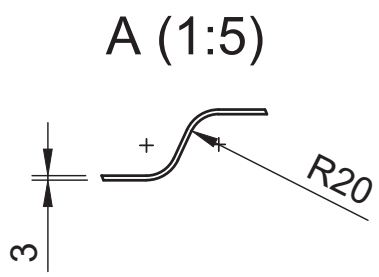


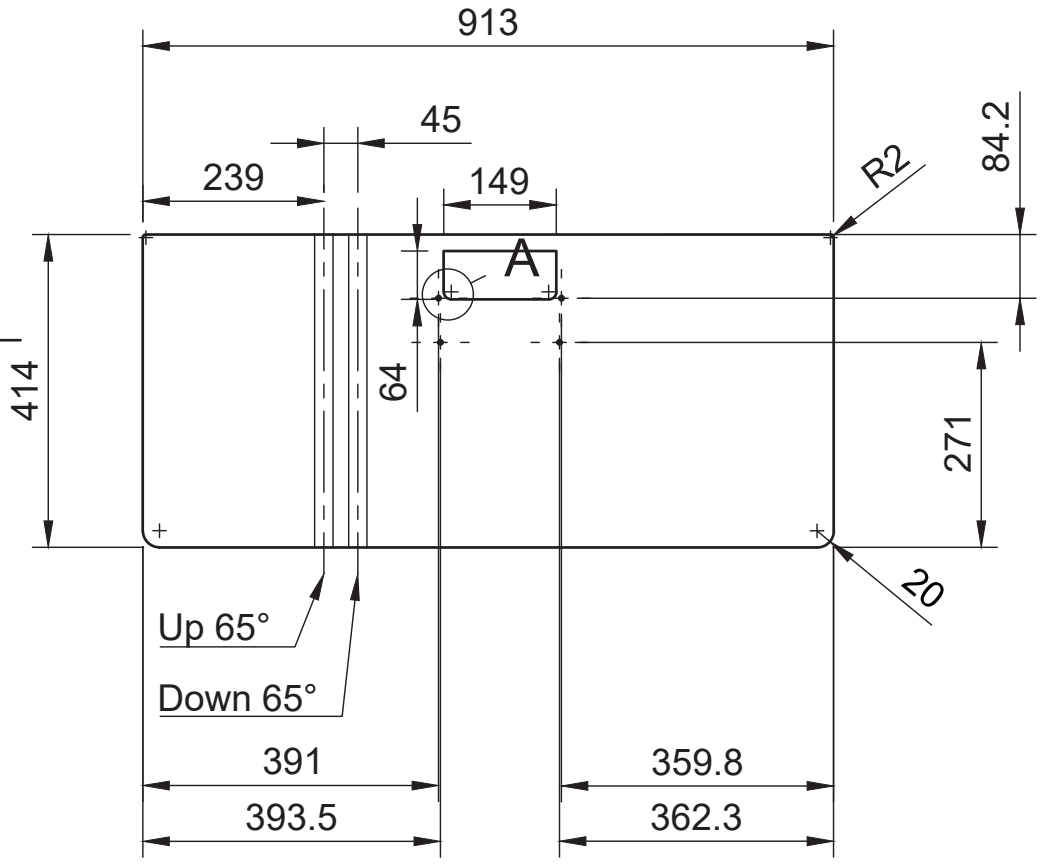


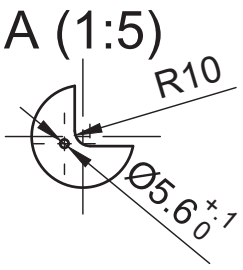


Scale: 1:5 **Unit: mm** **Drawing Type: Detail**	**Part Name: 05 - hook**
Material: Stainless Steel	**Drawn by: David Nocis** **Date: 17-12-2025**
	Standard: ISO 2768
	Drawing No. 25
Paper: A4	**Sheet: 01 of 01**

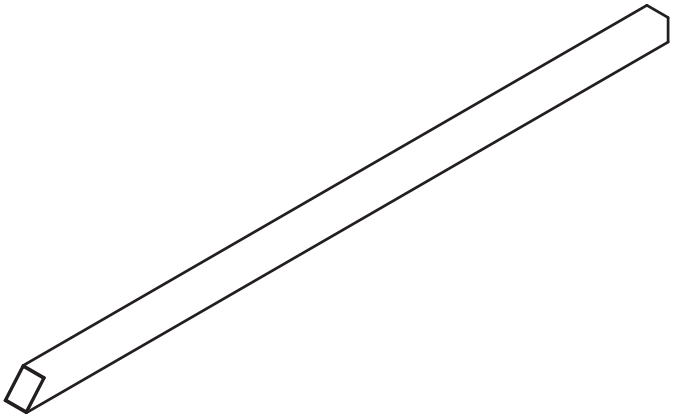


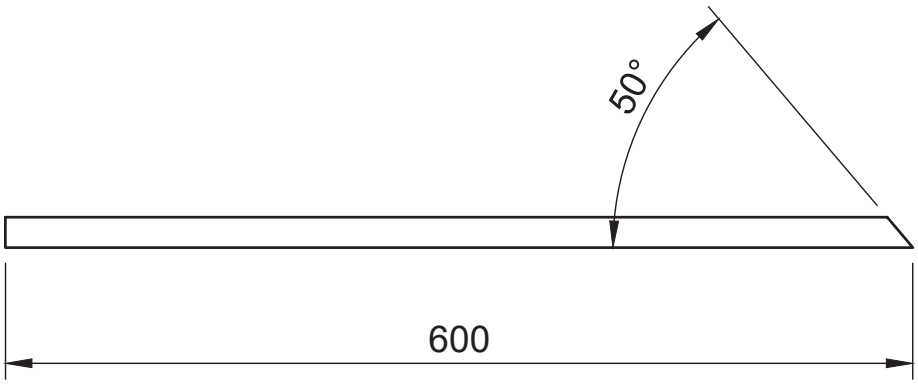


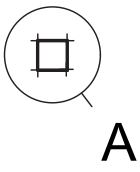




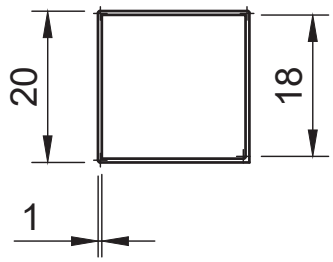
Scale: 1:10 **Unit: mm** **Drawing Type: Detail**	**Part Name: 01 - tabletop**
Material: Stainless Steel	**Drawn by: David Nocis** **Date: 17-12-2025**
	Standard: ISO 2768
	Drawing No. 26
Paper: A4	**Sheet: 01 of 01**



