

Wiesel

Entwurf, Konstruktion
und Bauplan:
Hilmar Lange

Schwerpunktlage:
53 mm hinter der
Nasenleiste am Rumpf

Ruderausschläge:
Seite +- 42 mm
Höhe +- 13 mm
Querruder +13 / -8 mm



Material-
zusammen-
stellung ab
Seite 19!



Technische Daten:
Spannweite: 908 mm
Tragflächeneinhalt: 14 dm²
Abfluggewicht: 600 - 650 g
Flächenbelastung: 43 - 46 g/dm²
Profil: MH-43 mod.
V-Form: 2° pro Seite
EWD: 0,5°
Motor-Seitenzug: 2° nach rechts
Motorsturz: 2° nach unten

Zubehörteile und
Komponenten:

aero-**naut Z-Spinner set / cool nose (CN) 42 mm / Aeronaut #7251-76**

Klappflugschraube 9,0x7,0 CAM Z-Carbon, 8mm Hals, Aeronaut #7239-23

BL-Motor aeronaut actro-N-28-3-1300 / 28x30 mm / 3 mm Welle / 53 g / 13-25 A / Aeronaut #7003-03

BL-Regler actrocon 30 / Aeronaut #7003-32 / 30-40 A / 20 g

Multiplex Superleichttrad / EPP / 54 mm / #733189

2 Stellringe Ø 2 mm

Leichttrad Ø 15 mm

8x Neodym-Magnet 5x8

8x Neodym-Magnet 3x3

2 Paar MPX-Stecker

**4x Servo z.B. D-Power DS-140BB MG Digital / 23,9x9x29 mm
9,5 g / 48 Ncm / DPDS140**

Akku: 3S LiPo 1500 mAh

Empfänger: 6-Kanal

13 weiche Vlies-Scharniere

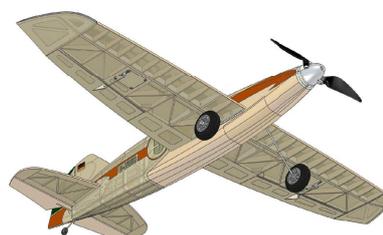
Als Pilotenkopf eignet sich
1 Styroporkugel Ø 40 mm

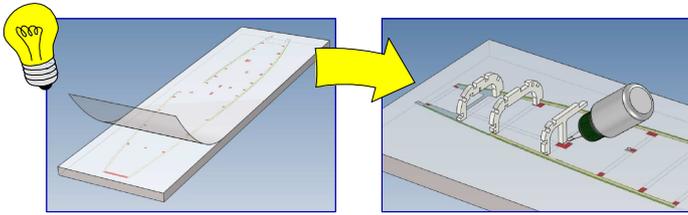


maximaler
Motordurch-
messer:
28 mm!



die beiden
QR-Servos
dürfen nicht dicker
sein als 9 mm!





Vorgehensweise:

Bauplan mit Sprühkleber auf ein ebenes Baubrett aufkleben. Danach den Plan mit selbstklebender Transparentfolie (Bücherfolie) beziehen. Auf dieser Oberfläche können alle stehenden Elemente mit Sekundenkleber fixiert werden. Nach Fertigstellung lässt sich die Baugruppe durch Unterheben vom Baubrett ablösen.

Method: Glue the blueprint to a flat building board using spray adhesive. Then cover the plan with self-adhesive transparent film (book covering film). All standing elements can be fixed to this surface with superglue. After completion, the assembly can be detached from the building board by levering it under.

Rumpfbau, rechte Rumpfhälfte / right half of the fuselage

1 1a, 1b

2 **3** 1 Sägeblattbreite Abstand
keep distance of a sawblade width
Die Löcher müssen übereinstimmen
holes must match

4 **5** **6** **6R**
Linke Rumpfhälfte: 6L
Left fuselage half: 6L
R: 92°
L: 88°
unten bündig
flush at bottom

7 1 Sägeblattbreite Abstand
keep distance of a sawblade width
Die Löcher müssen übereinstimmen
holes must match

8 absolut senkrecht aufkleben!
stick absolutely vertically!

9 182 mm, 186 mm, 184 mm, □ 3 x 3

10 389 mm, 351 mm, Ausklüpfung notch, 1,5 x 4, □ 3 x 3

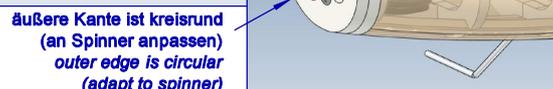
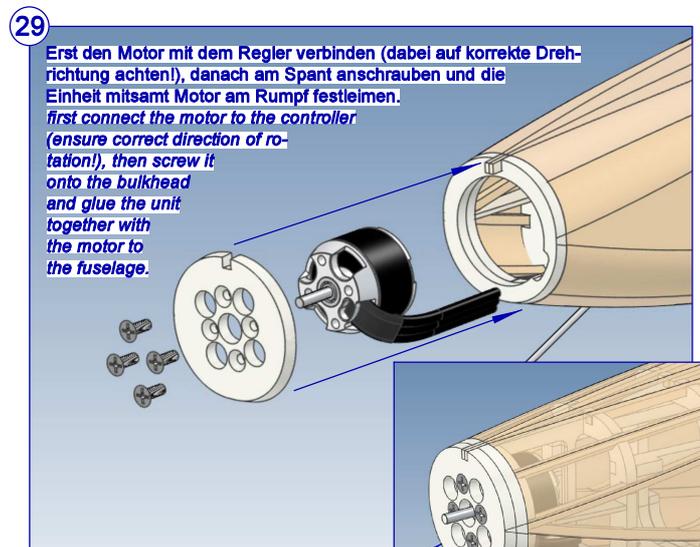
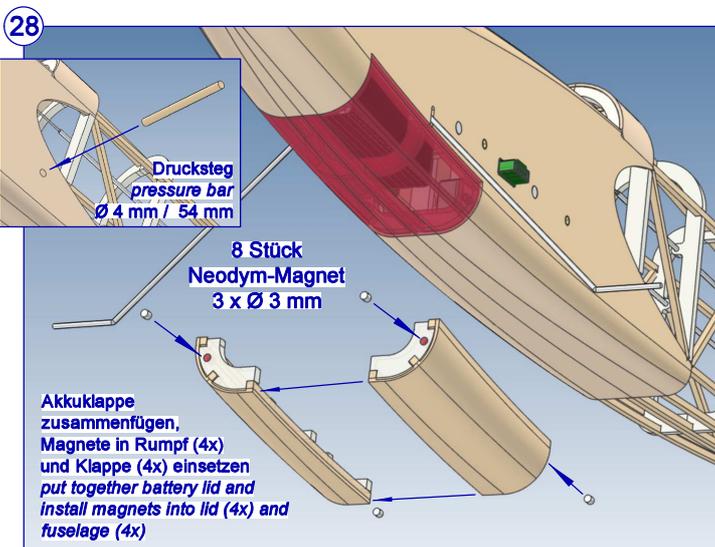
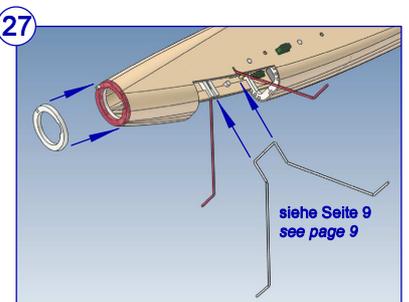
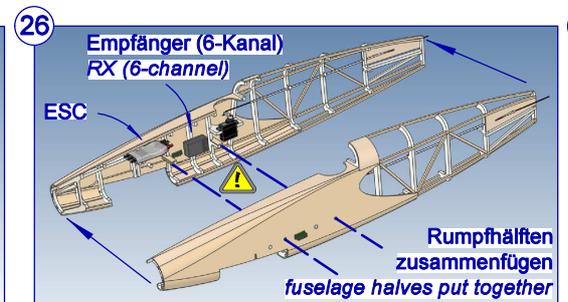
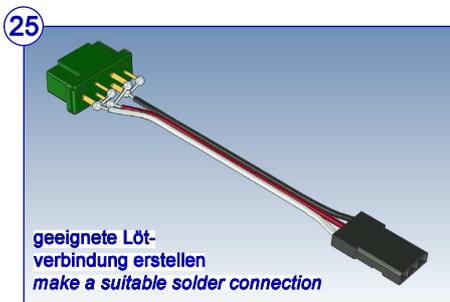
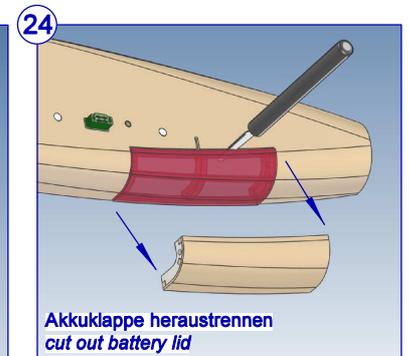
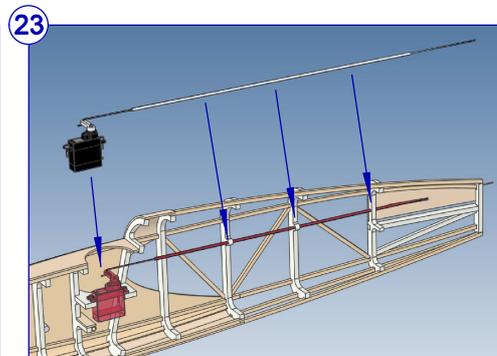
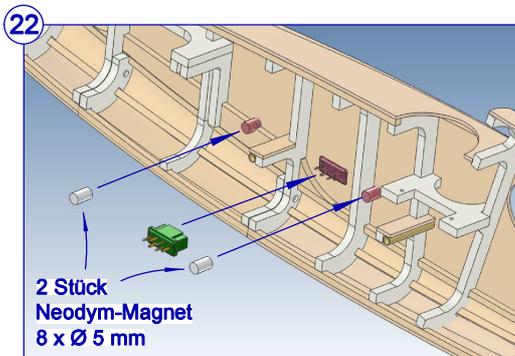
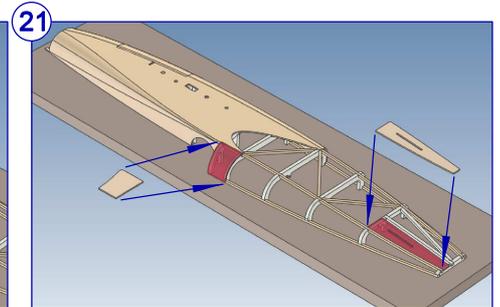
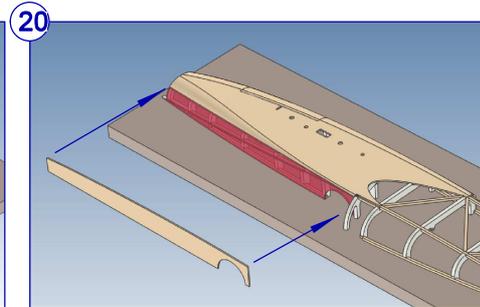
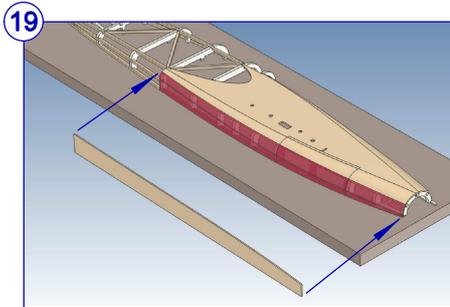
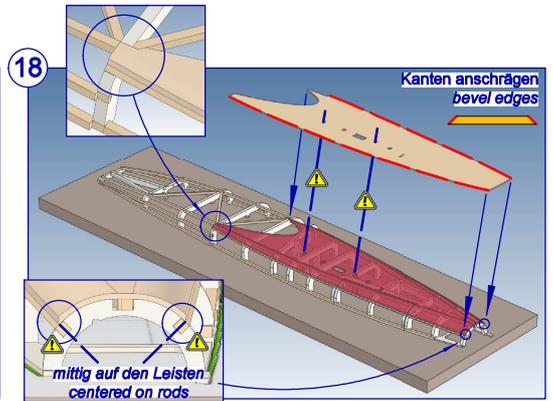
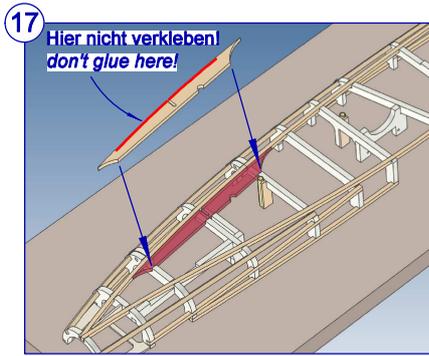
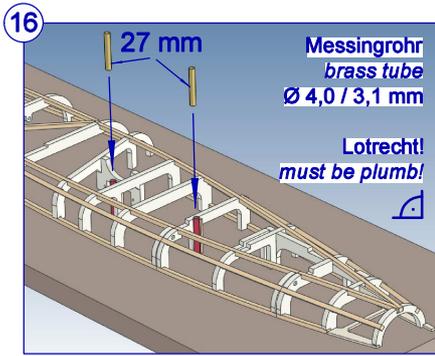
11 Ausklüpfung notch, 1,5 x 4, Abschrägung bevel, 332 mm, 390 mm, □ 3 x 3

12 Ausklüpfung notch, 1,5 x 4, 283 mm, 288 mm, □ 3 x 3

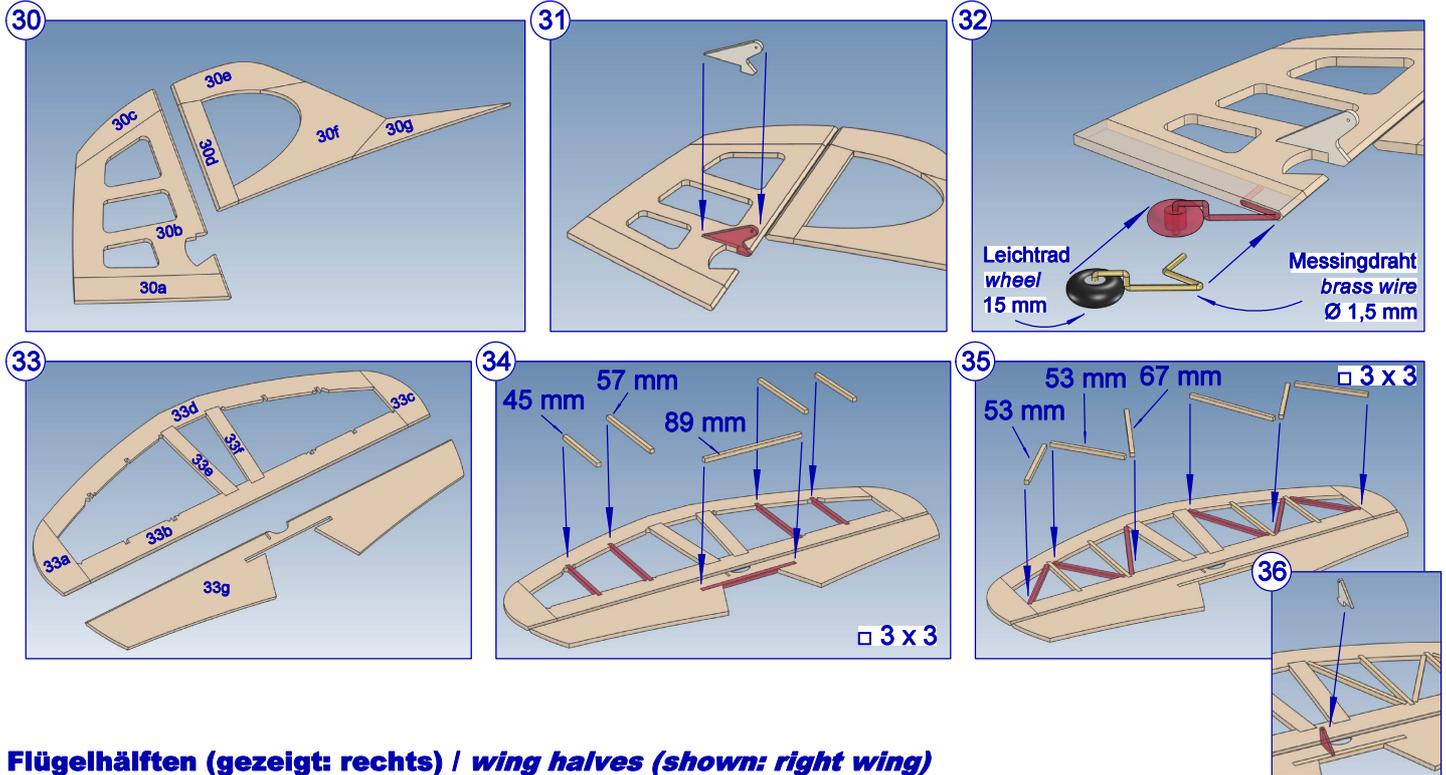
13 230 mm, Ausklüpfung notch, Abschrägung bevel, 1,5 x 4, □ 3 x 3

14 14b, Markierung mark, 89 mm, 87 mm, 85 mm, □ 3 x 3, Diagonalstreben zuspitzen
sharpen diagonal braces