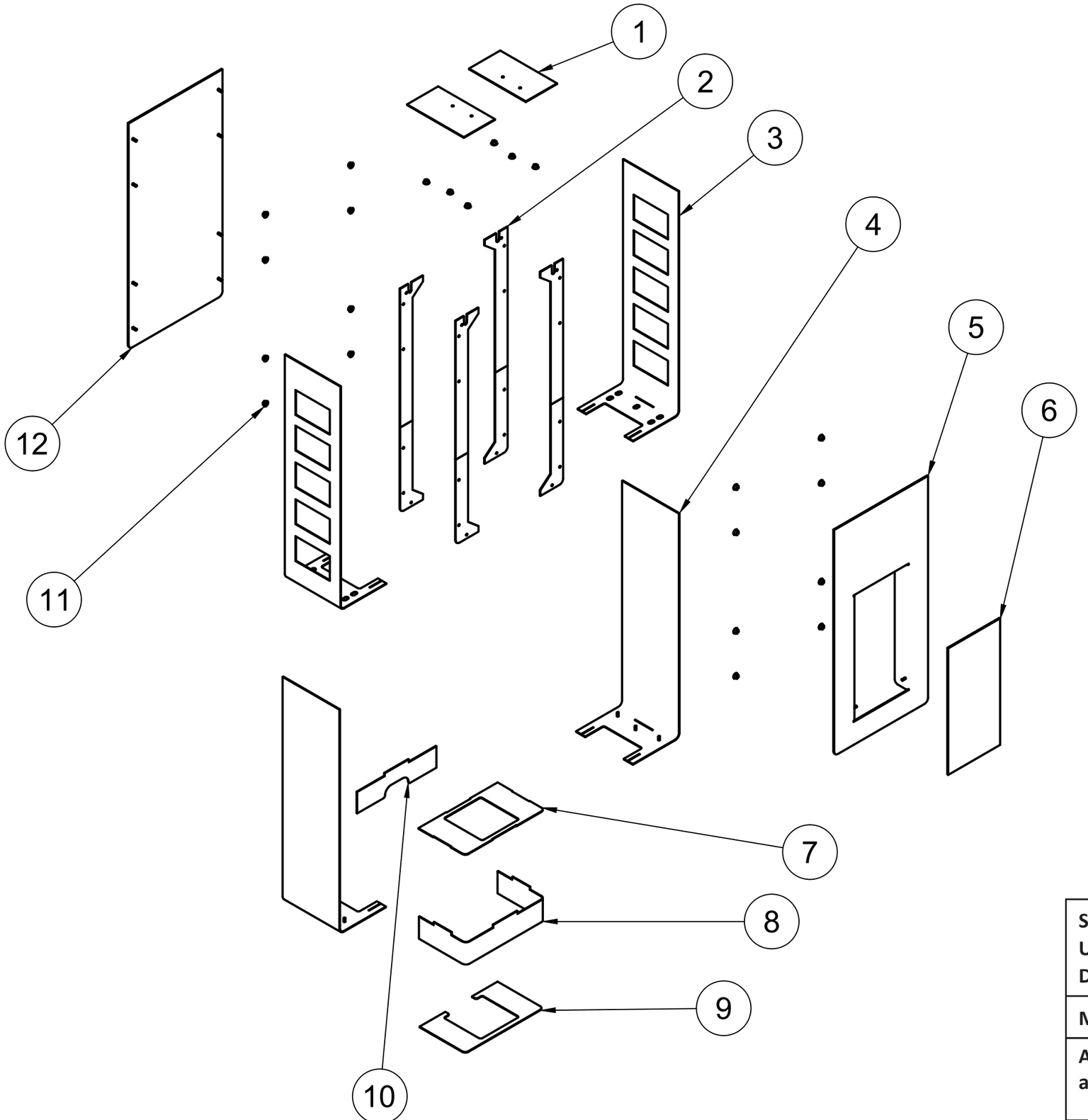




A (1:1)

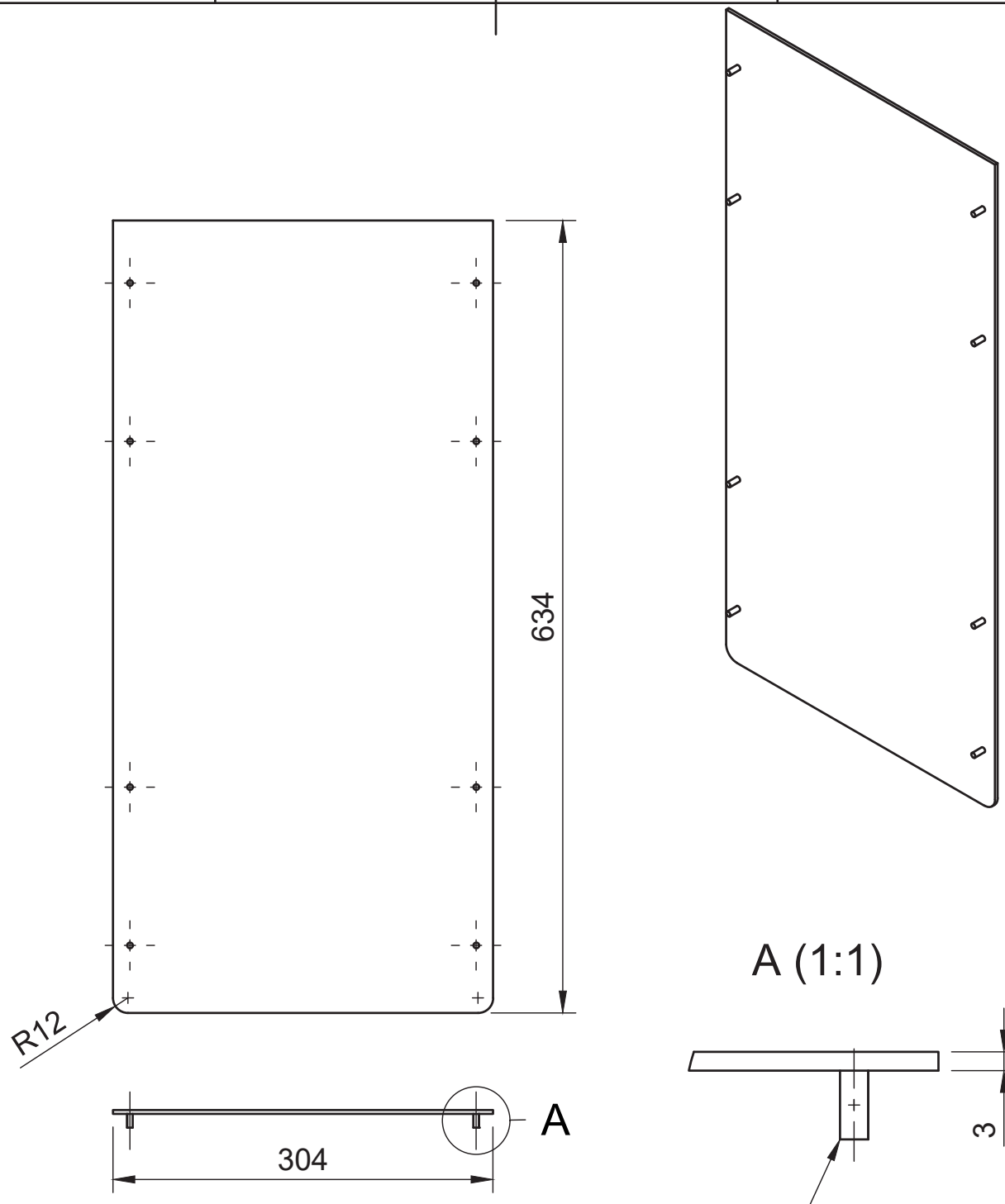


Scale: 1:5 **Unit: mm** **Drawing Type: Detail**	**Part Name: 03 - frame beam long**
Material: Stainless Steel	**Drawn by: David Nocis** **Date: 17-12-2025**
	Standard: ISO 2768
	Drawing No. 27
Paper: A4	**Sheet: 01 of 01**



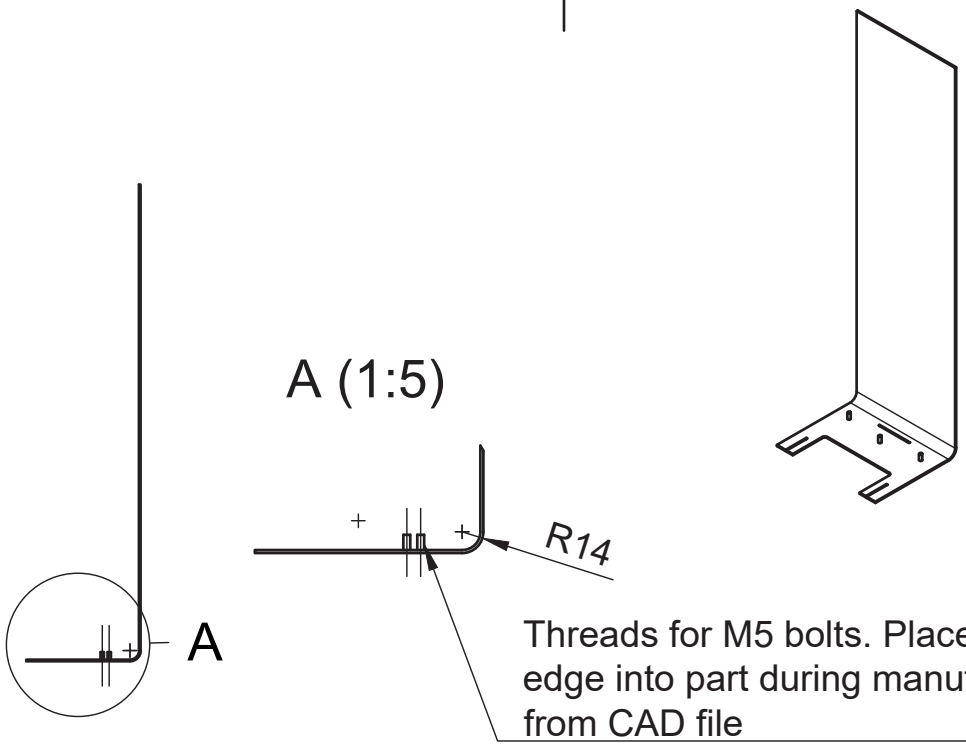
Parts List			
Item	Qty	Part Name	Material
1	2	top connector plate	Stainless steel
2	4	support sides	Stainless steel
3	2	internal structure	Stainless steel
4	2	external structure	Stainless steel
5	1	front panel lower part	Stainless steel
6	1	service latch lower part	Stainless steel
7	1	leg platform lid	Stainless steel
8	1	leg platform bend	Stainless steel
9	1	leg platform bottom	Stainless steel
10	1	leg platform bag	Stainless steel
11	22	bolt	M5
12	1	back plate lower part	Stainless steel

Scale: 1:10 **Unit:** **Drawing Type: Exploded**	**Part Name: RGB Foot**
Material:	**Drawn by: David Nocis** **Date: 17-12-2025**
Assembled using bolts and tack welding	**Standard: ISO 2768**
Paper: A3	**Drawing No. 28** **Sheet: 01 of 01**