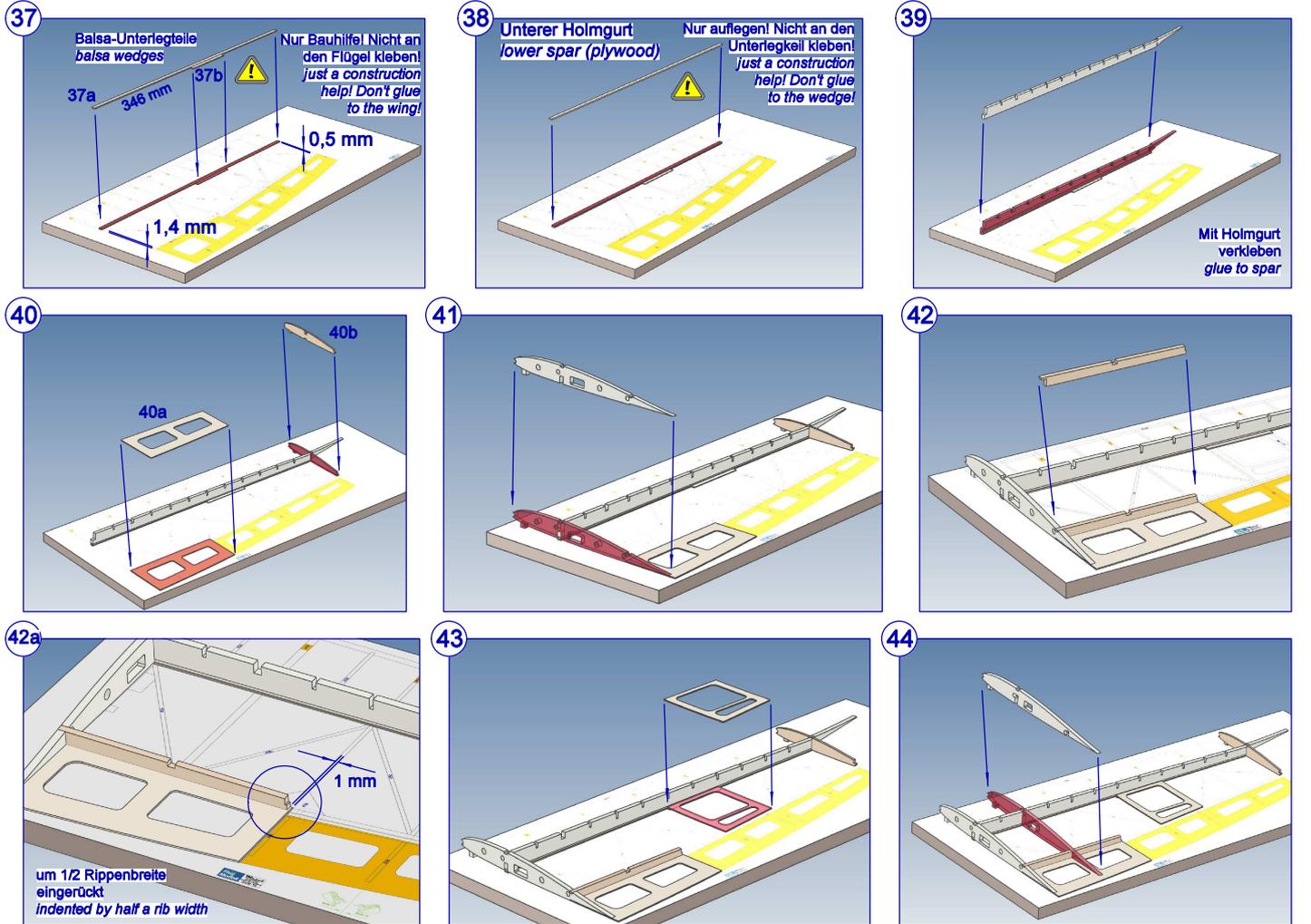
15 15b, 15a

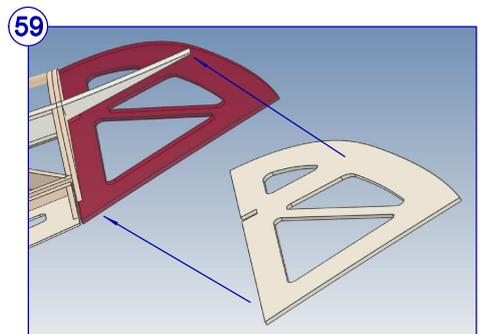
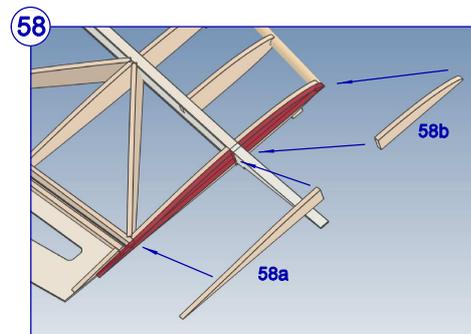
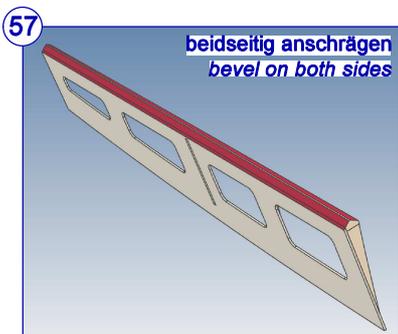
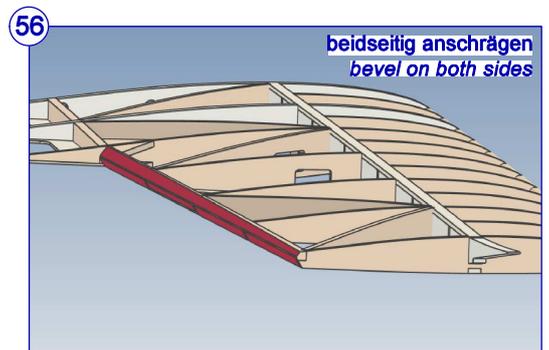
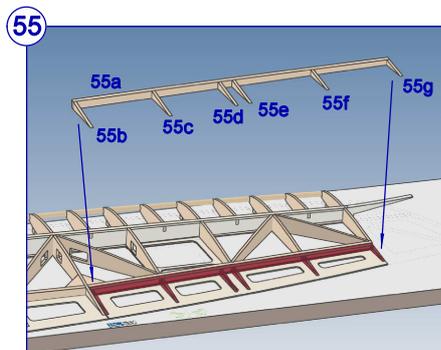
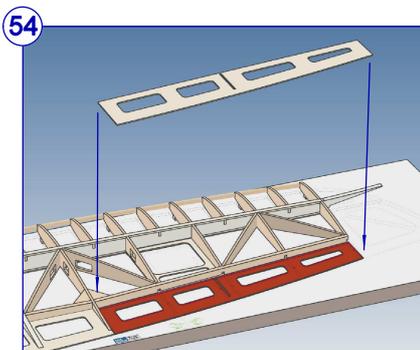
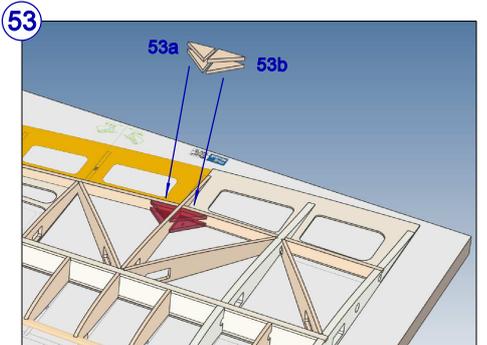
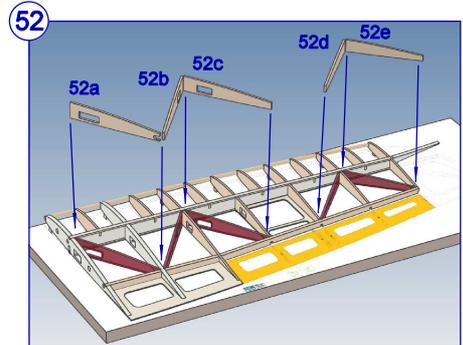
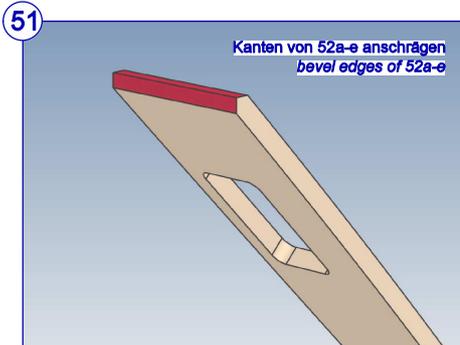
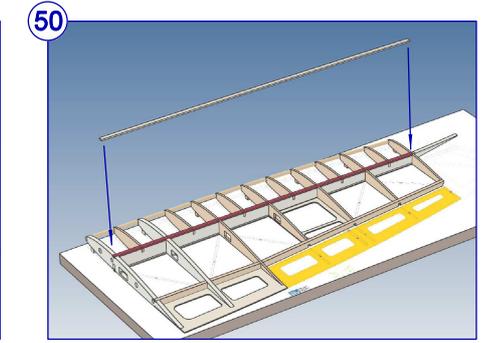
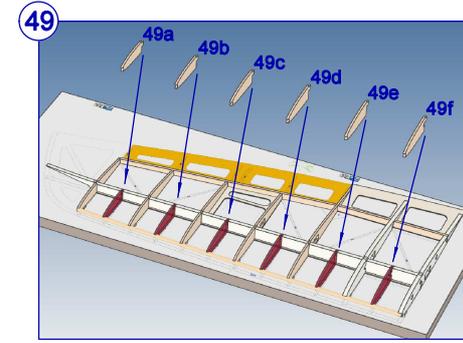
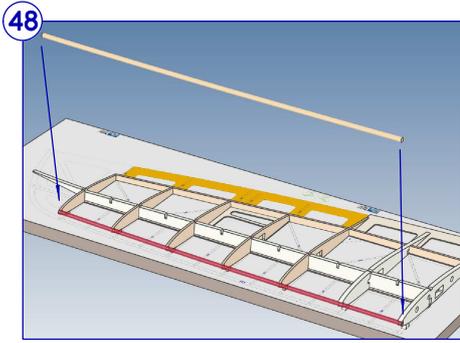
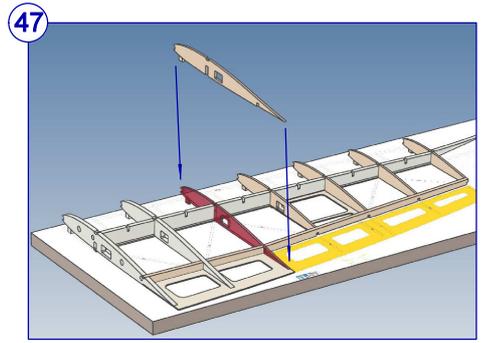
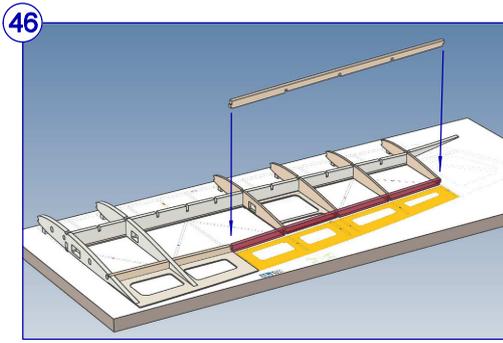
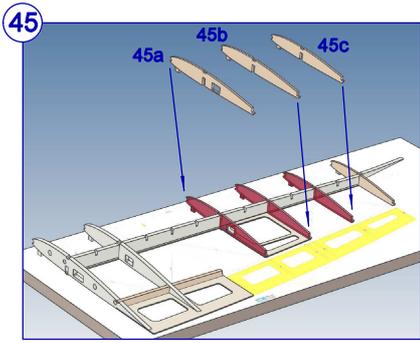


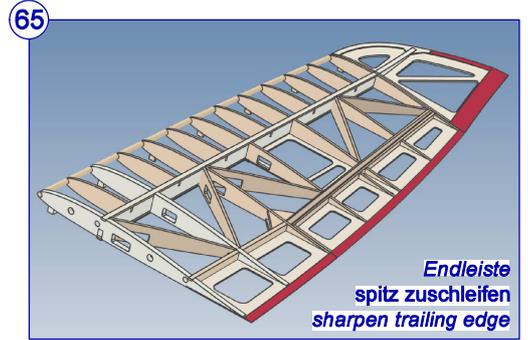
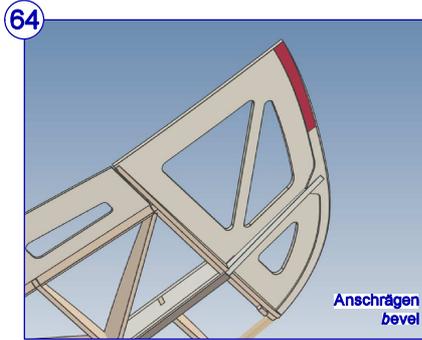
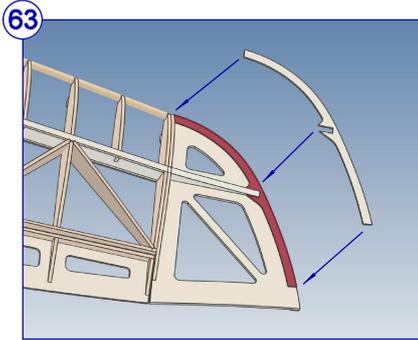
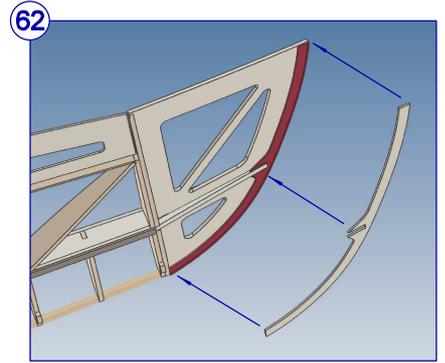
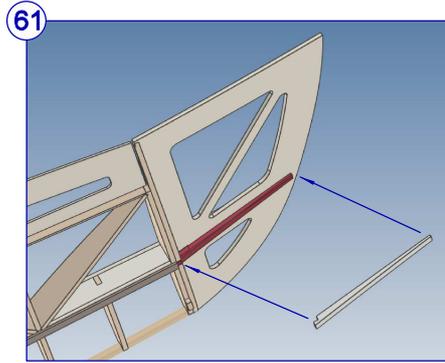
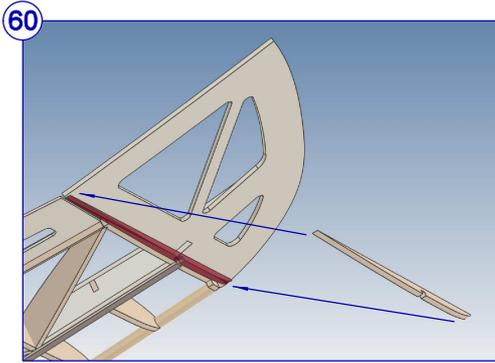
Leitwerke / tail stabilizers



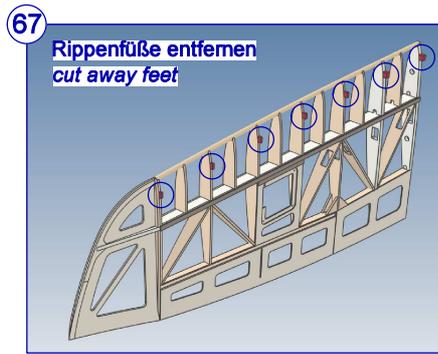
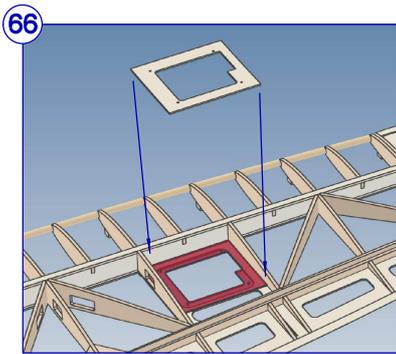
Flügelhälften (gezeigt: rechts) / wing halves (shown: right wing)



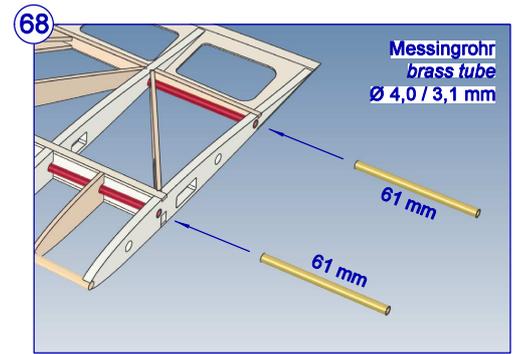




Endleiste
spitz zuschleifen
sharpen trailing edge



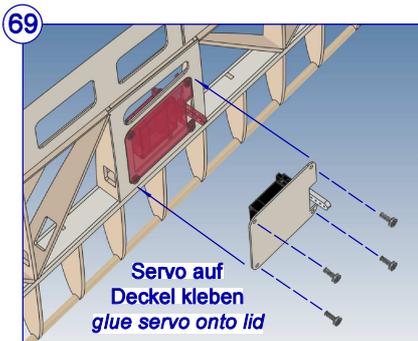
Rippenfüße entfernen
cut away feet



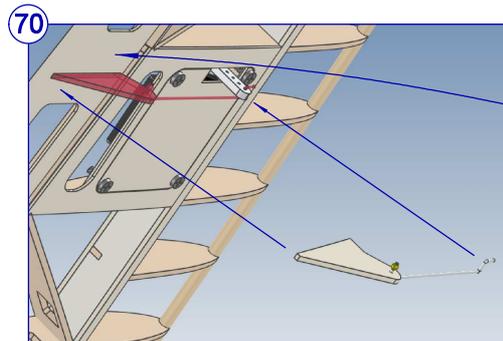
Messingrohr
brass tube
Ø 4,0 / 3,1 mm

61 mm

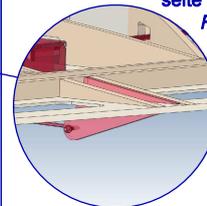
61 mm



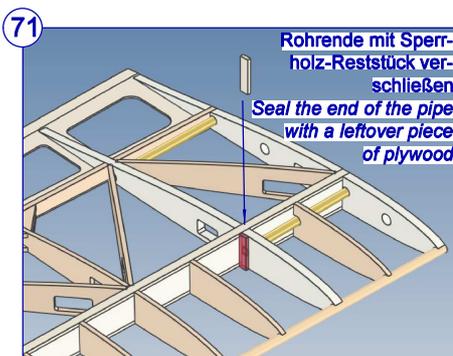
Servo auf
Deckel kleben
glue servo onto lid



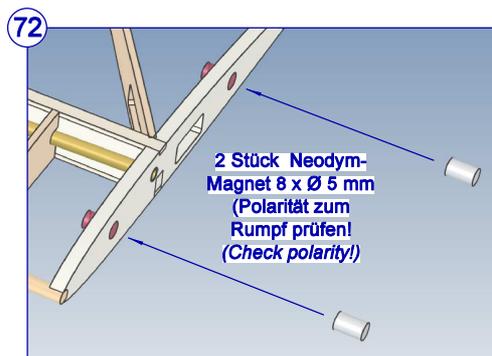
Ruderhorn an Ober-
seite bündig
Rudder
horn
flush
on
top



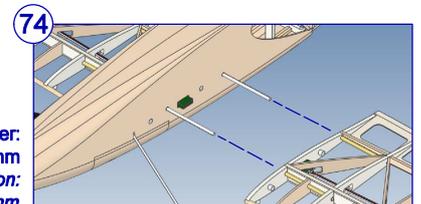
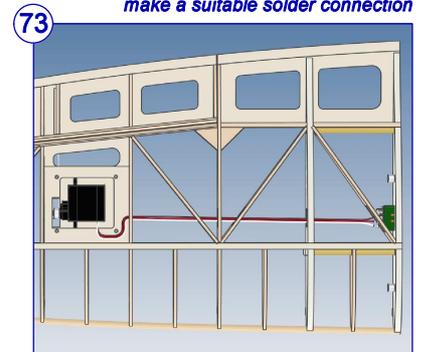
geeignete
Lötverbindung erstellen
make a suitable solder connection



Rohrende mit Sperr-
holz-Reststück ver-
schließen
Seal the end of the pipe
with a leftover piece
of plywood

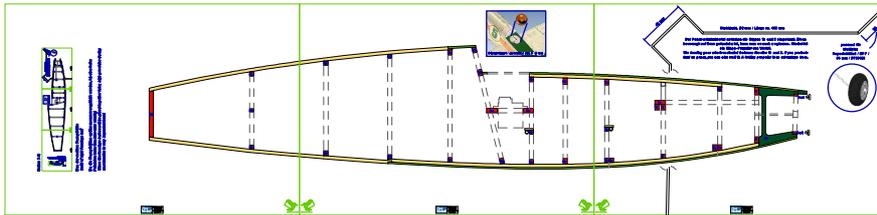


2 Stück Neodym-
Magnet 8 x Ø 5 mm
(Polarität zum
Rumpf prüfen!)
(Check polarity!)



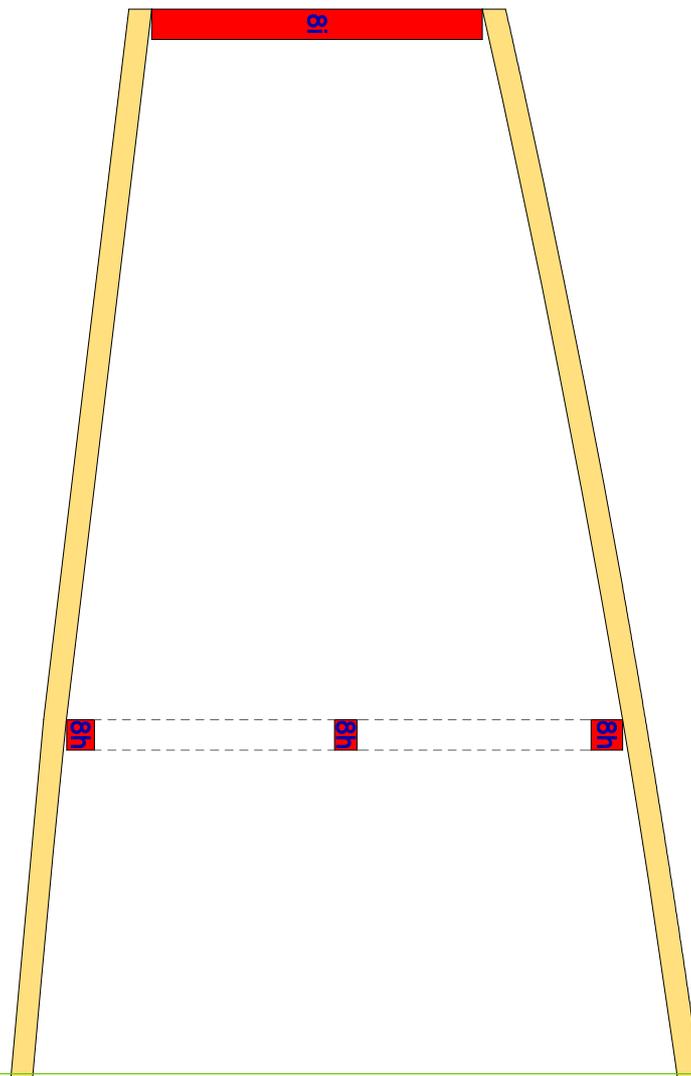
Flügelverbinder:
2x Stahldraht Ø 3 mm / L=174 mm
wing connection:
2x steel wire Ø 3 mm / L=174 mm