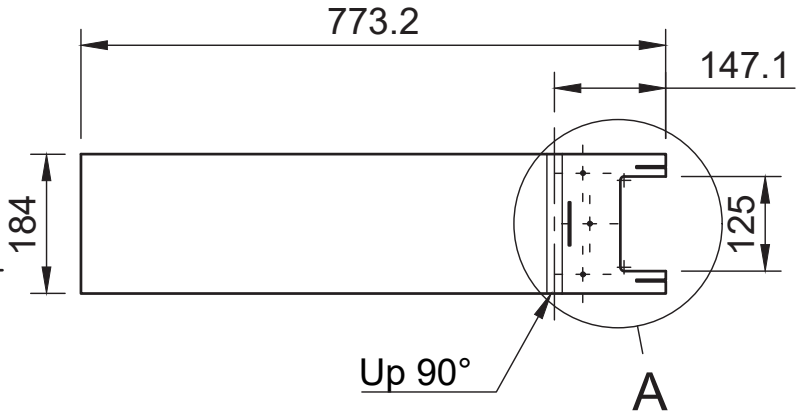


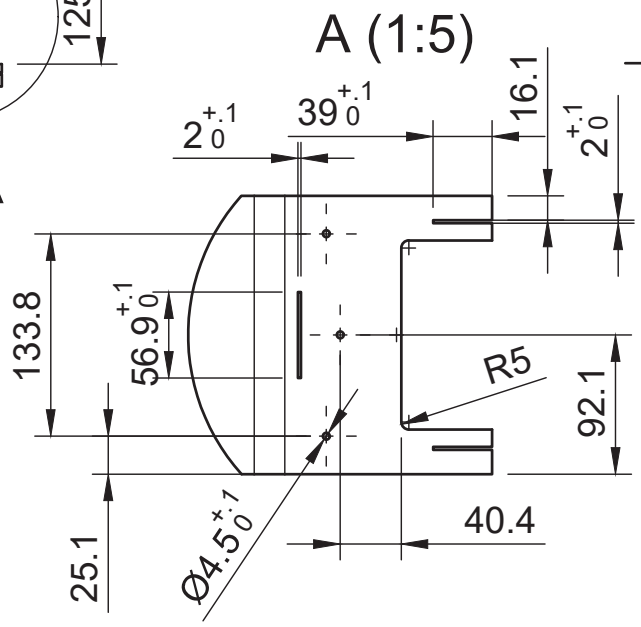
Threads for M5 bolts. Placement edge into part during manufacturing from CAD file

Scale: 1:5 **Unit: mm** **Drawing Type: Detail**	**Part Name: 12 - back plate lower part**
Material: Stainless Steel	**Drawn by: David Nocis** **Date: 17-12-2025**
Stud welding for bolt	**Standard: ISO 2768**
	Drawing No. 29
Paper: A4	**Sheet: 01 of 01**

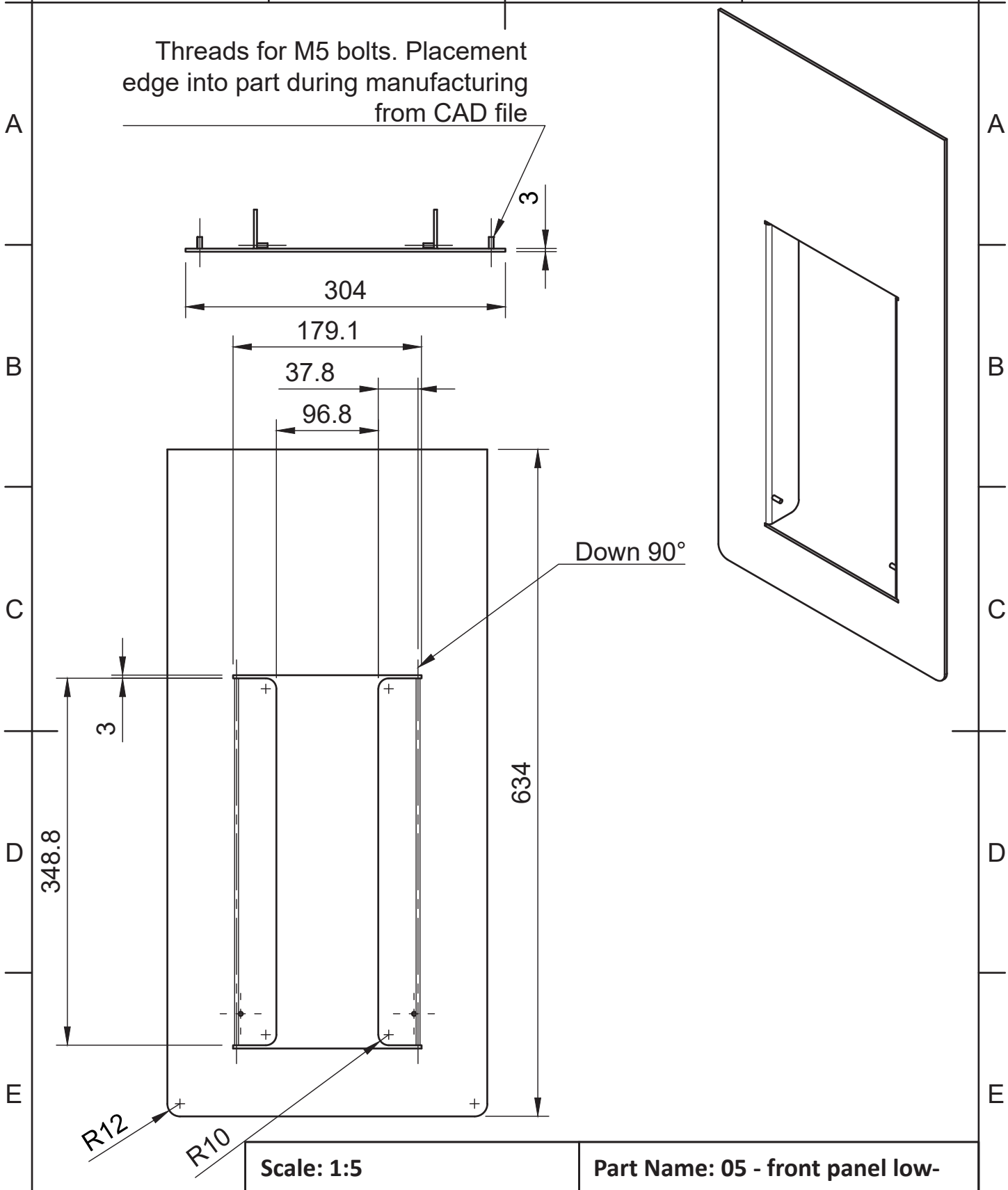


Threads for M5 bolts. Placement edge into part during manufacturing from CAD file

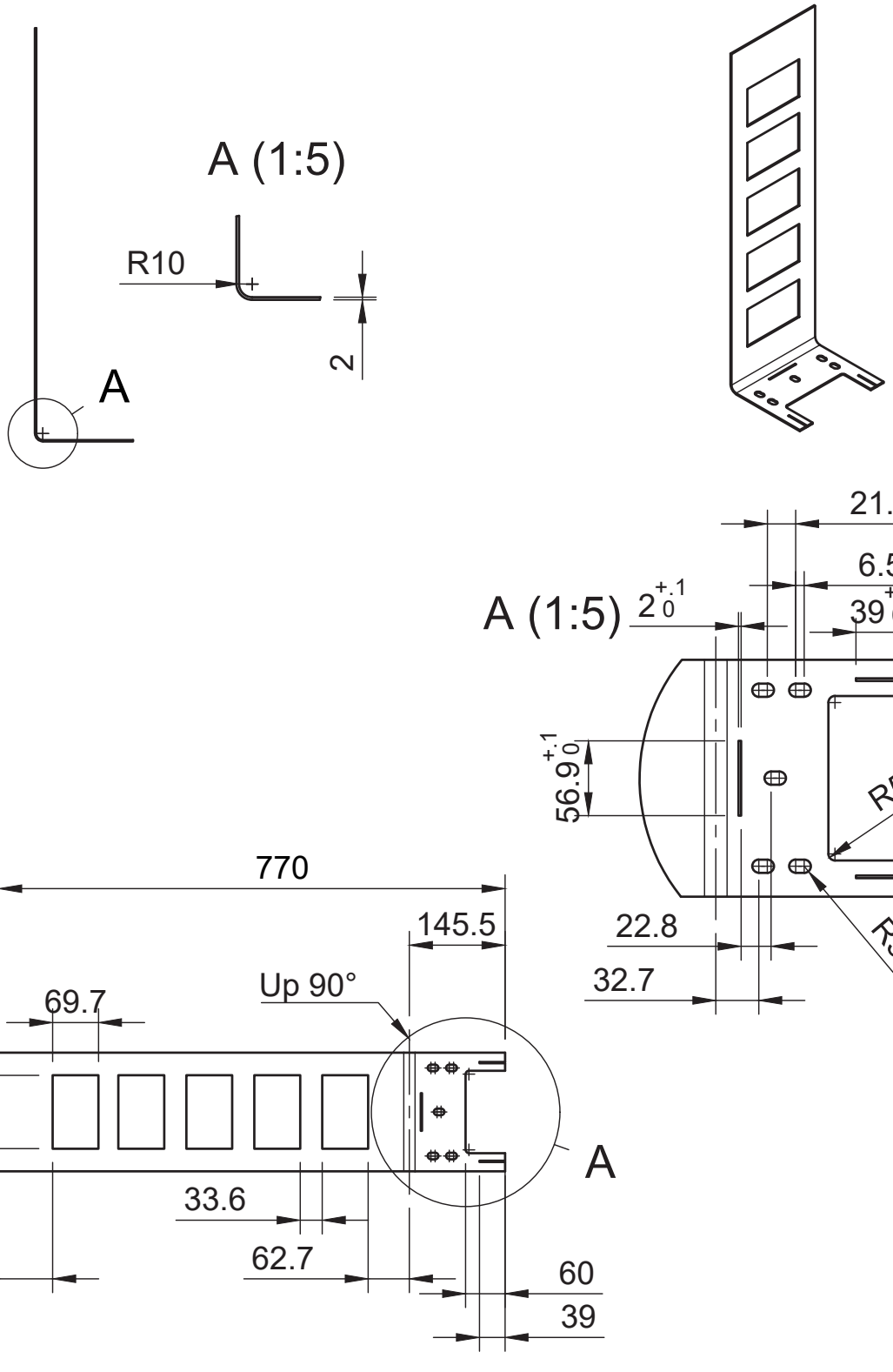




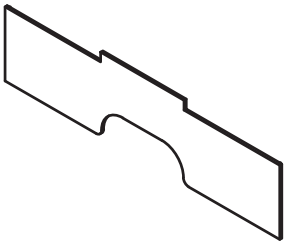
Scale: 1:10 **Unit: mm** **Drawing Type: Detail**	**Part Name: 04 - external structure**
Material: Stainless Steel	**Drawn by: David Nocis** **Date: 17-12-2025**
Stud welding for bolt	**Standard: ISO 2768**
	Drawing No. 30
Paper: A4	**Sheet: 01 of 01**

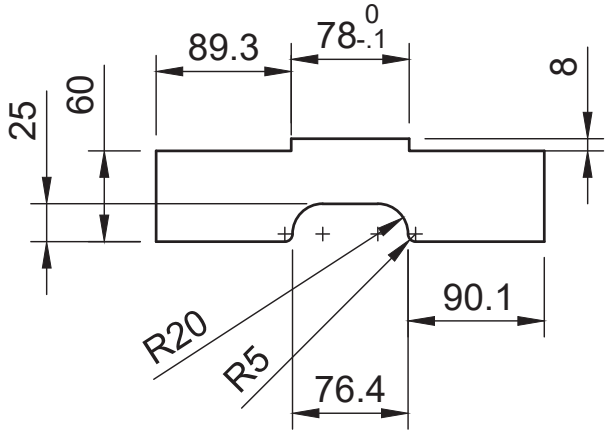


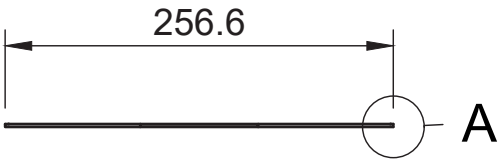
Scale: 1:5 **Unit: mm** **Drawing Type: Detail**	**Part Name: 05 - front panel lower part**
Material: Stainless Steel	**Drawn by: David Nocis** **Date: 17-12-2025**
Stud welding for bolt	**Standard: ISO 2768**
	Drawing No. 31
Paper: A4	**Sheet: 01 of 01**



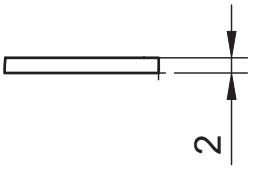
Scale: 1:10 **Unit: mm** **Drawing Type: Detail**	**Part Name: 03 - internal structure**
Material: Stainless Steel	**Drawn by: David Nocis** **Date: 17-12-2025**
	Standard: ISO 2768
	Drawing No. 32
Paper: A4	**Sheet: 01 of 01**