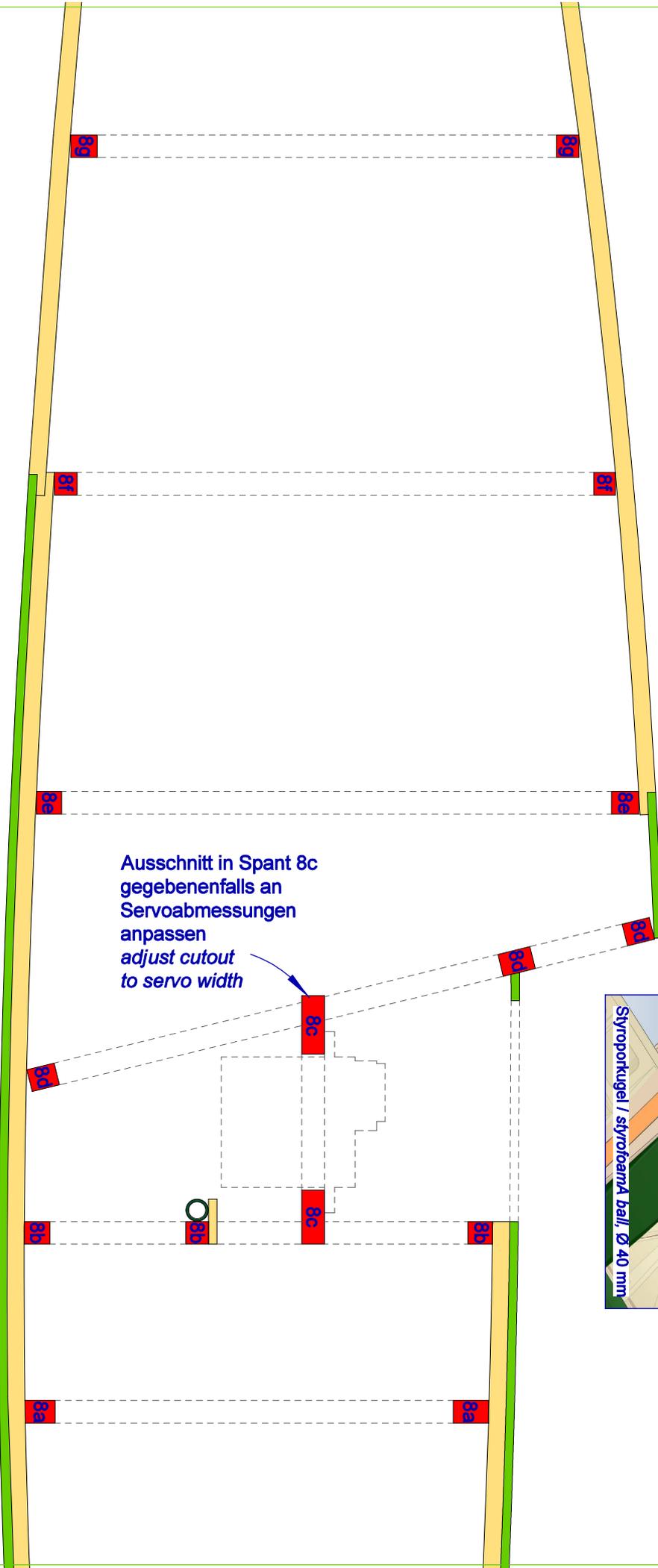
Seiten 7-9:



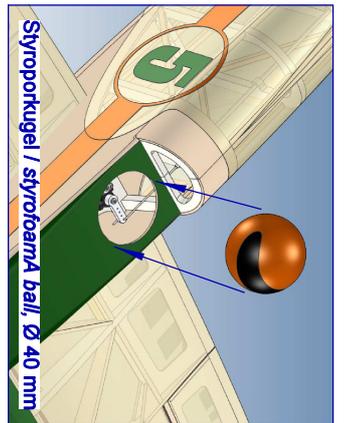
Bau der rechten Rumpfhälfte
build of right fuselage half

Da die Rumpfhälften später zusammengeklebt werden, ist eine hohe Präzision beim Bau hier sehr wichtig!
Since the fuselage halves will be glued together later, high precision during construction is very important here!





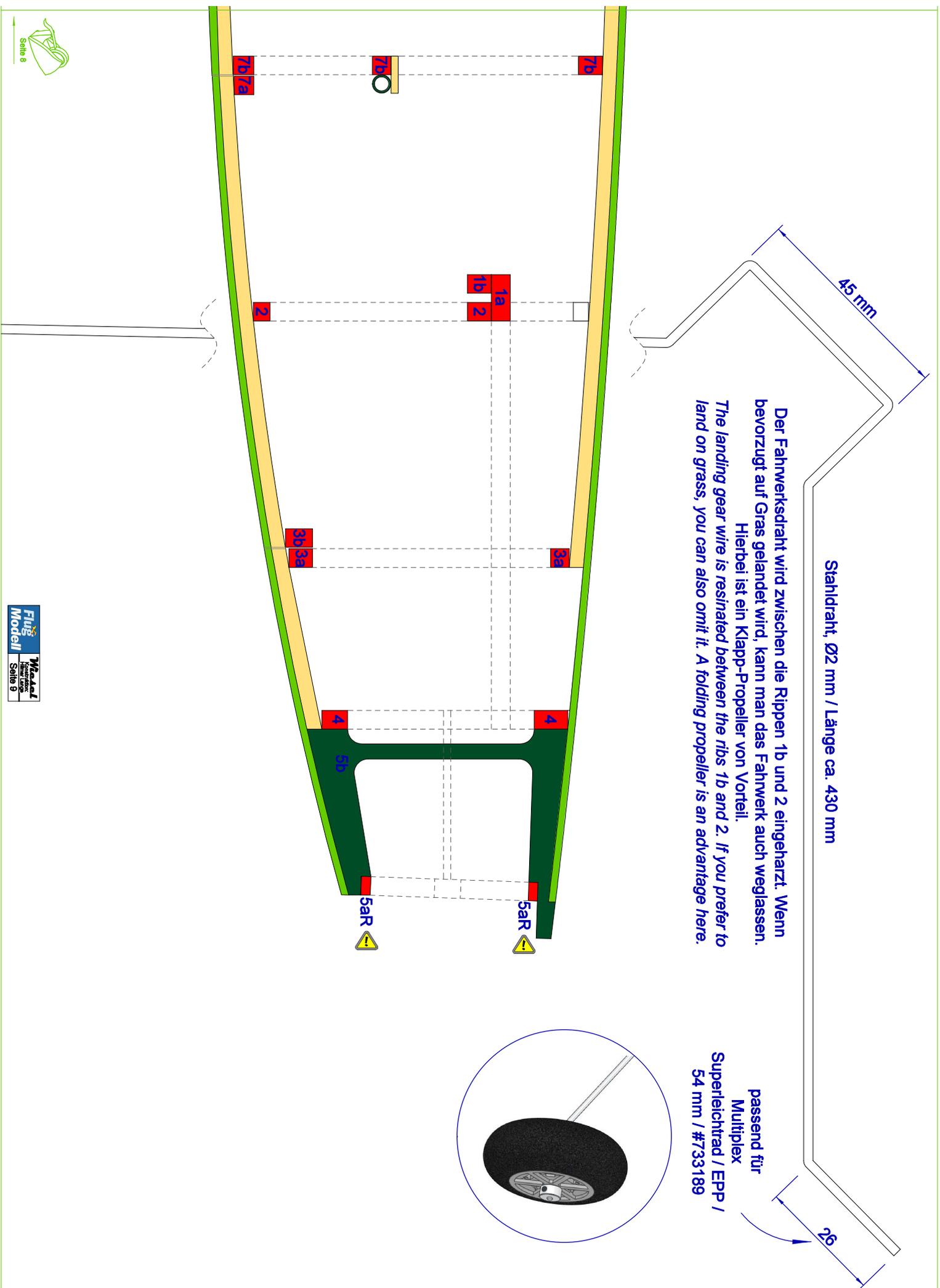
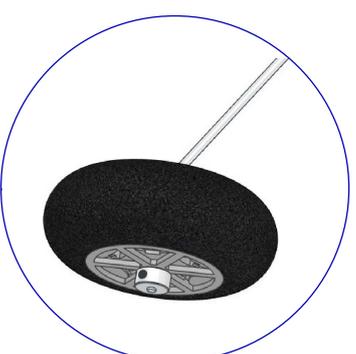
Ausschnitt in Spant 8c
gegebenenfalls an
Servoabmessungen
anpassen
*adjust cutout
to servo width*



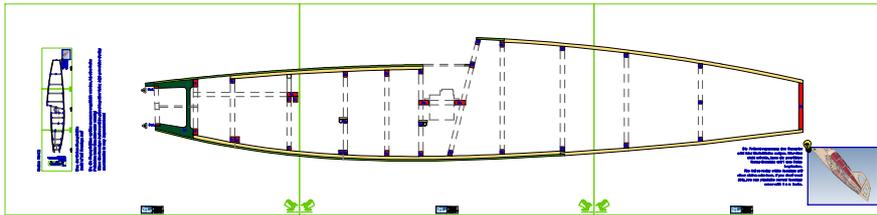
Stahldraht, Ø2 mm / Länge ca. 430 mm

Der Fahrwerksdraht wird zwischen die Rippen 1b und 2 eingeharzt. Wenn bevorzugt auf Gras gelandet wird, kann man das Fahrwerk auch weglassen. Hierbei ist ein Klapp-Propeller von Vorteil.
The landing gear wire is resinated between the ribs 1b and 2. If you prefer to land on grass, you can also omit it. A folding propeller is an advantage here.

passend für
Multiplex
Superleichtrad / EPP /
54 mm / #733189

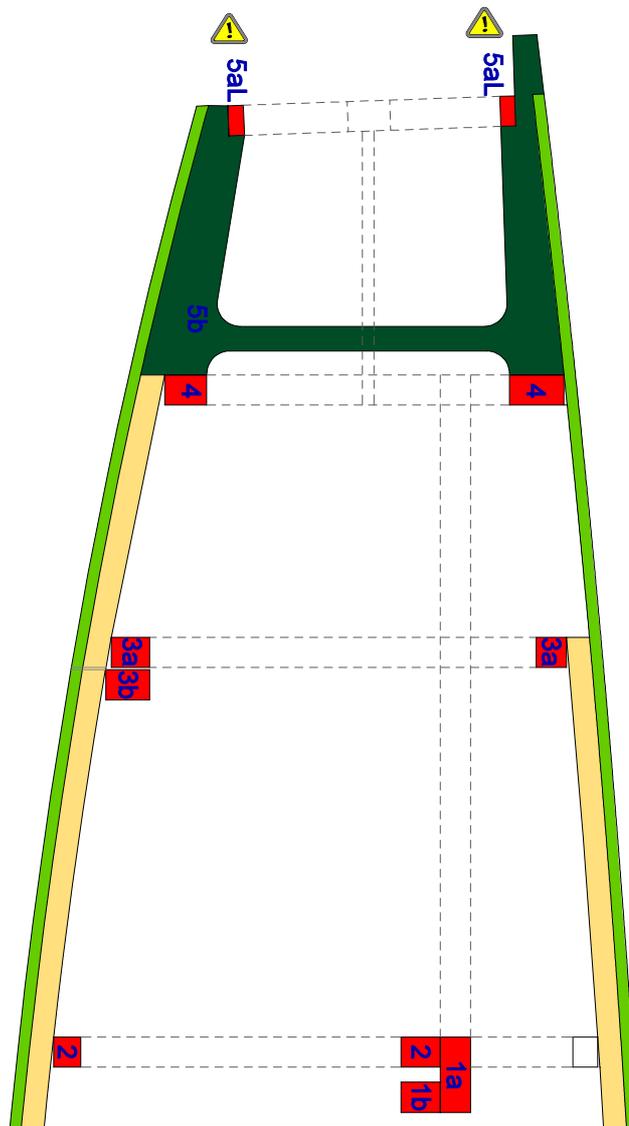


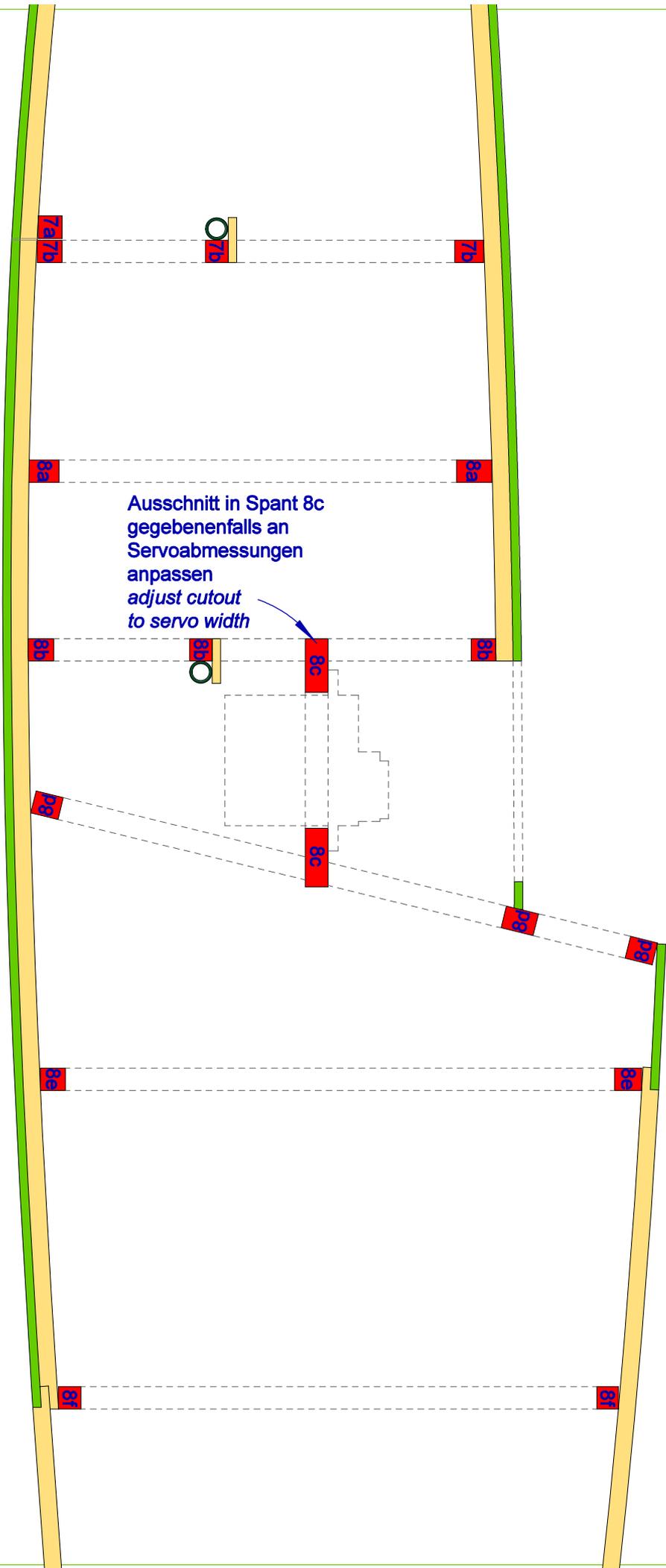
Seiten 10-12:

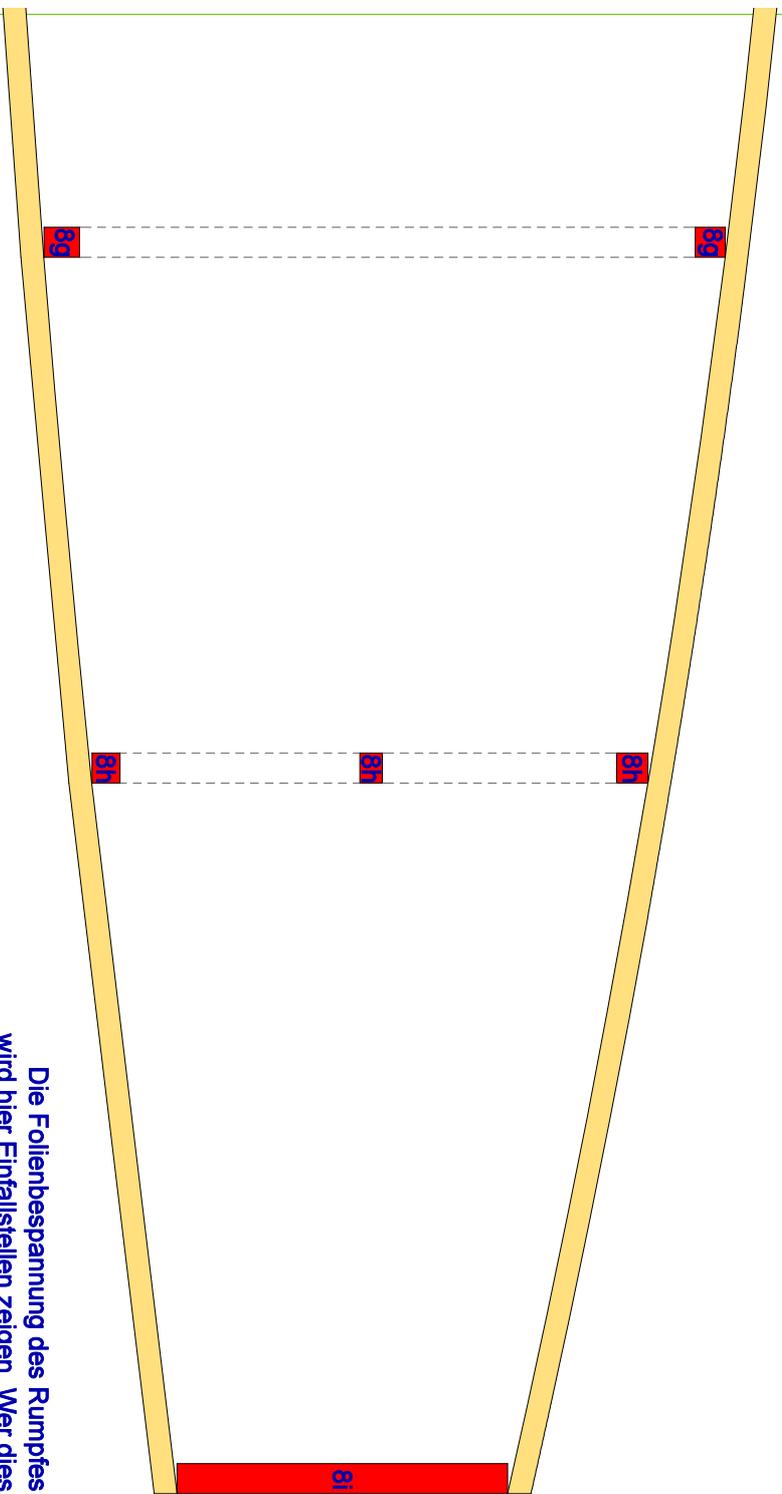


Bau der linken Rumpfhälfte
build of left fuselage half

Da die Rumpfhälften später zusammengeklebt werden, ist eine hohe Präzision beim Bau hier sehr wichtig!
Since the fuselage halves will be glued together later, high precision during construction is very important here!