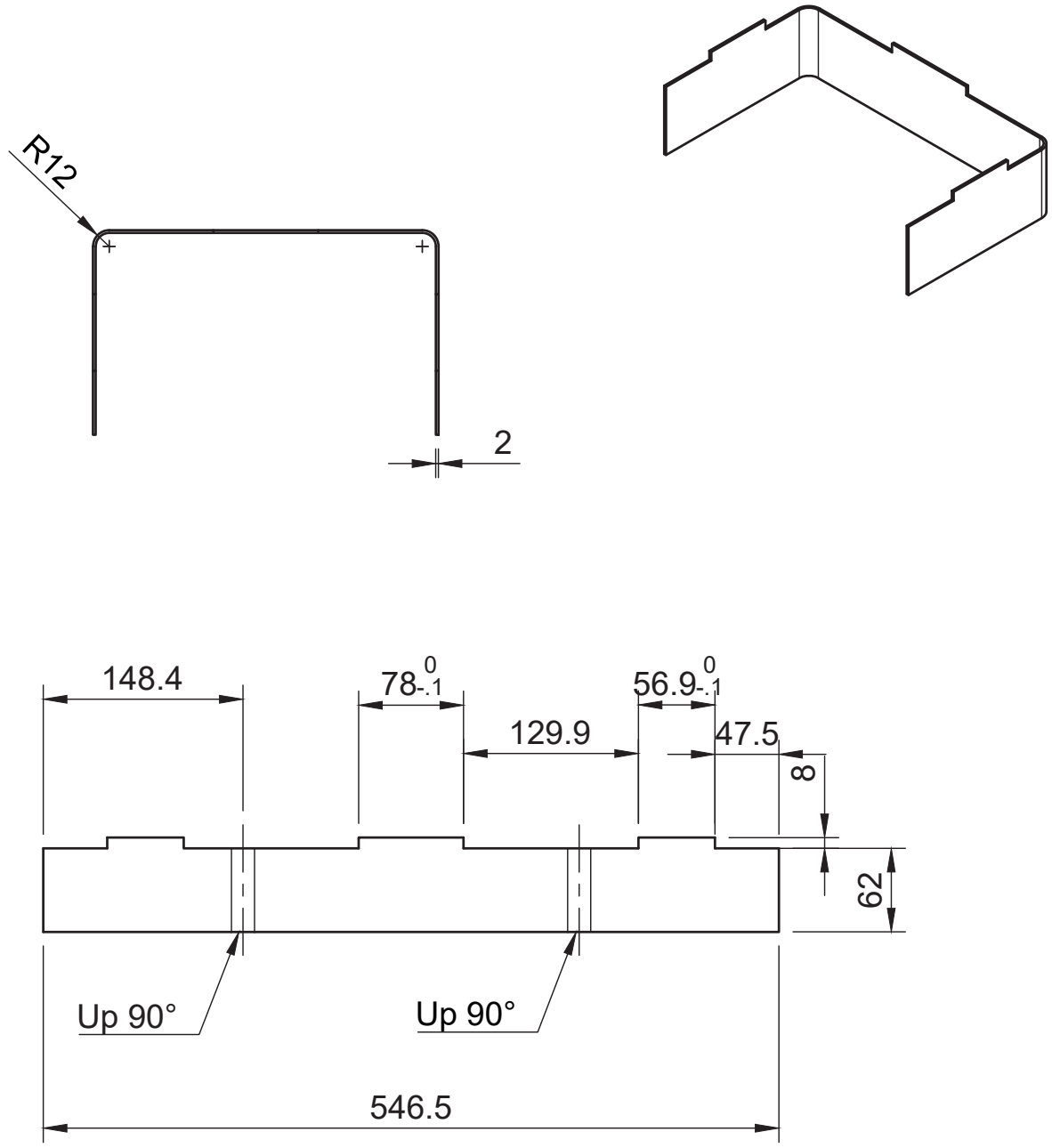




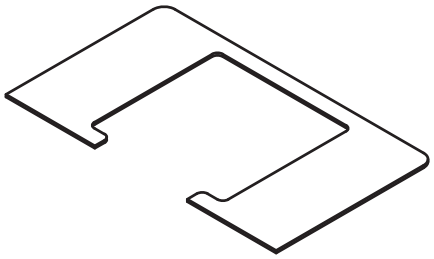
A (1:1)

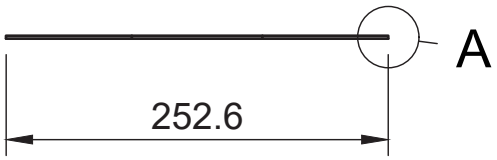


Scale: 1:5 **Unit: mm** **Drawing Type: Detail**	**Part Name: 10 - leg platform back**
Material: Stainless Steel	**Drawn by: David Nocis** **Date: 17-12-2025**
	Standard: ISO 2768
	Drawing No. 33
Paper: A4	**Sheet: 01 of 01**

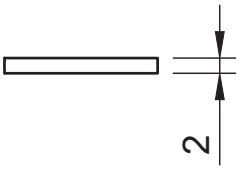


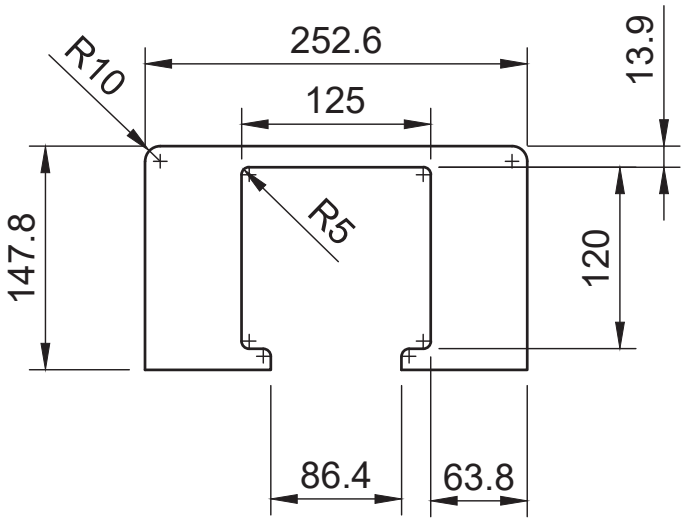
Scale: 1:5 **Unit: mm** **Drawing Type: Detail**	**Part Name: 08 - leg platform bend**
Material: Stainless Steel	**Drawn by: David Nocis** **Date: 17-12-2025**
	Standard: ISO 2768
	Drawing No. 34
Paper: A4	**Sheet: 01 of 01**