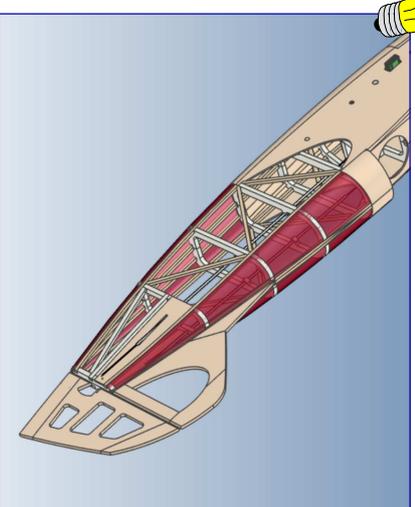




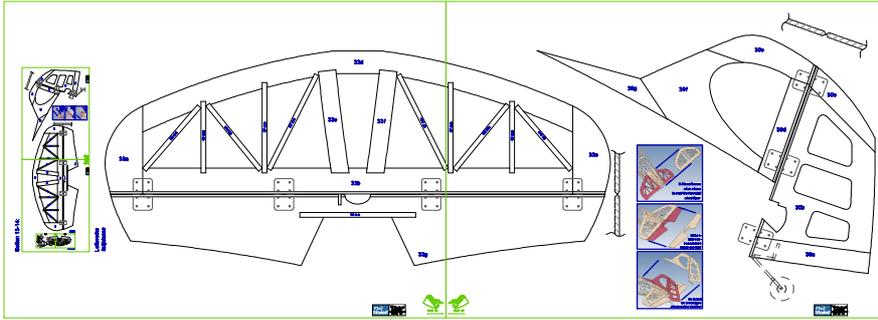


Die Folienbespannung des Rumpfes wird hier Einfeldstellen zeigen. Wer dies nicht möchte, kann die gewölbten Rumpfbereiche mit 1 mm Balsa beplancken.

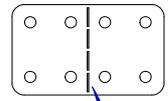
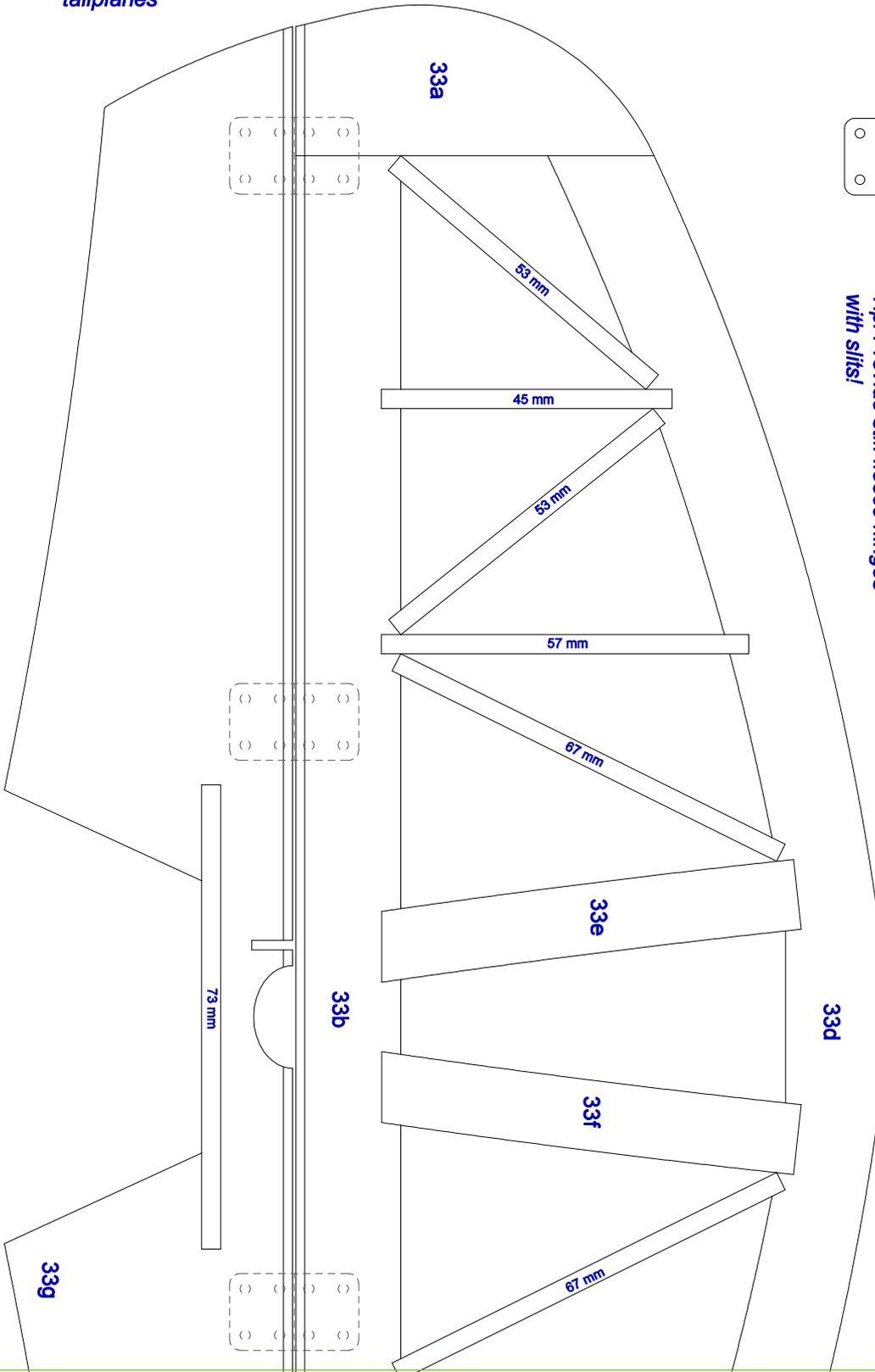
The foil covering of the fuselage will show sink marks here. If you don't want this, you can plank the curved fuselage areas with 1 mm balsa.



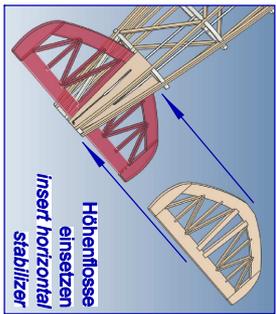
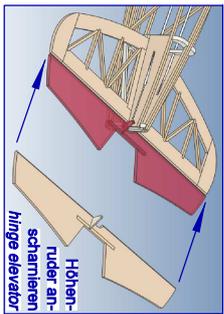
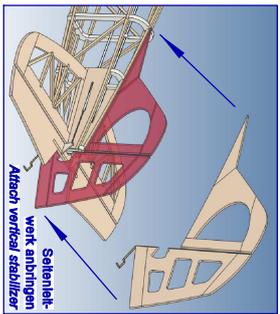
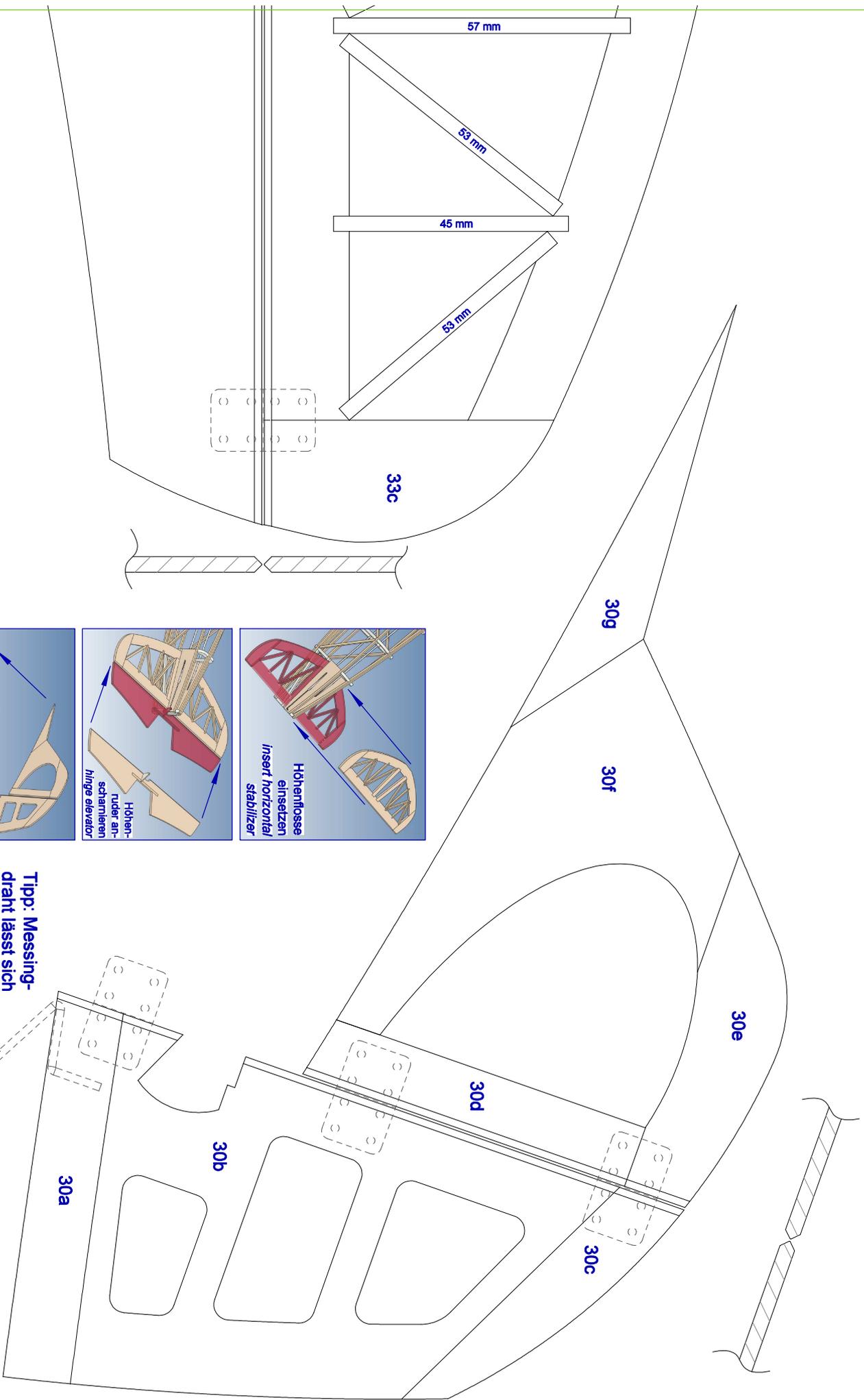
Seiten 13-14:



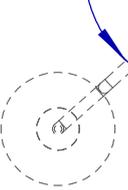
Leitwerke
tailplanes



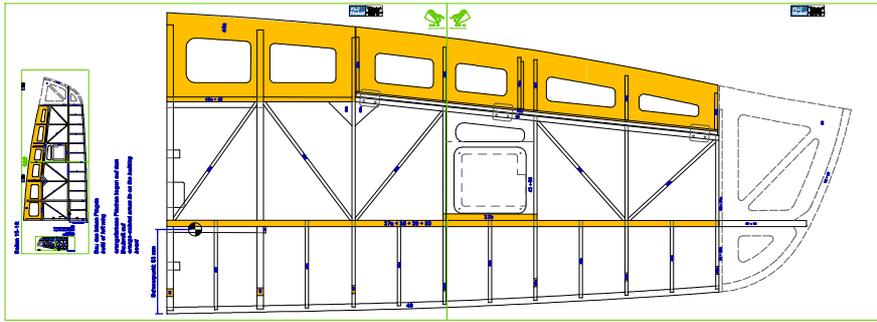
**Tipp: Schwergängige
Vlies-Scharniere mit Schlitz
versehen!**
**Tip: Provide stiff fleece hinges
with slits!**



Tipp: Messingdraht lässt sich leichter biegen als Stahl Draht!
Tip: brass wire is easier to bend than steel wire!

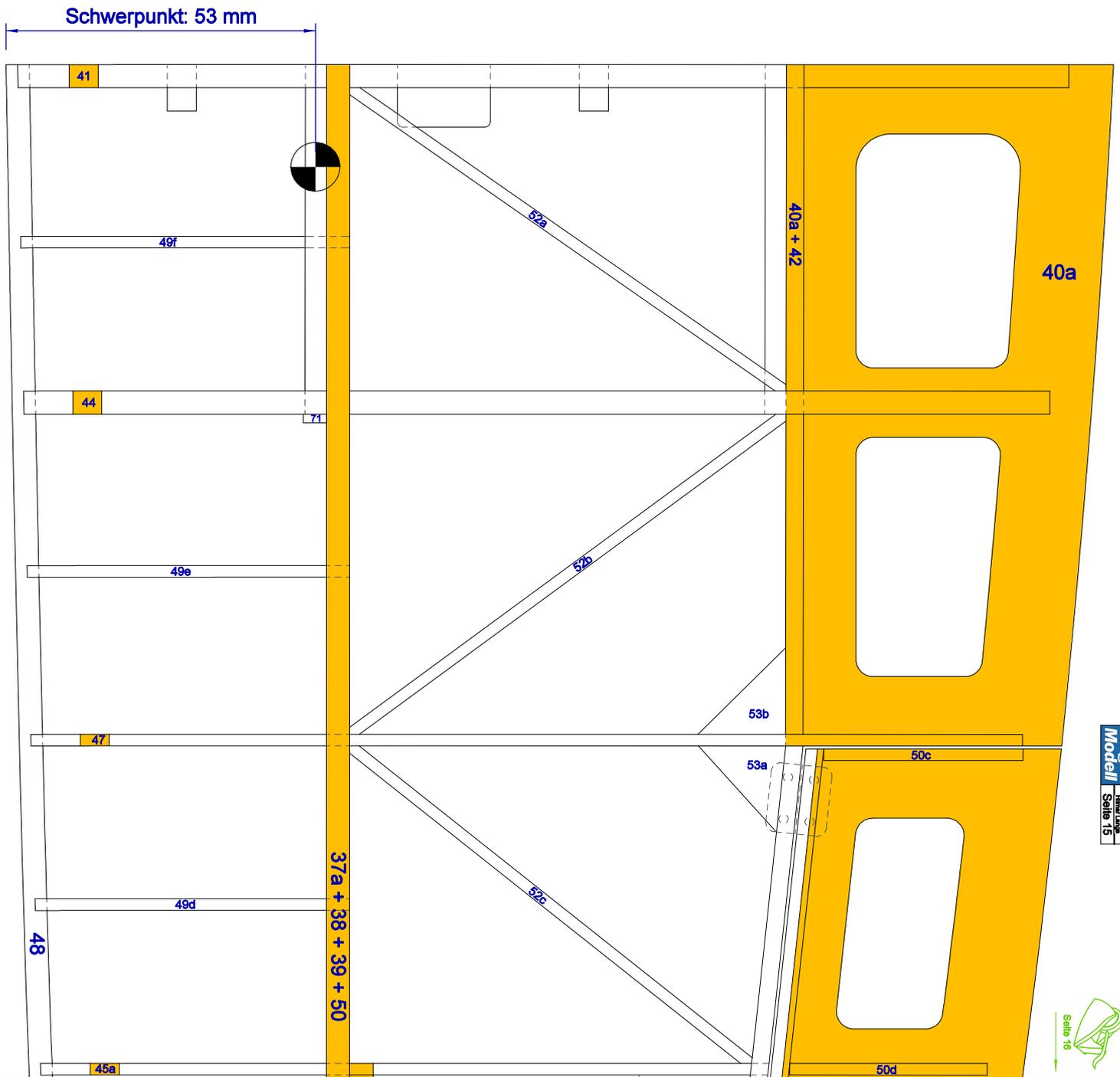


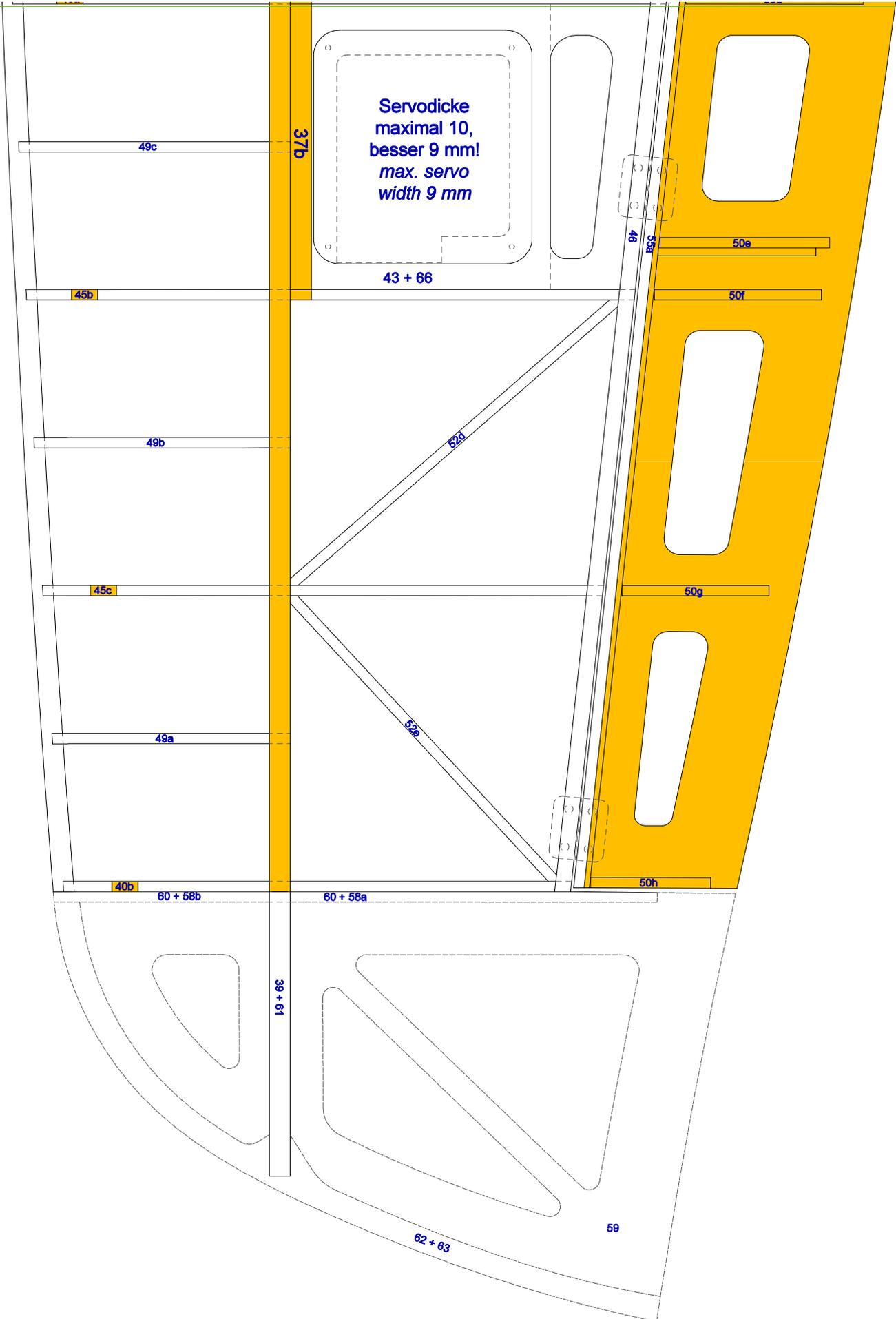
Seiten 15-16:



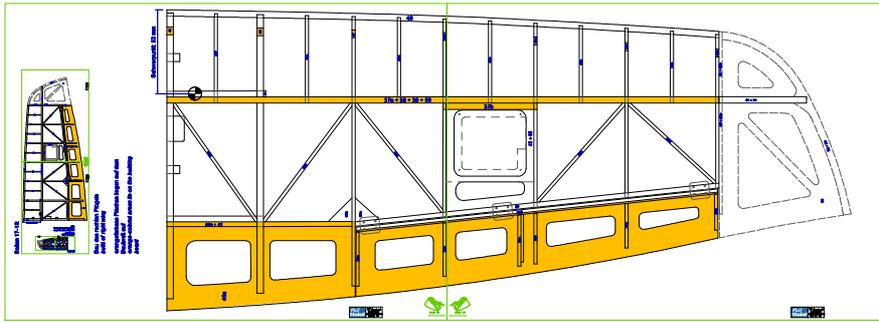
Bau des linken Flügels
build of left wing

orangefarbene Flächen liegen auf dem
Baubrett auf
*orange-colored areas lie on the building
board*