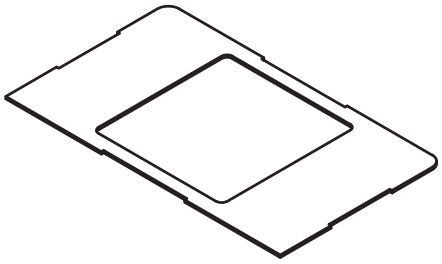


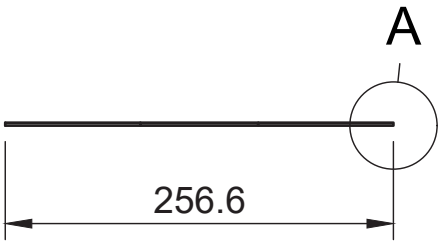
A (1:1)

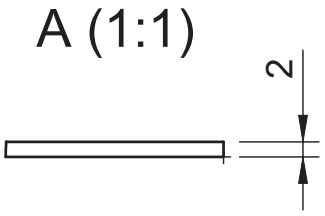


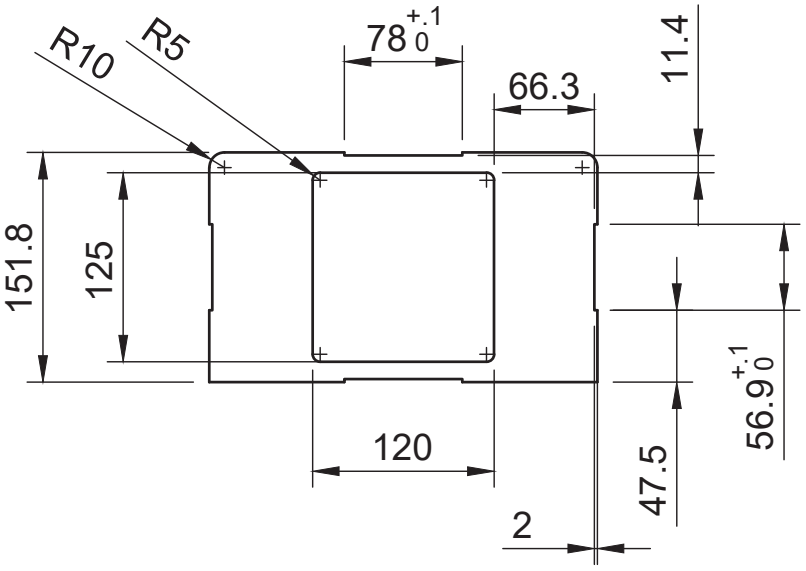


Scale: 1:5 **Unit: mm** **Drawing Type: Detail**	**Part Name: 09 - leg platform bottom**
Material: Stainless Steel	**Drawn by: David Nocis** **Date: 17-12-2025**
	Standard: ISO 2768
	Drawing No. 35
Paper: A4	**Sheet: 01 of 01**

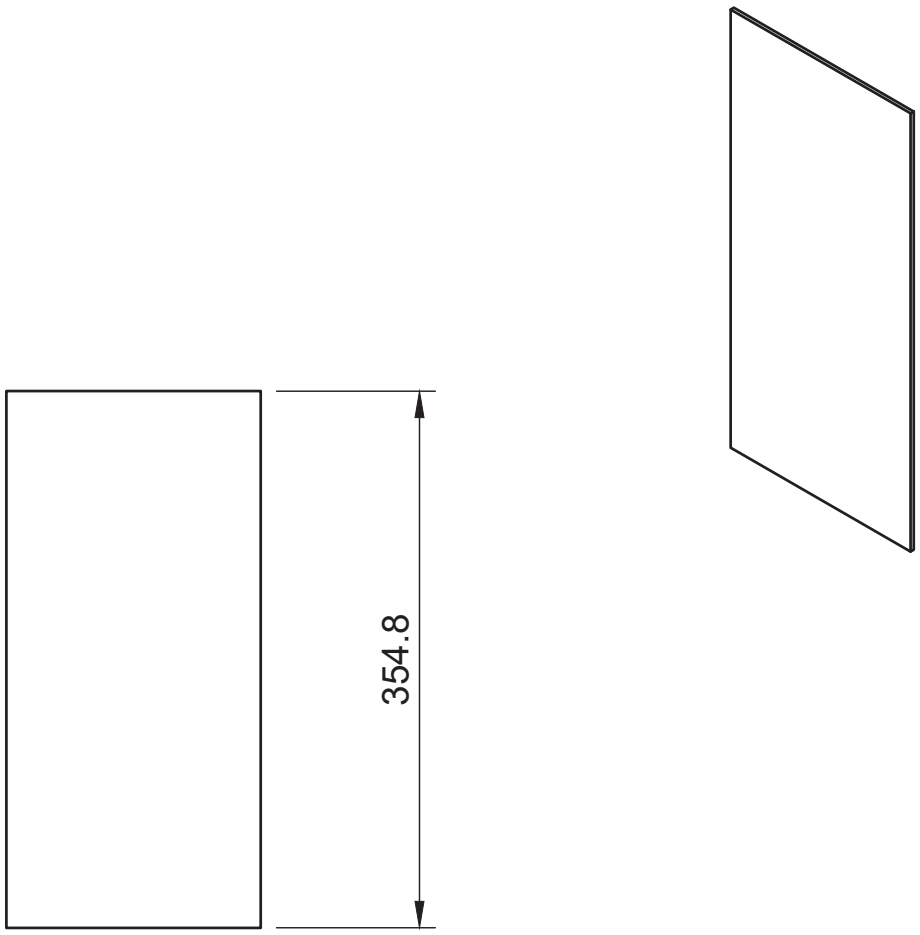




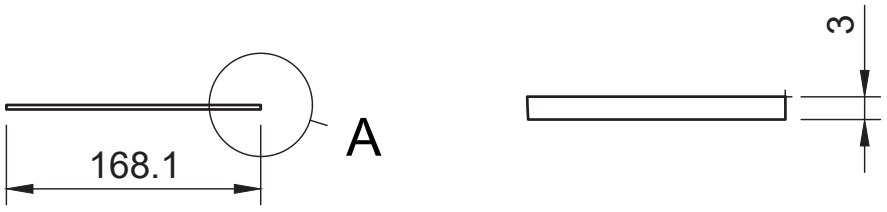




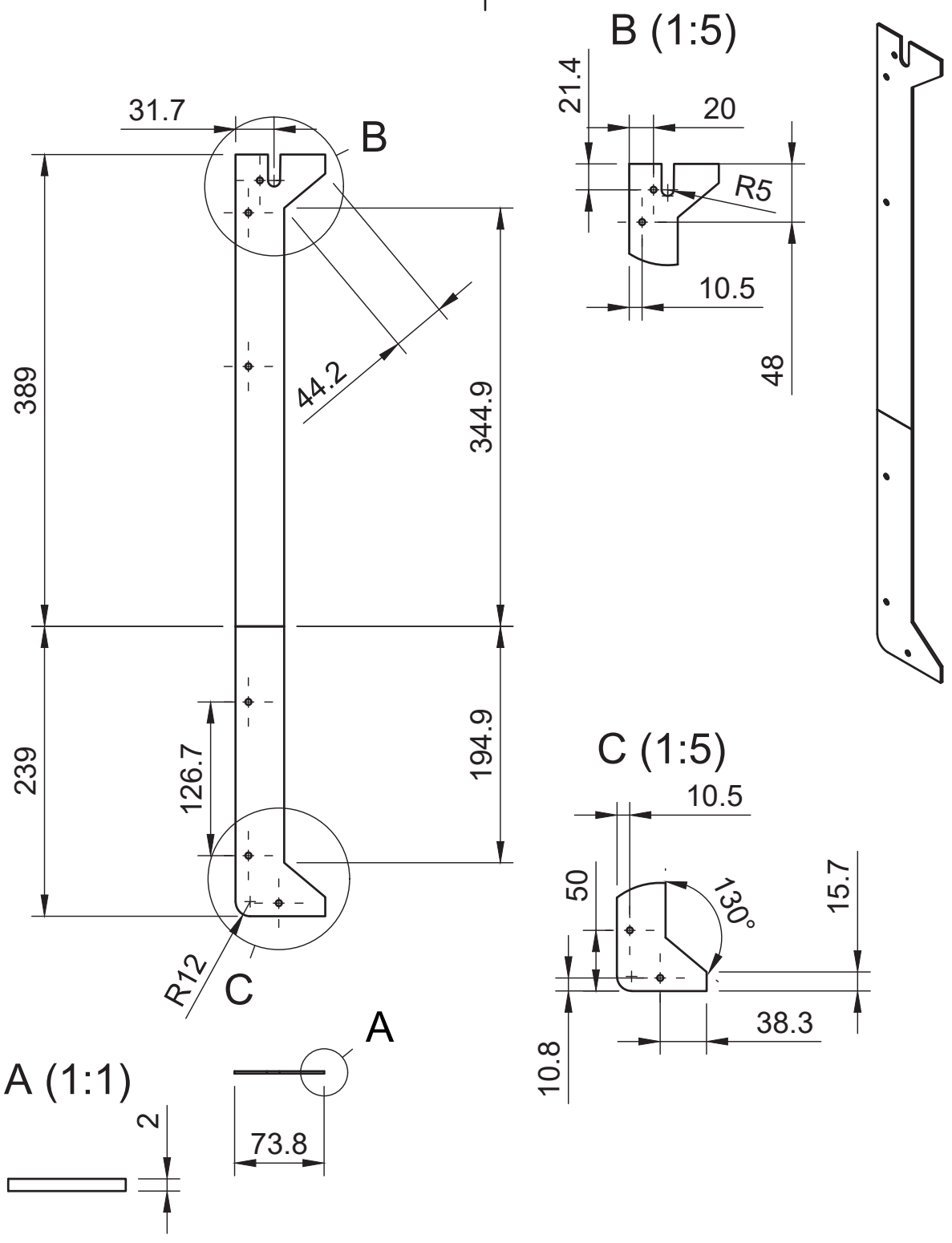
Scale: 1:5 **Unit: mm** **Drawing Type: Detail**	**Part Name: 07 - leg platform lid**
Material: Stainless Steel	**Drawn by: David Nocis** **Date: 17-12-2025**
	Standard: ISO 2768
	Drawing No. 36
Paper: A4	**Sheet: 01 of 01**



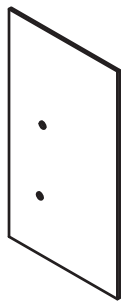
A (1:1)

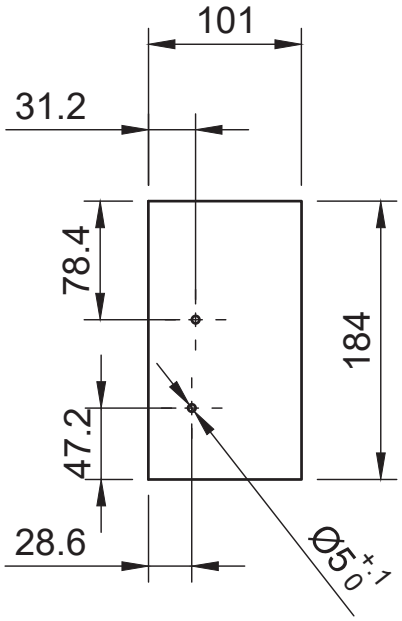


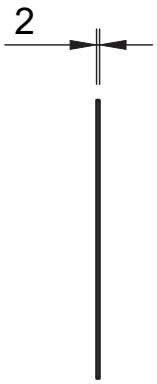
Scale: 1:5 **Unit: mm** **Drawing Type: Detail**	**Part Name: 06 - service latch lower part**
Material: Stainless Steel	**Drawn by: David Nocis** **Date: 17-12-2025**
	Standard: ISO 2768
	Drawing No. 37
Paper: A4	**Sheet: 01 of 01**



Scale: 1:10 **Unit: mm** **Drawing Type: Detail**	**Part Name: 02 - support sides**
Material: Stainless Steel	**Drawn by: David Nocis** **Date: 17-12-2025**
	Standard: ISO 2768
	Drawing No. 38
Paper: A4	**Sheet: 01 of 01**







Scale: 1:5 **Unit: mm** **Drawing Type: Detail**	**Part Name: 01 - top connector plate**
Material: Stainless Steel	**Drawn by: David Nocis** **Date: 17-12-2025**
	Standard: ISO 2768
	Drawing No. 39
Paper: A4	**Sheet: 01 of 01**