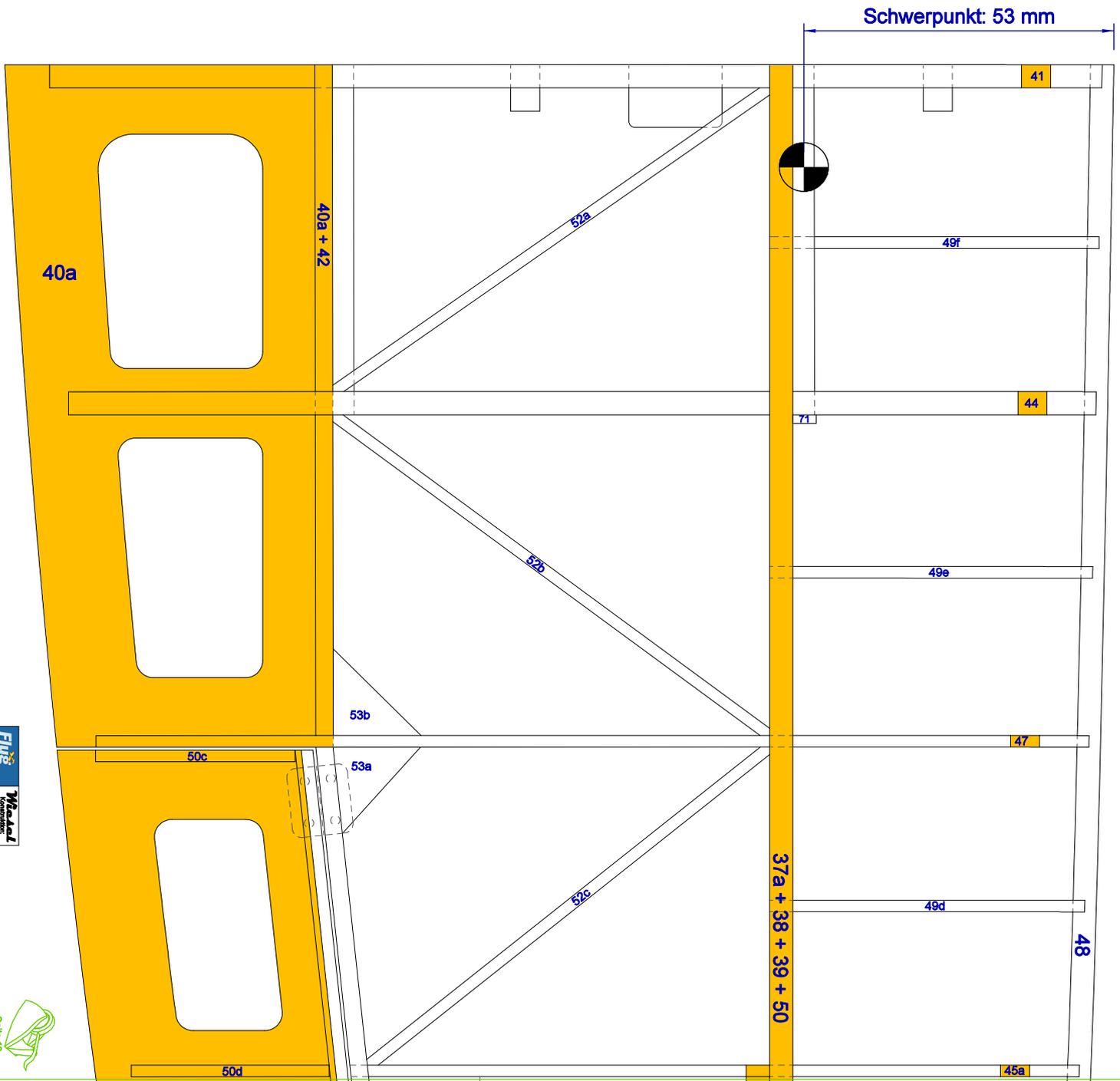


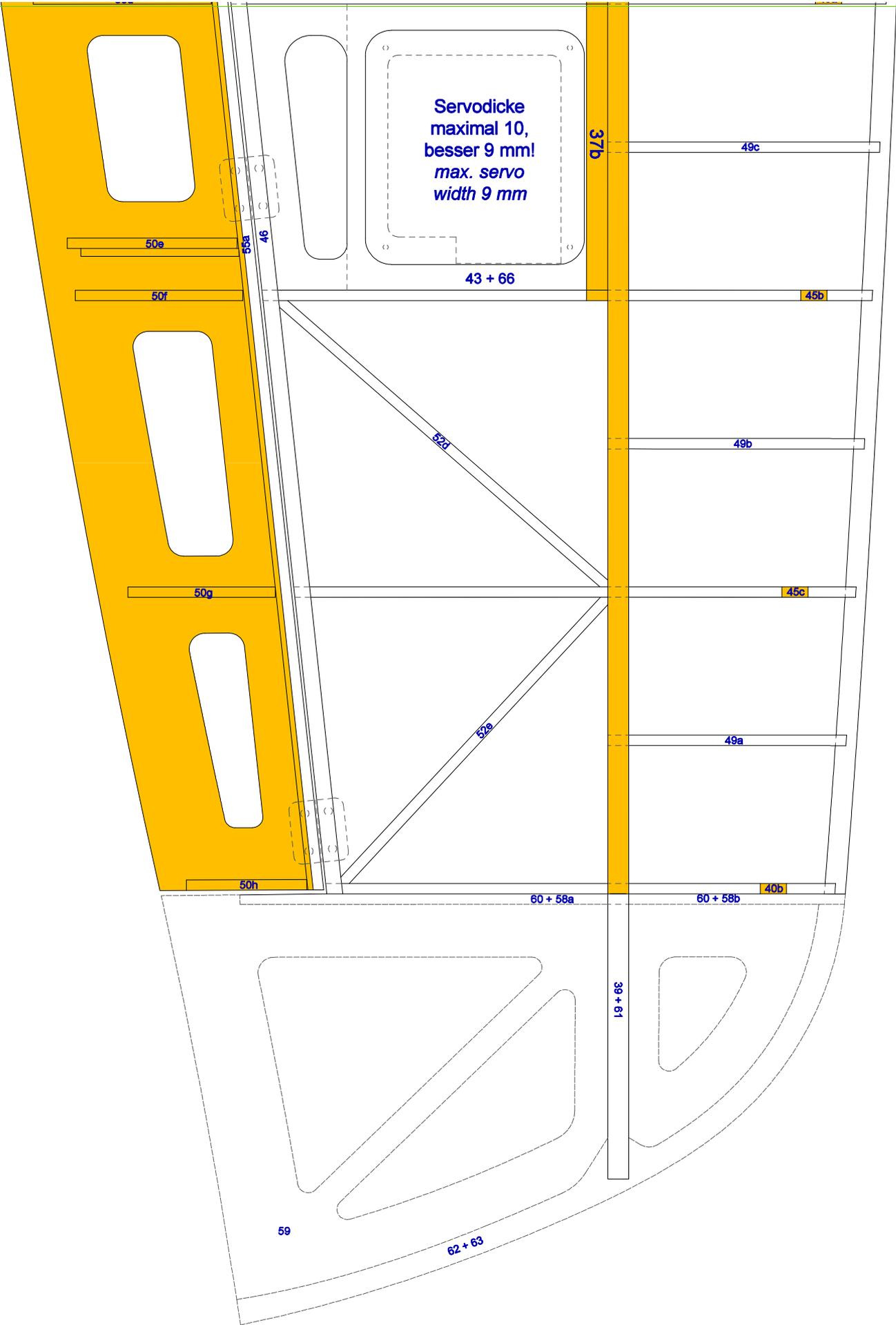
Seiten 17-18:



Bau des rechten Flügels
build of right wing

orangefarbene Flächen liegen auf dem
Baubrett auf
*orange-colored areas lie on the building
board*





347 mm (43a)

332 mm (11)

351 mm (10)

57 mm (34)

45 mm (34)

67 mm (35)

57 mm (34)

73 mm (34)

89 mm (14)

87 mm (14)

332 mm (11)

351 mm (10)

230 mm (13)

230 mm (13)

27 mm (16)

27 mm (16)

27 mm (16)

27 mm (16)

250 mm (23)

350 mm (23)



54 mm (29)

230 mm (13)

230 mm (

45 mm (34)

182 mm (9)

182

85 mm (14)

89 mm (14)

230 mm (13)

87 mm (14)

230 mm (

186 mm (9)

184 mm (9)

186 mm (9)

184 mm (9)



38 mm (siehe Seite 43)

1 (13)

32 mm (9)

85 mm (14)

67 mm (35)

53 mm (35)

1 (13)

53 mm (35)

53 mm (35)

53 mm (35)



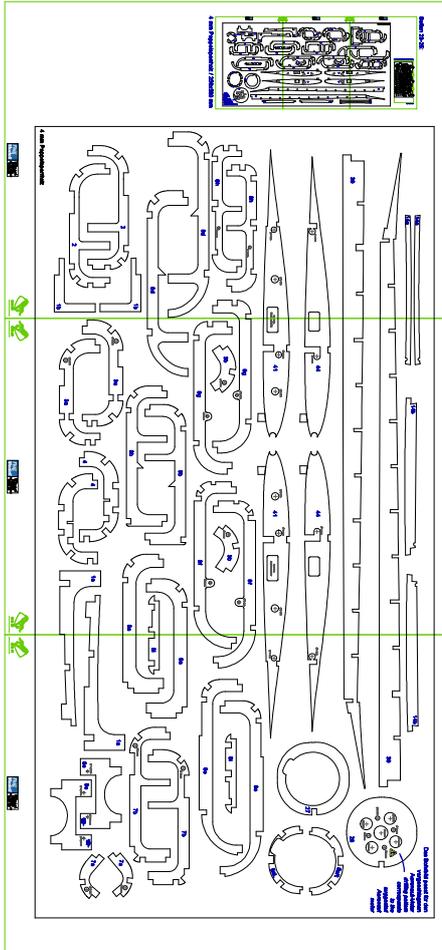
Eine Anordnung der Vierkantstäbe für 500 mm langes Ausgangsmaterial findet sich im Anhang auf den Seiten 44/45!

An arrangement of the square bars for 500 mm long starting material can be found in the appendix on pages 44/45!

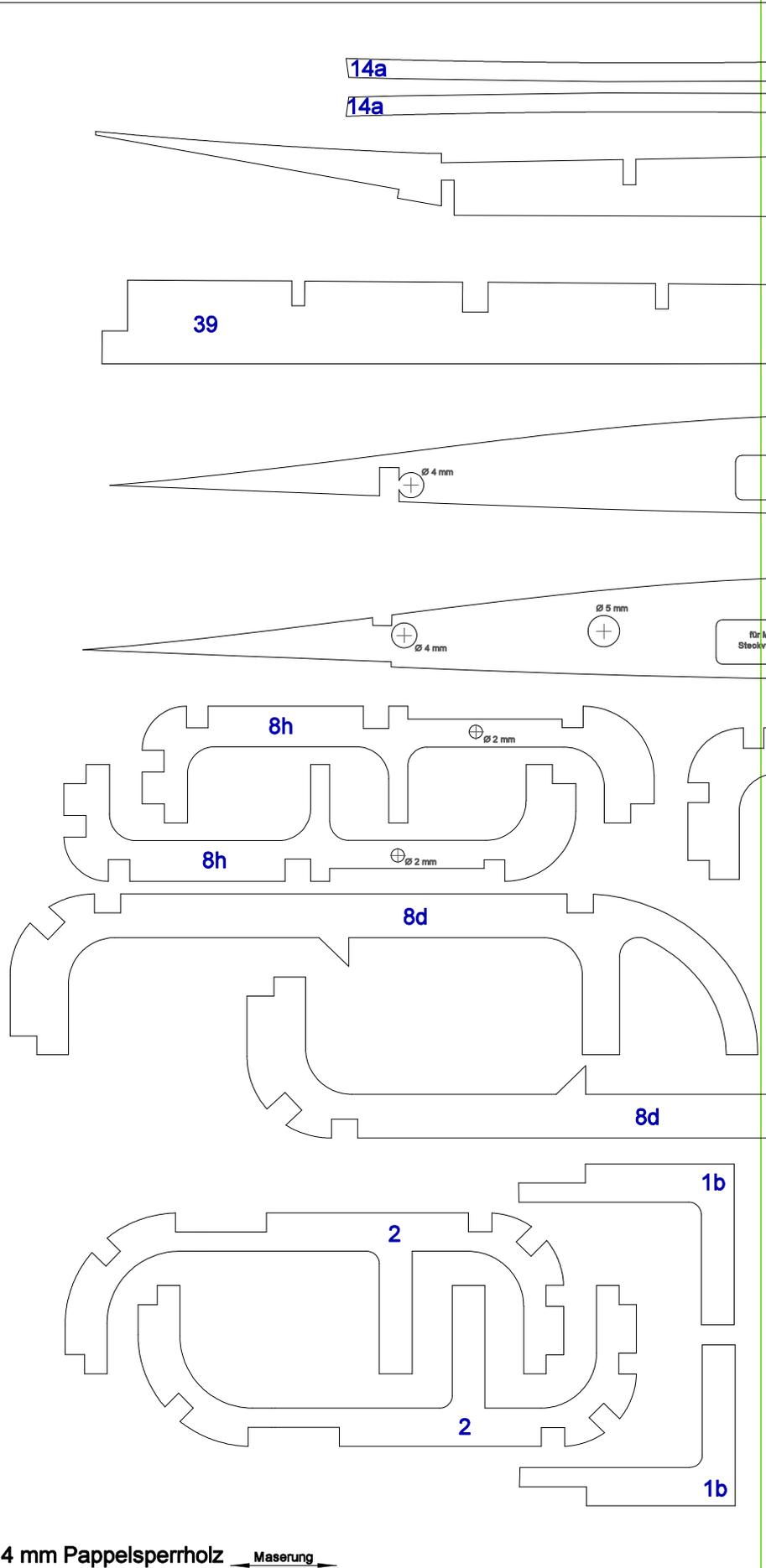
1000 mm



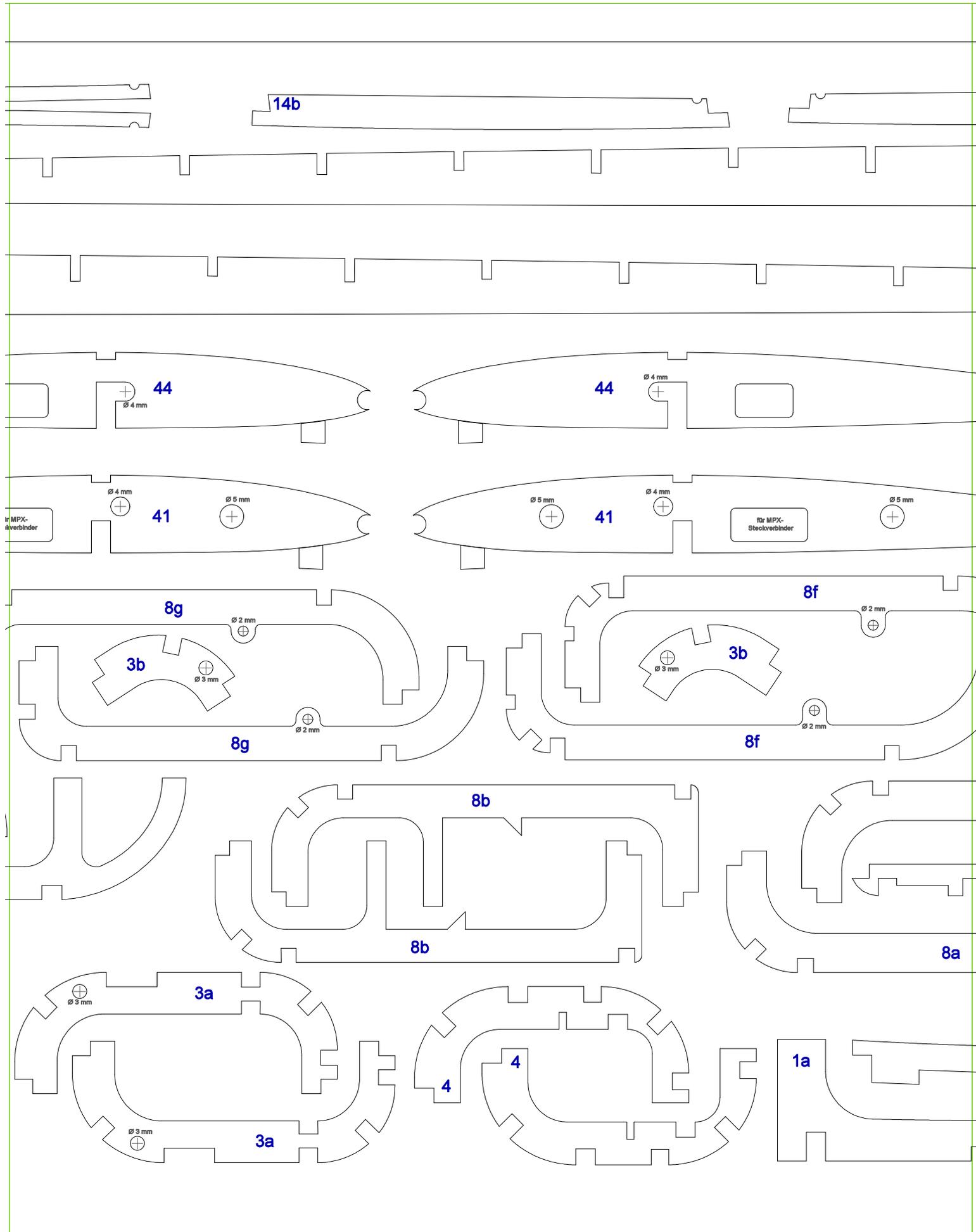
Seiten 23-25:



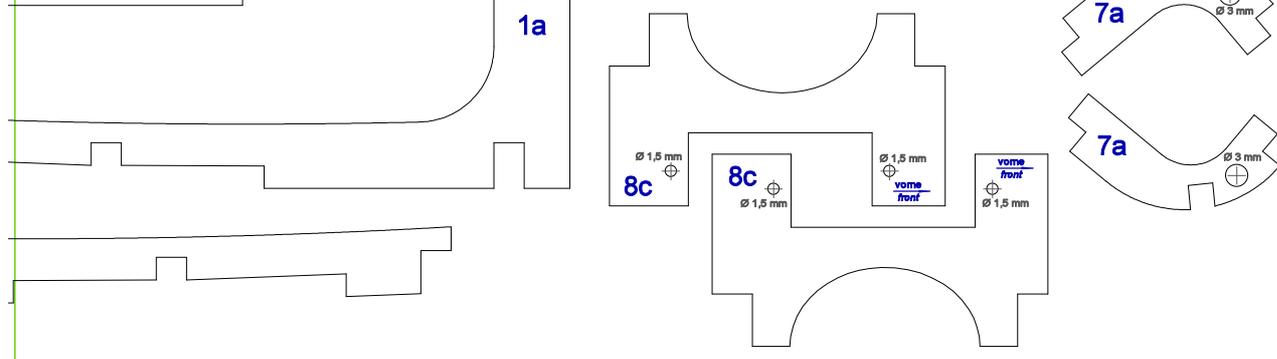
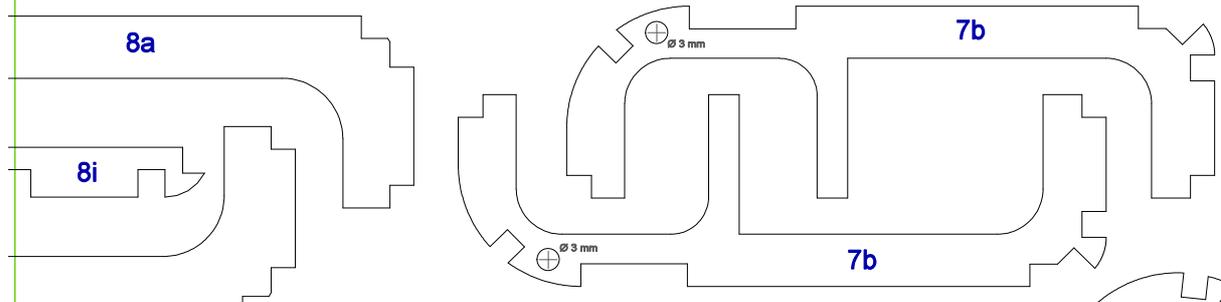
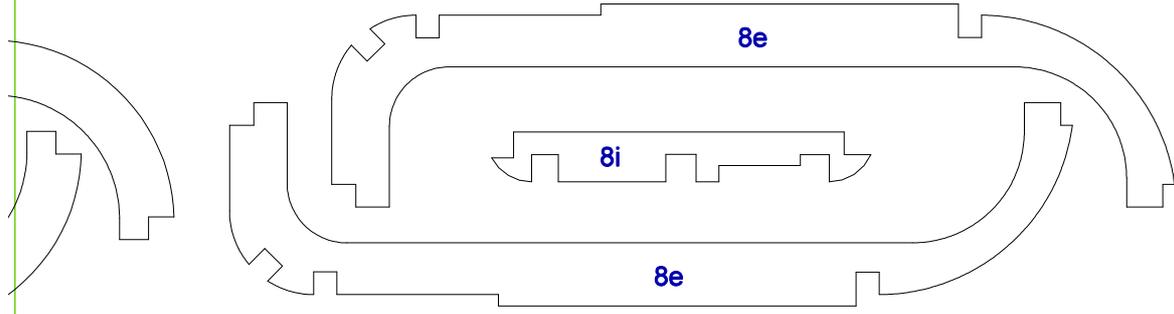
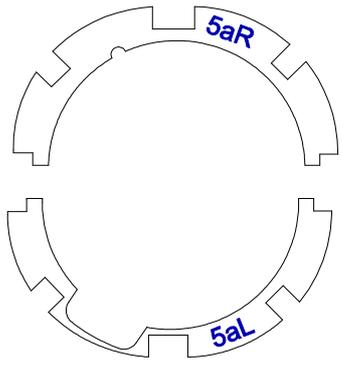
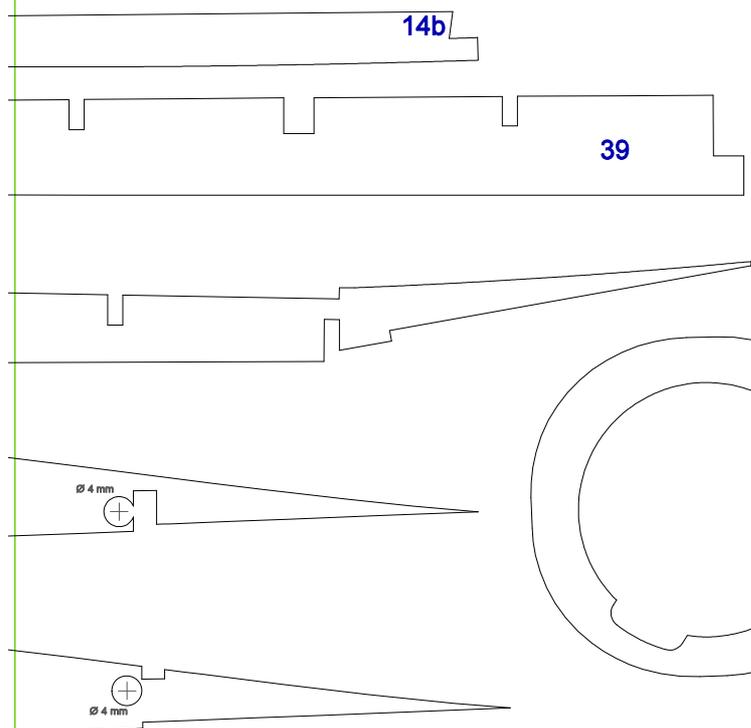
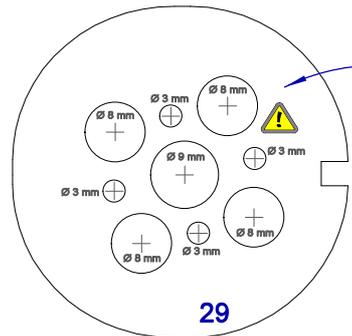
4 mm Pappelspertholz / 250x500 mm



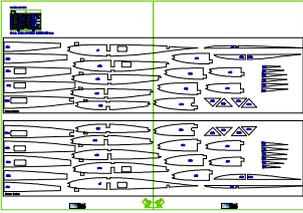
4 mm Pappelspertholz Maserung



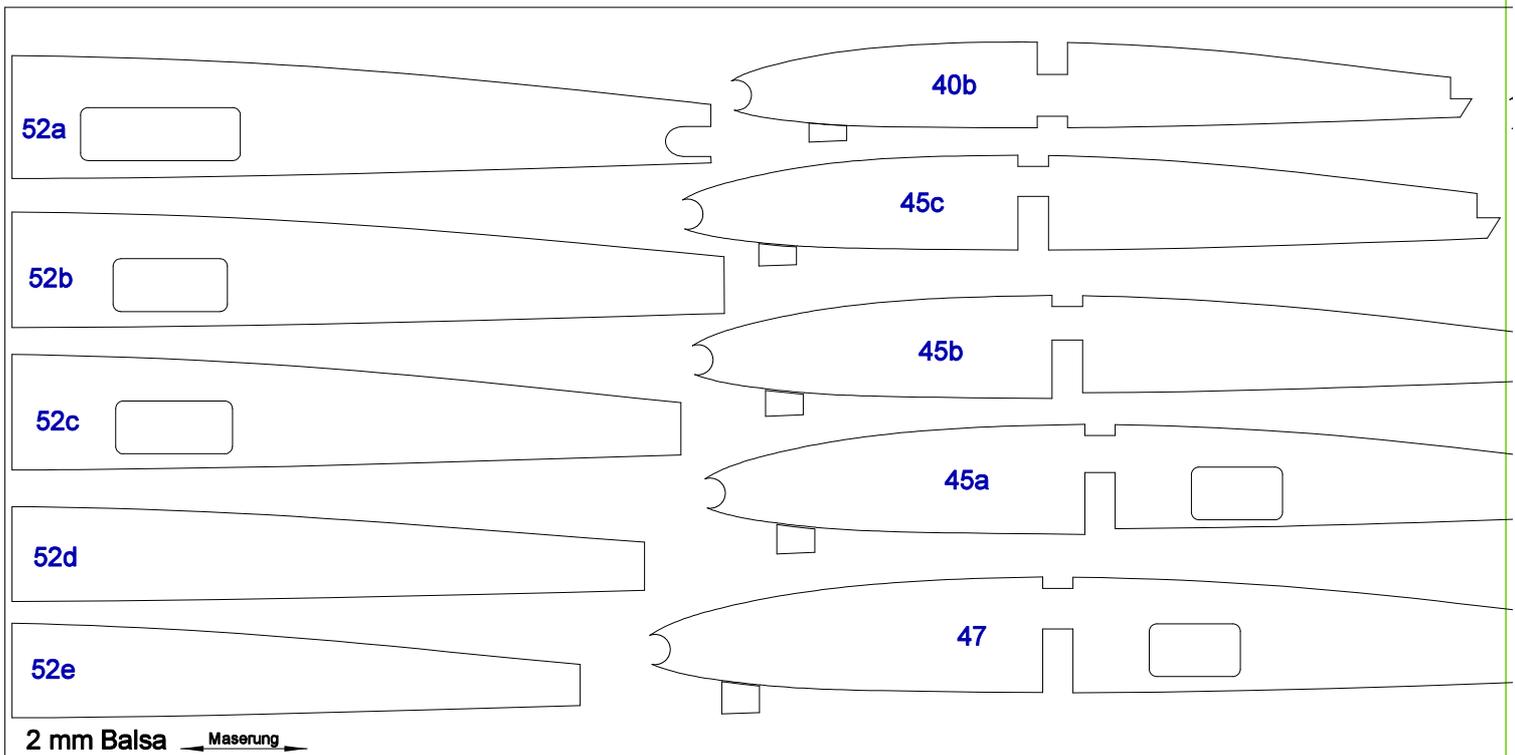
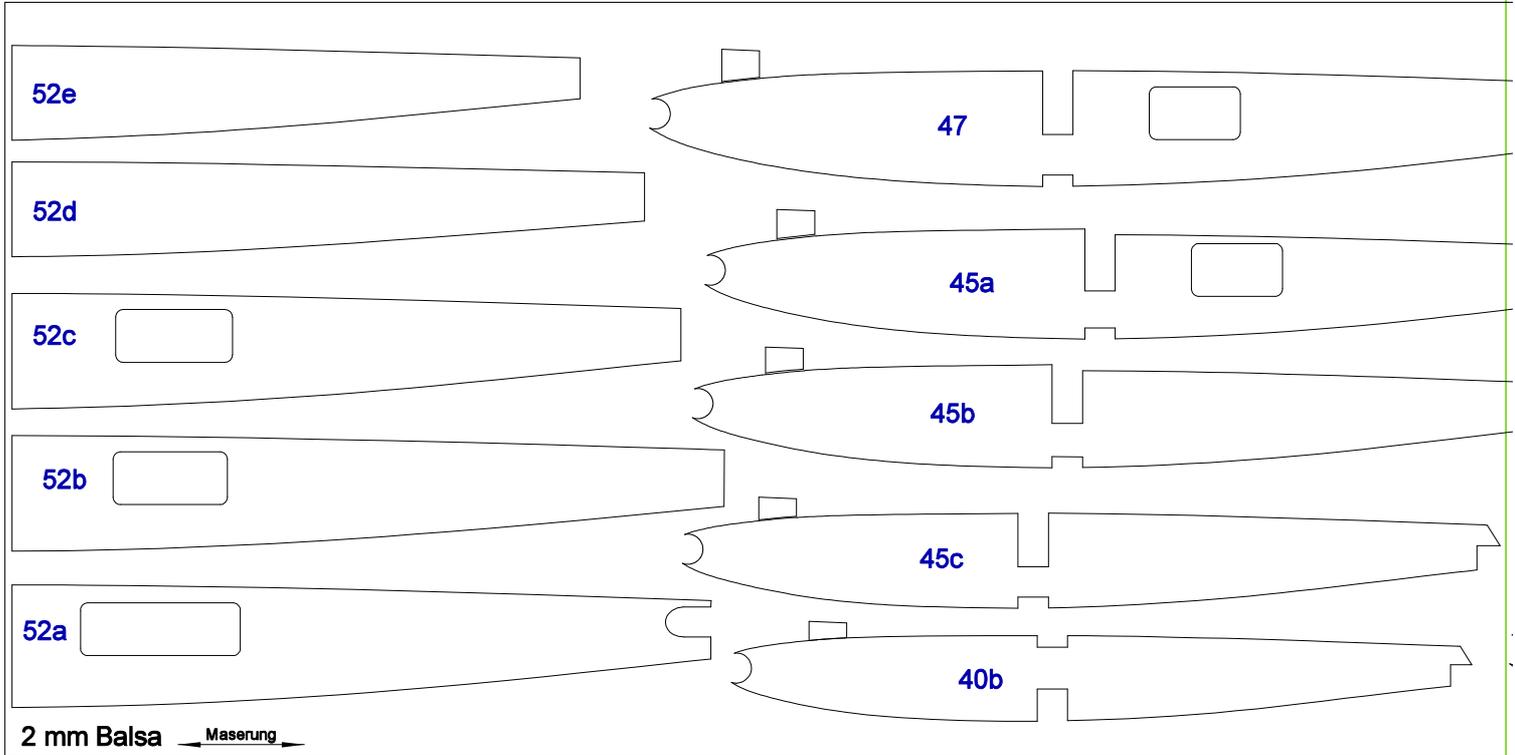
Das Bohrbild passt für den vorgeschlagenen Aeronaut-Motor
drilling pattern corresponds to the suggested Aeronaut motor

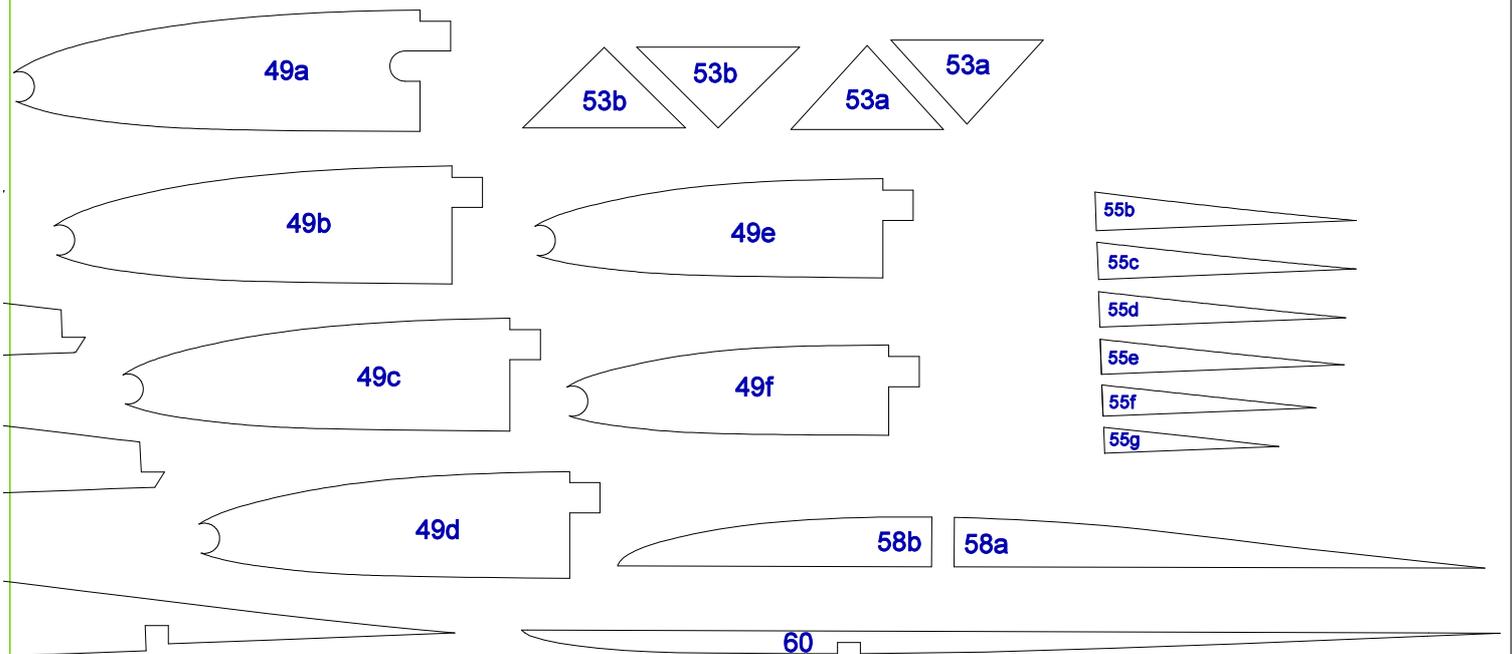
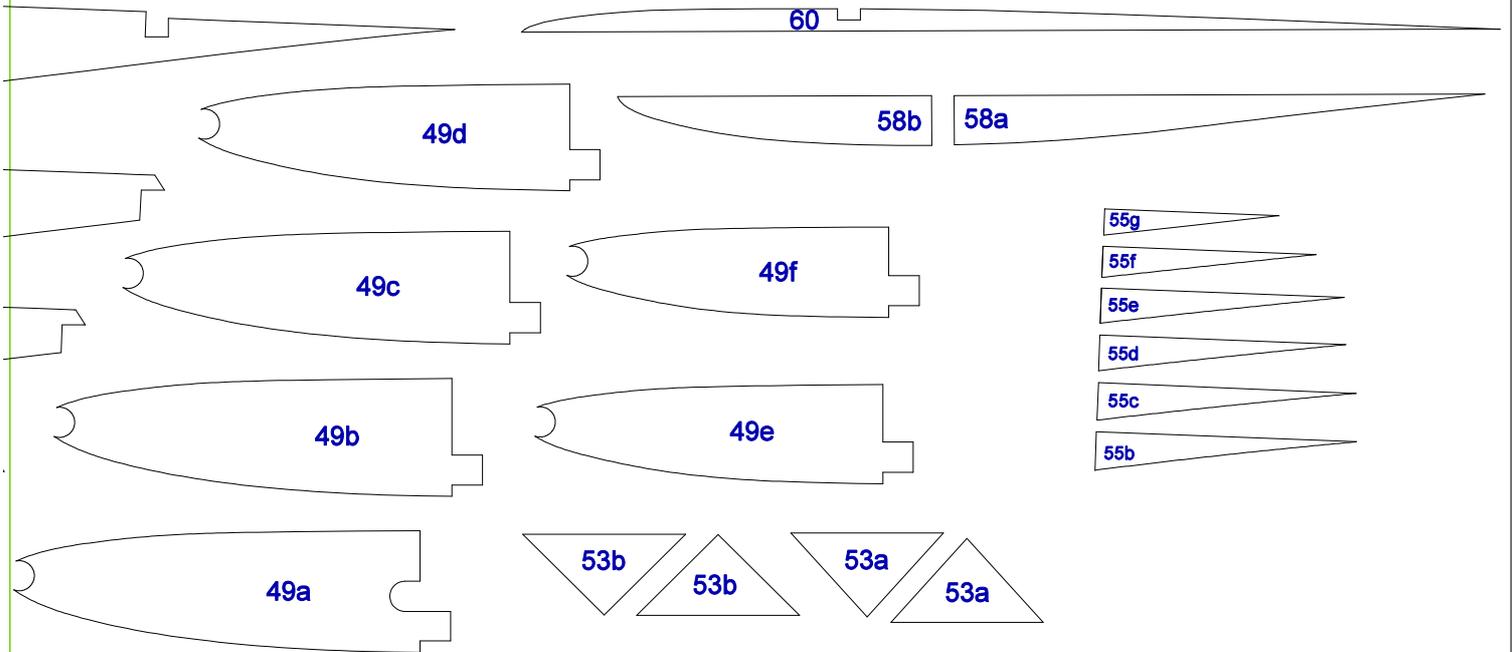


Seiten 26-27:

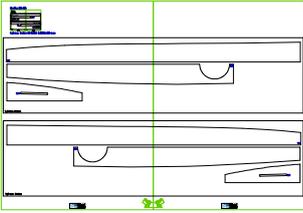


2 mm Balsa / 2 Stück à 395x100 mm



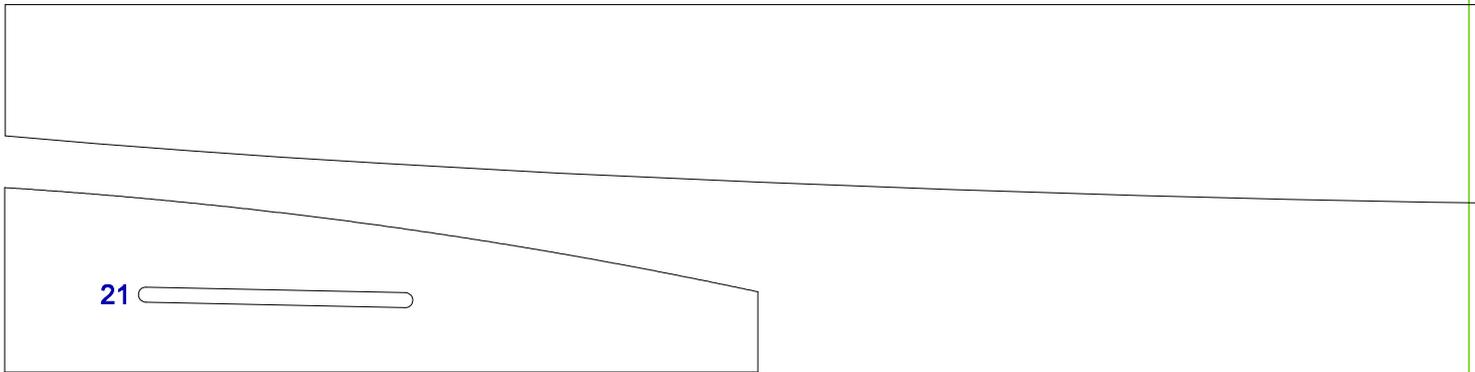


Seiten 28-29:

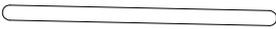


1,5 mm Balsa / 2 Stück à 395x100 mm

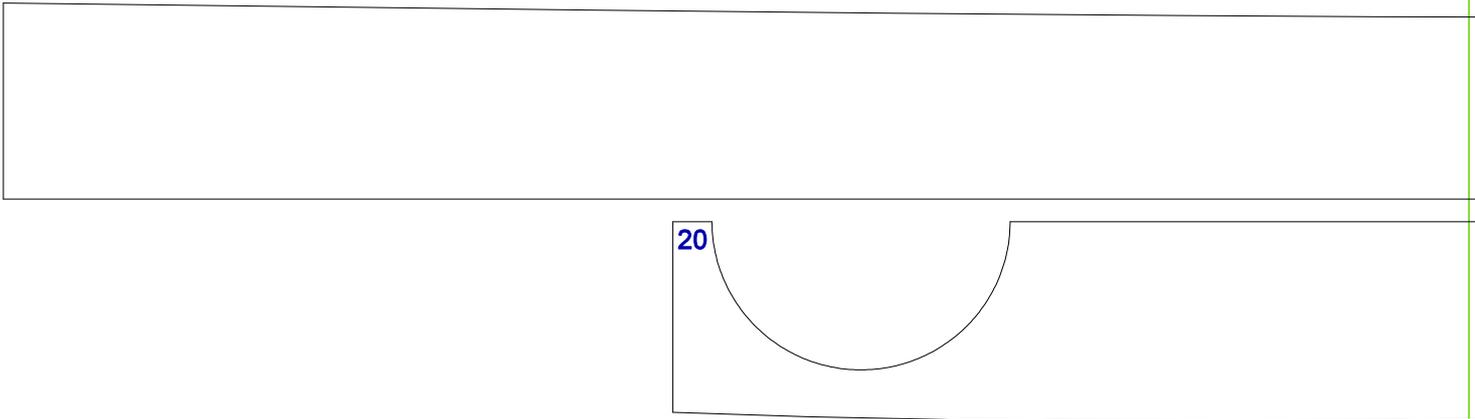
19



21

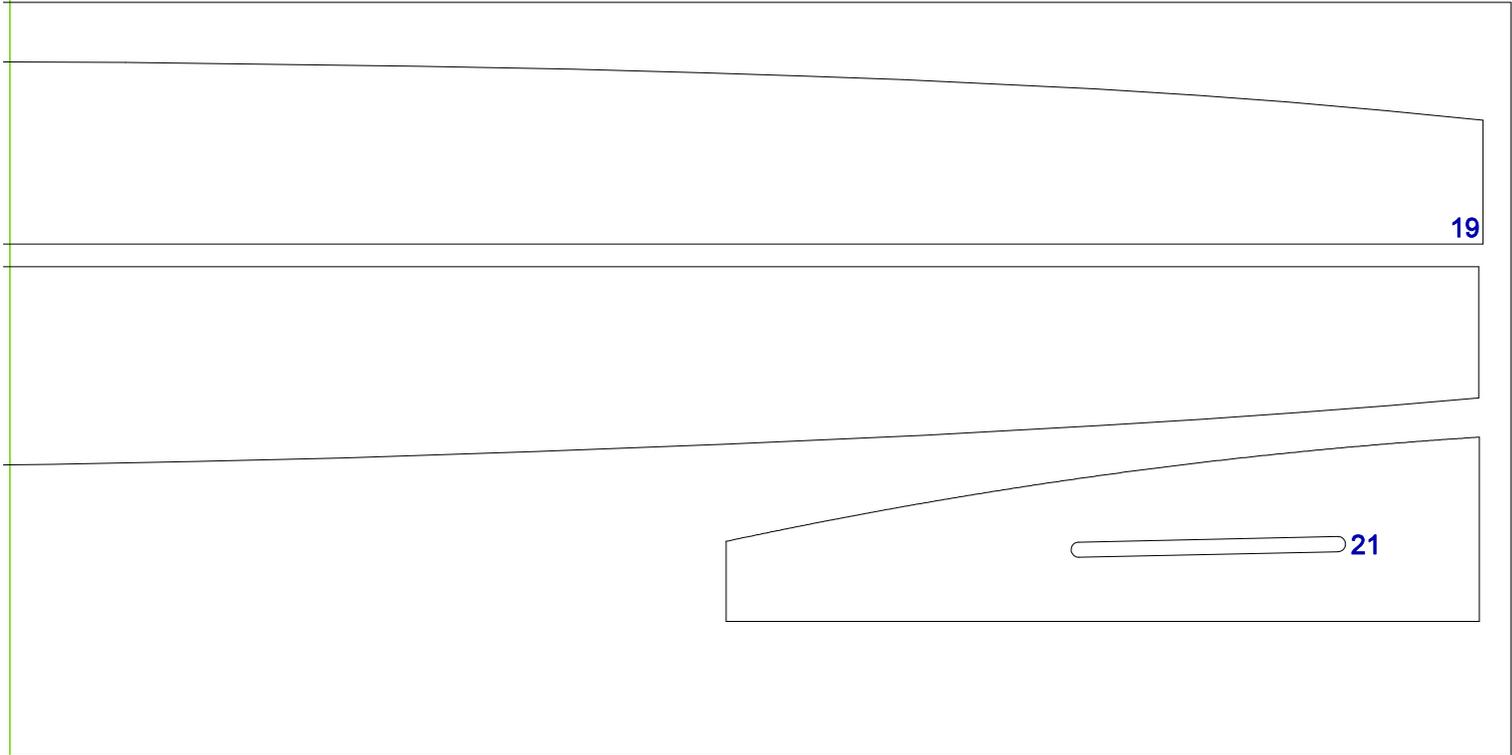
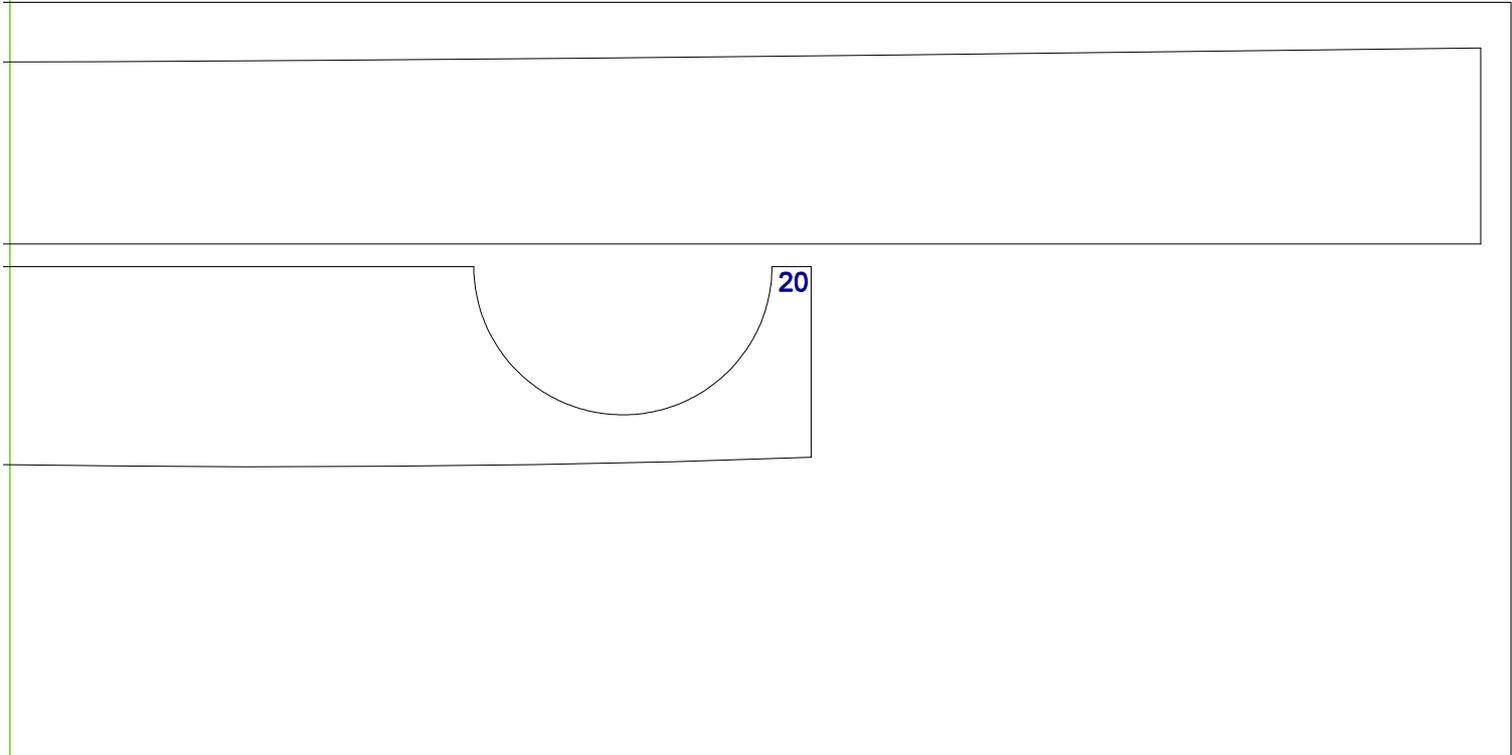


1,5 mm Balsa ← Maserung →

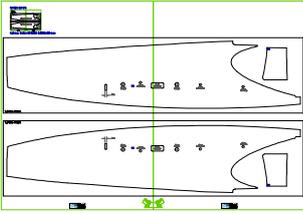


20

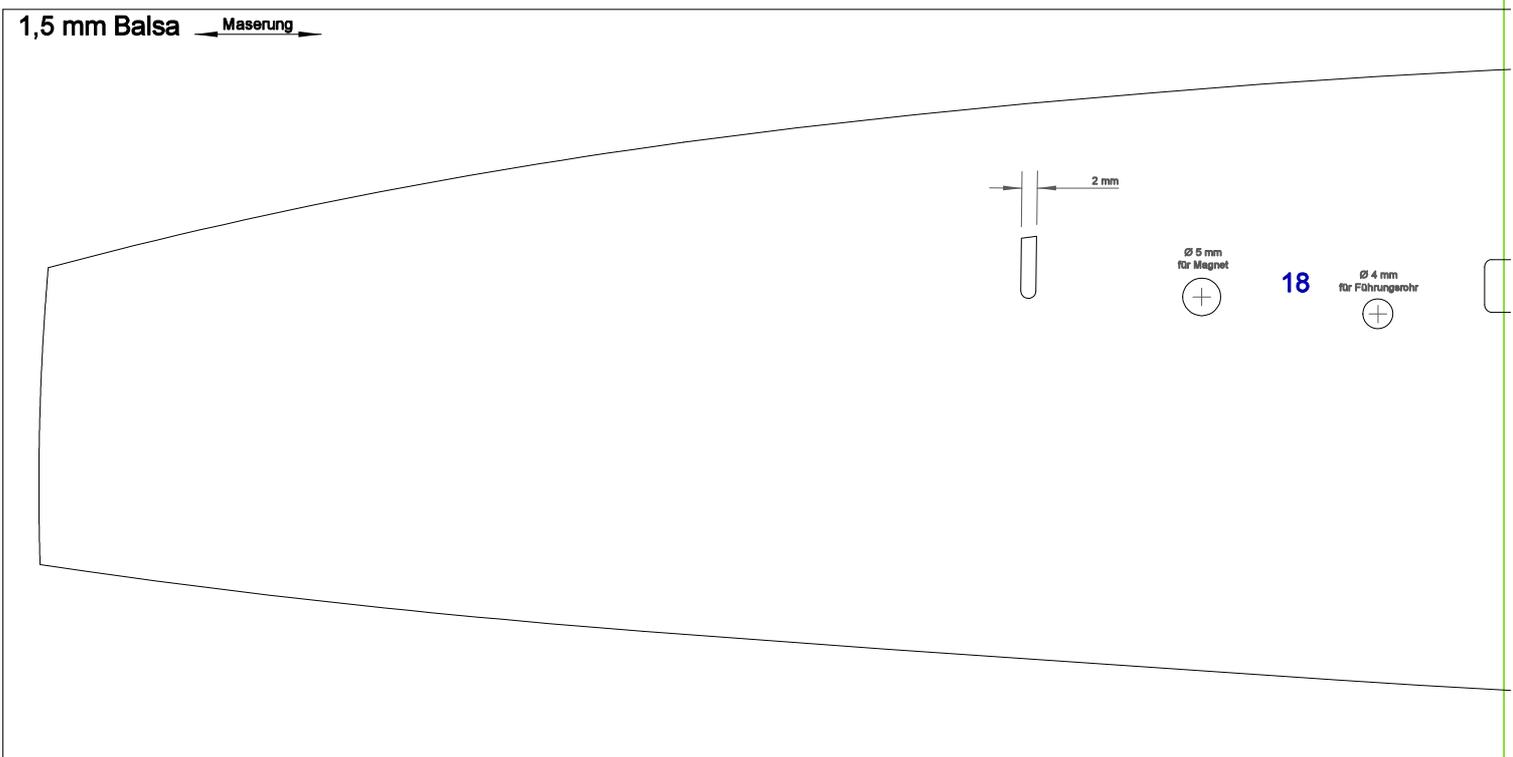
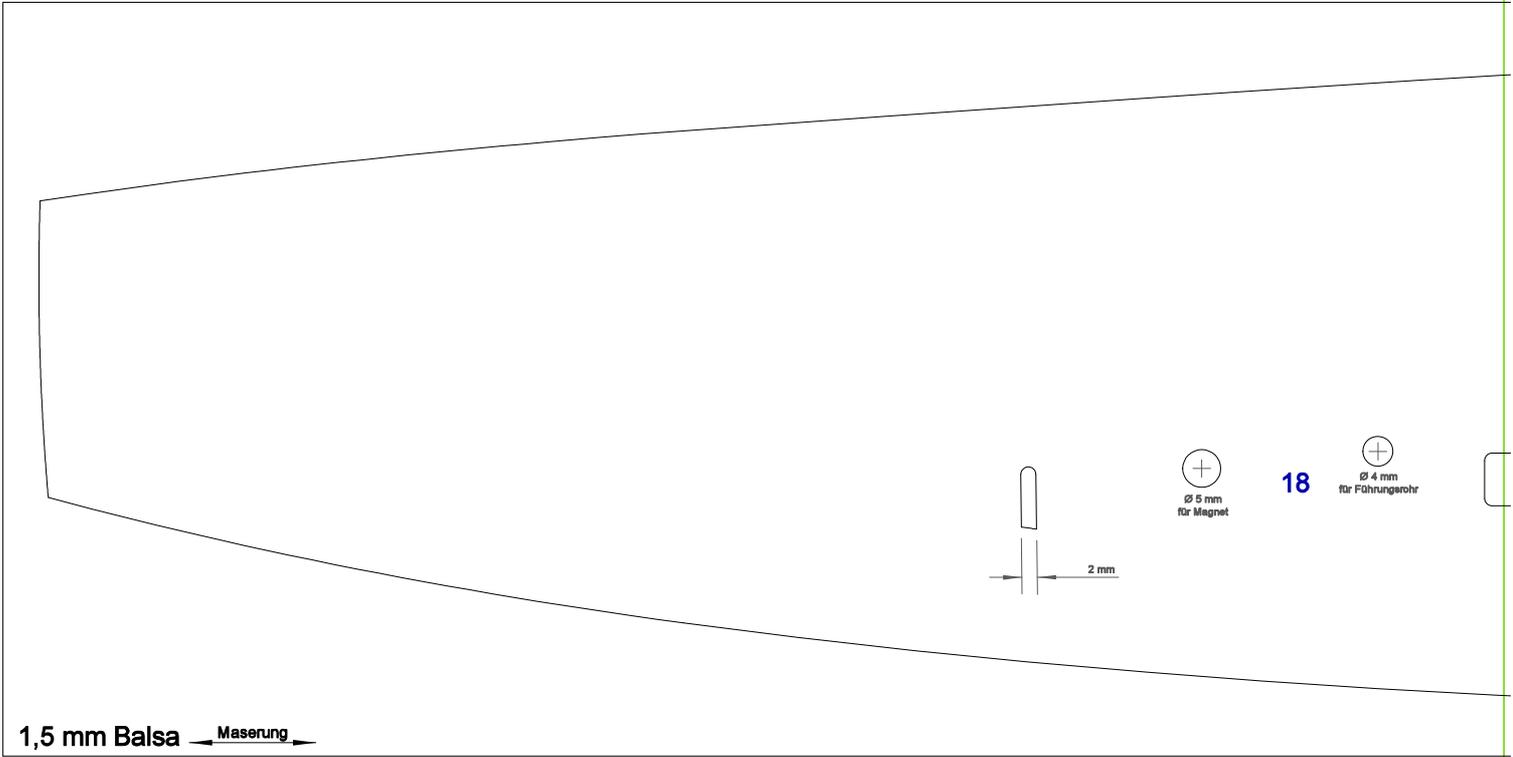
1,5 mm Balsa ← Maserung →

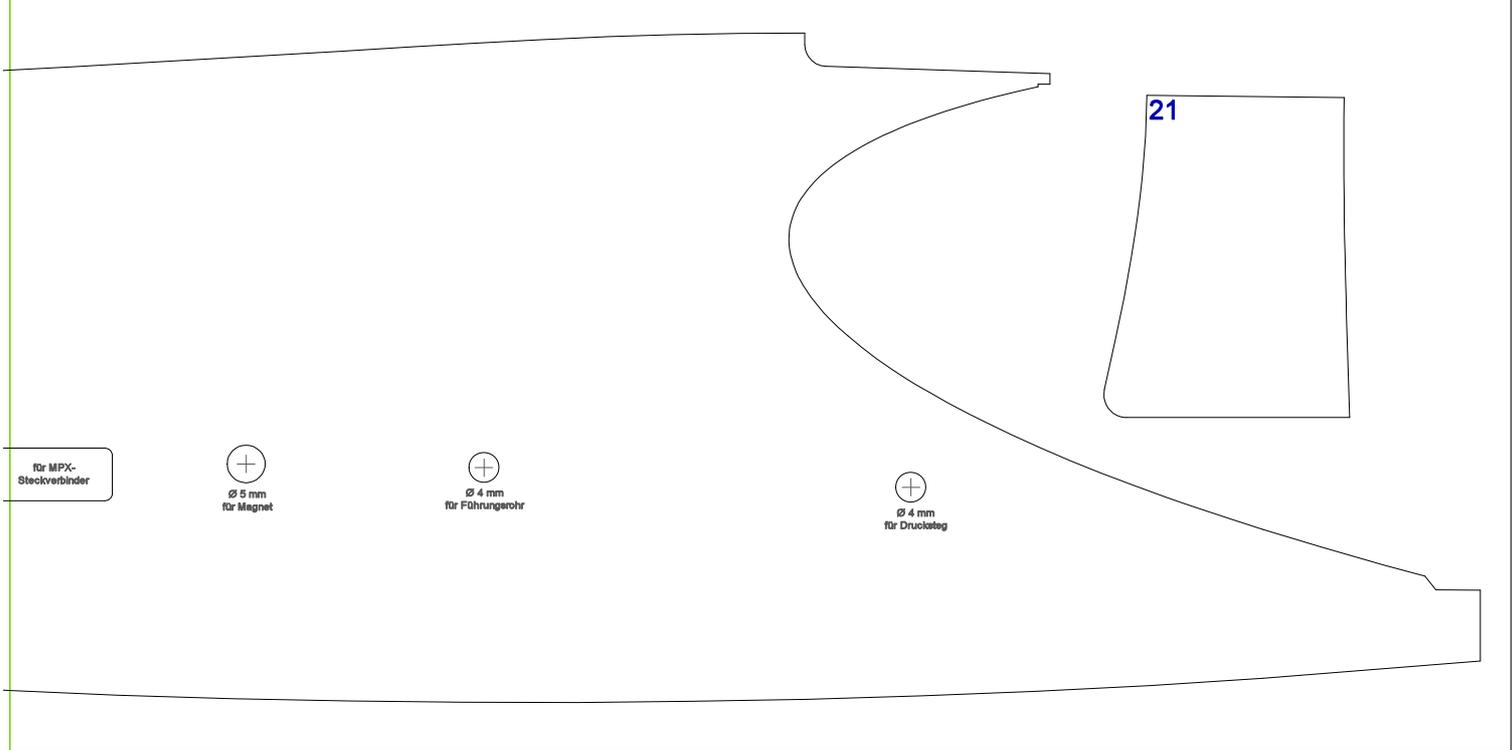


Seiten 30-31:



1,5 mm Balsa / 2 Stück à 395x100 mm





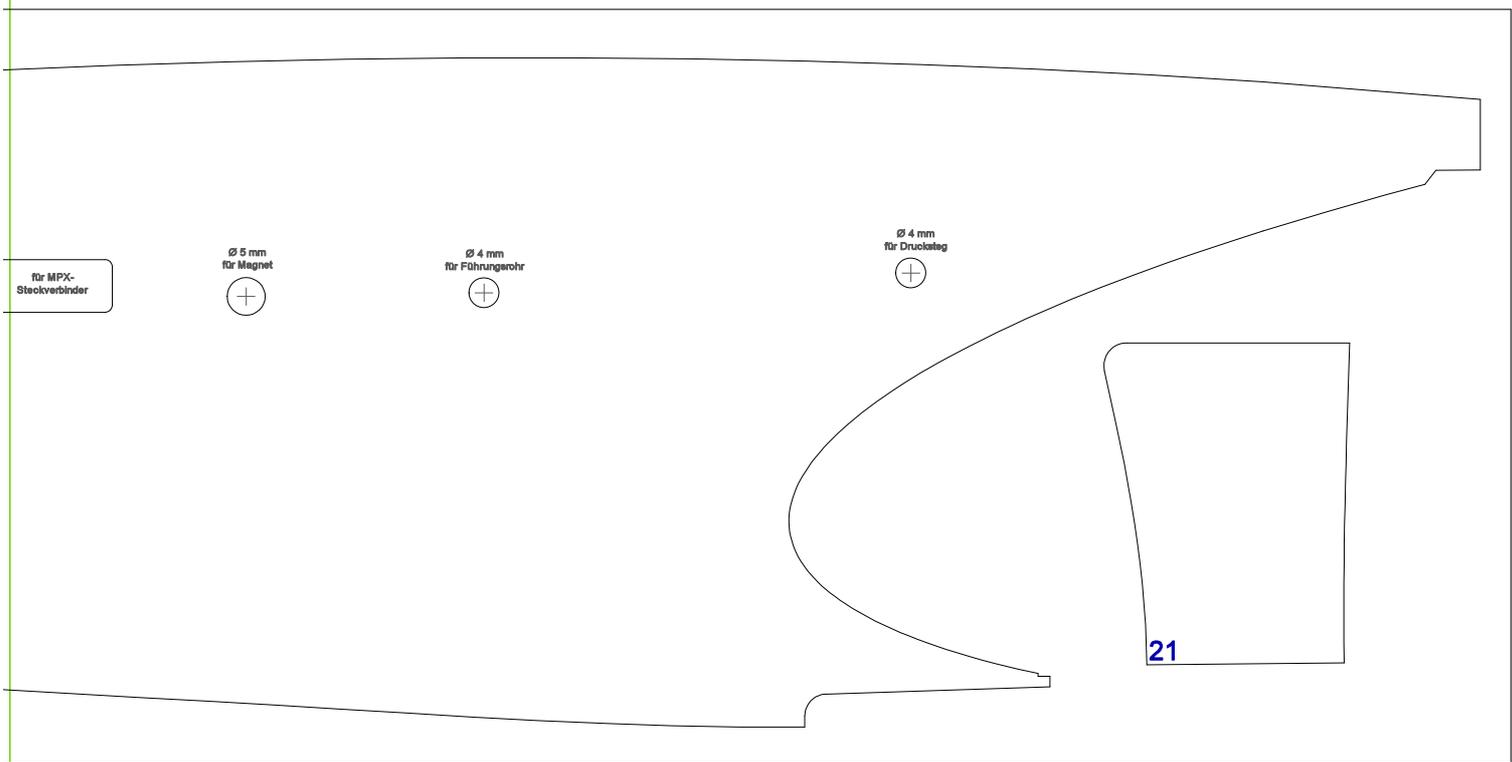
für MPX-Steckverbinder

⊕
Ø 5 mm
für Magnet

⊕
Ø 4 mm
für Führungsrohr

⊕
Ø 4 mm
für Drucksteg

21



für MPX-Steckverbinder

⊕
Ø 5 mm
für Magnet

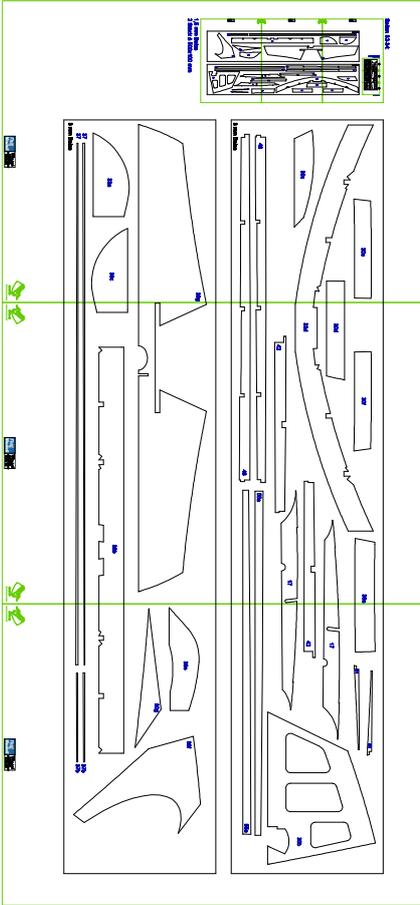
⊕
Ø 4 mm
für Führungsrohr

⊕
Ø 4 mm
für Drucksteg

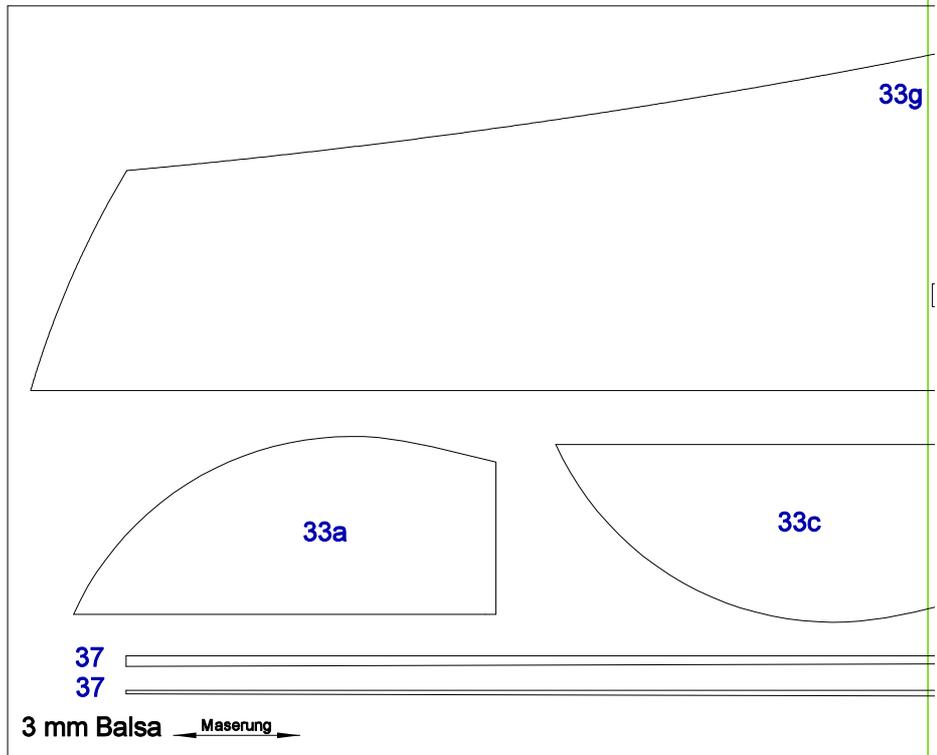
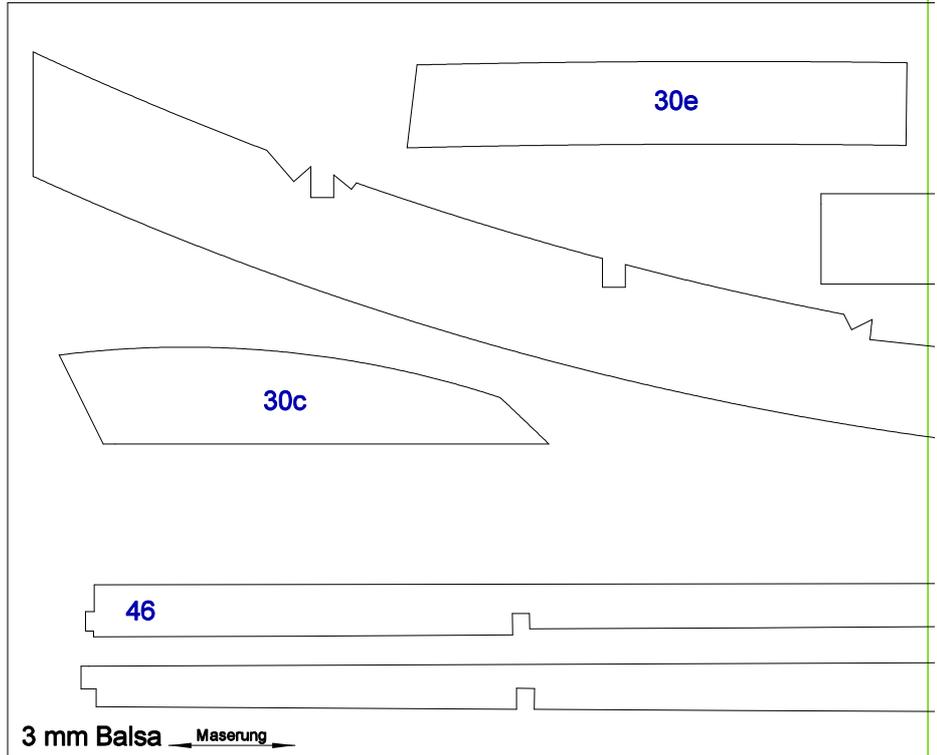
21

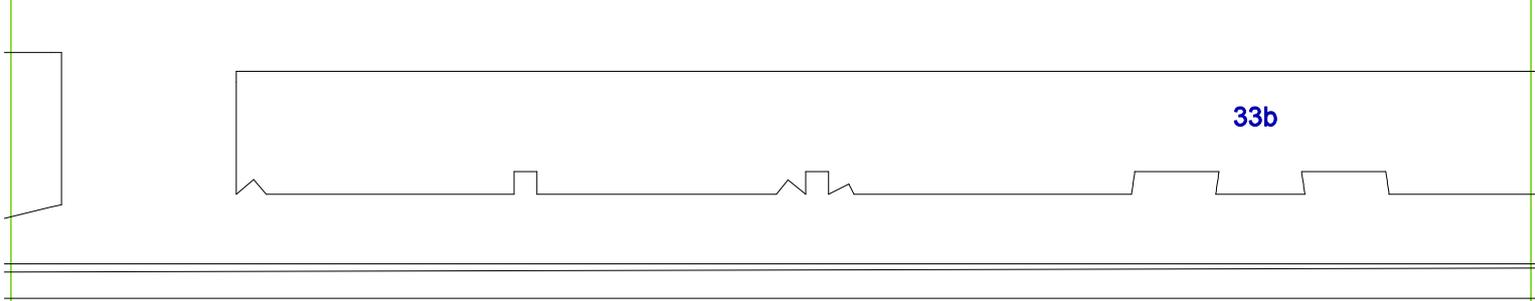
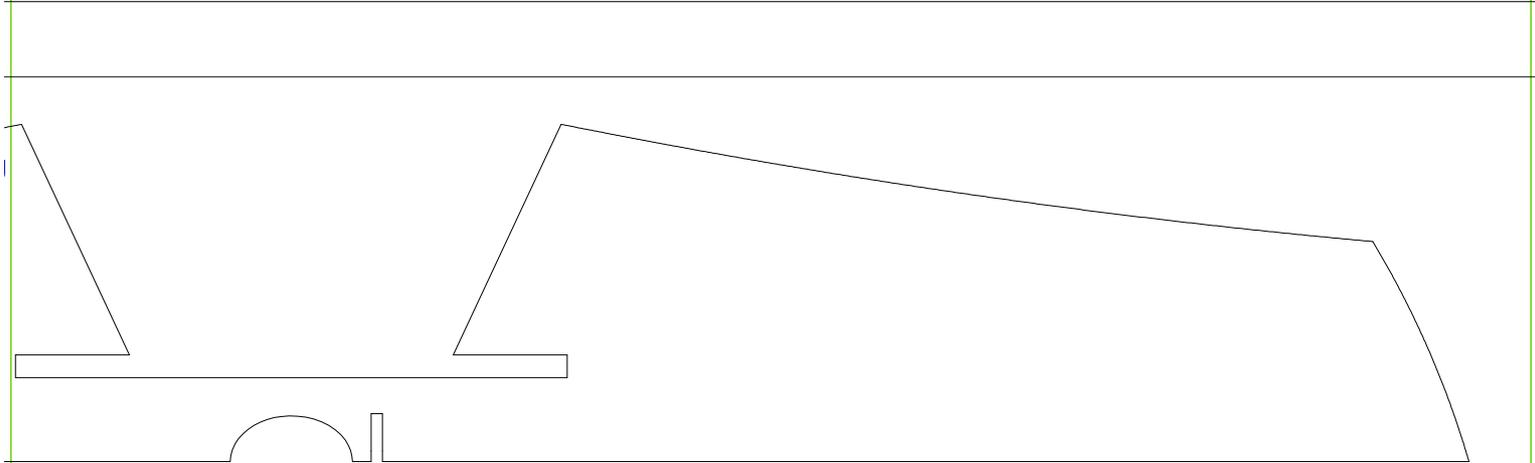
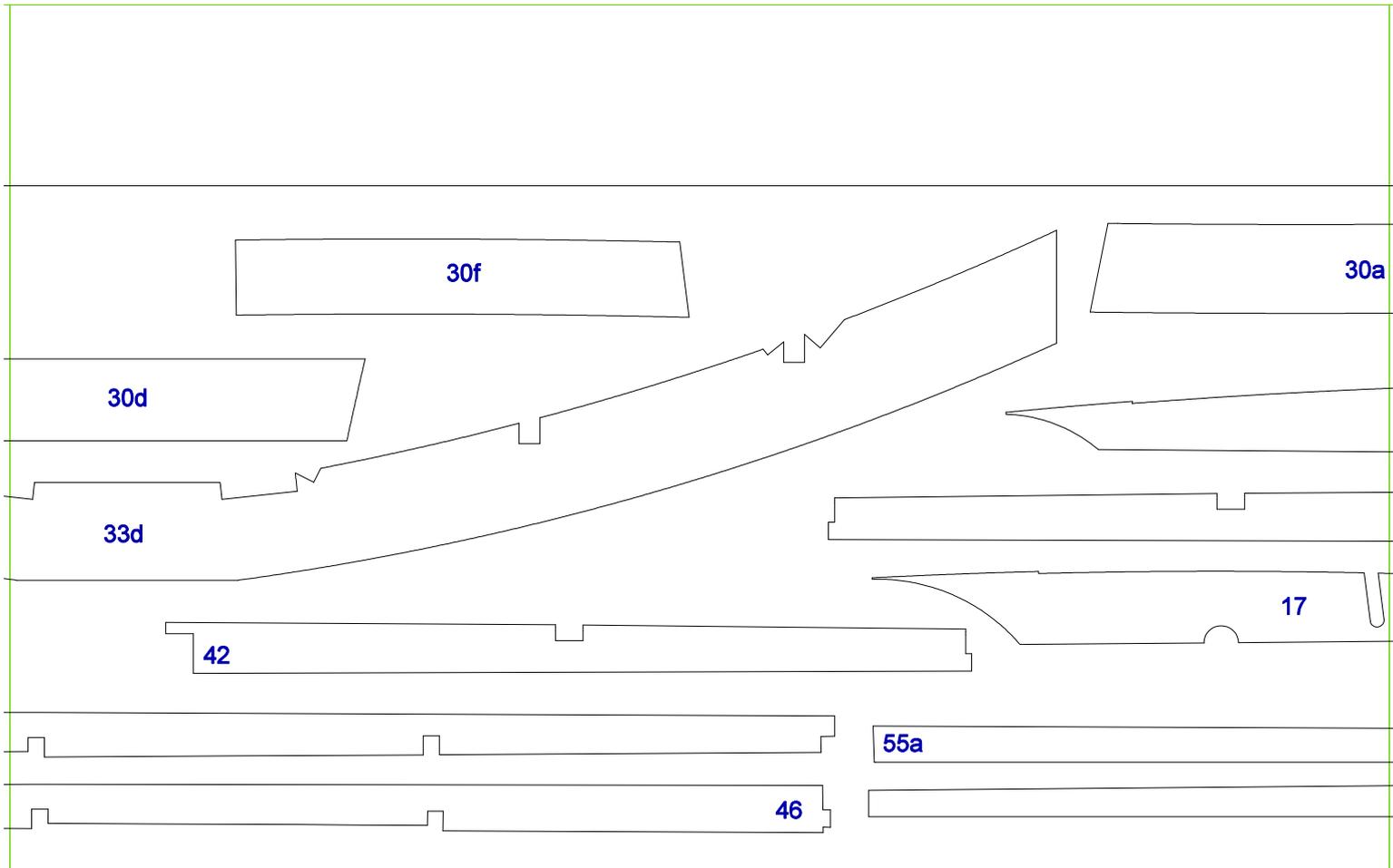


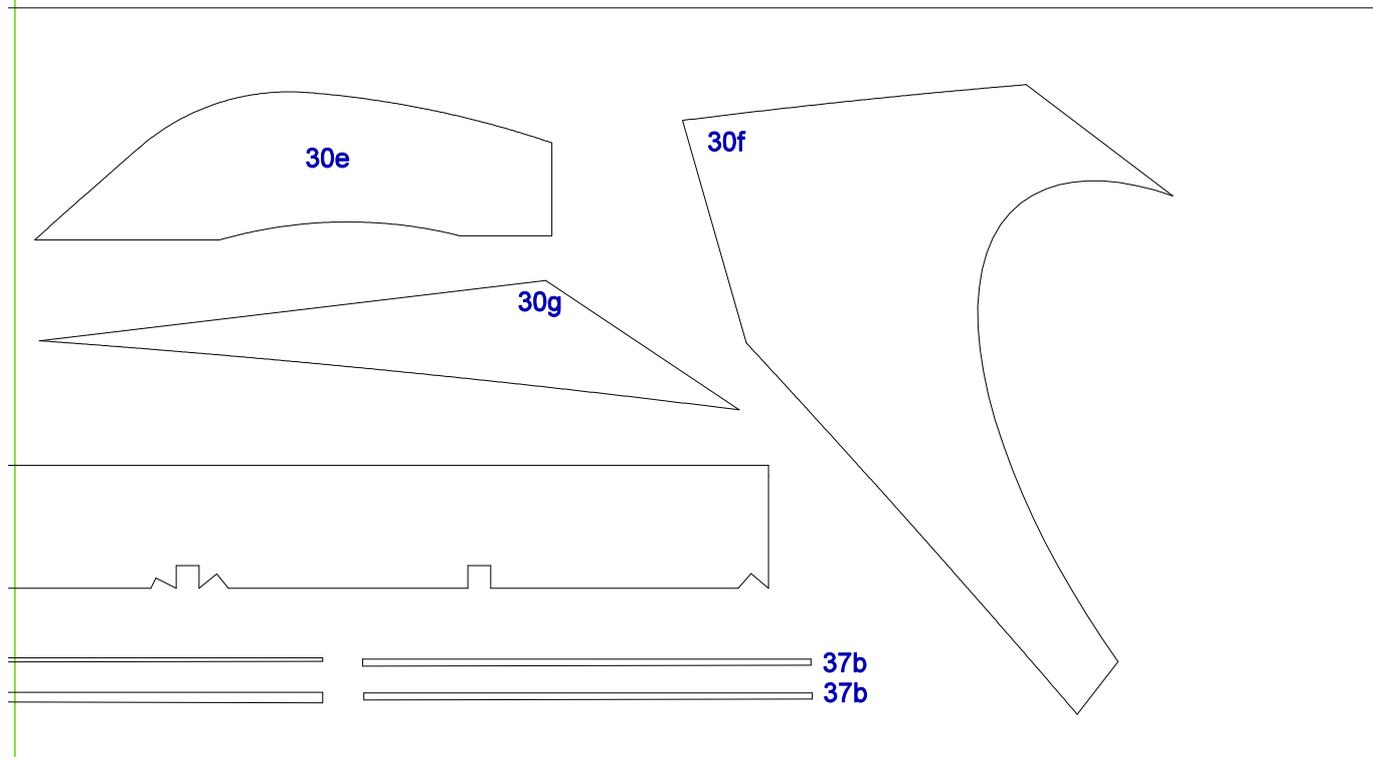
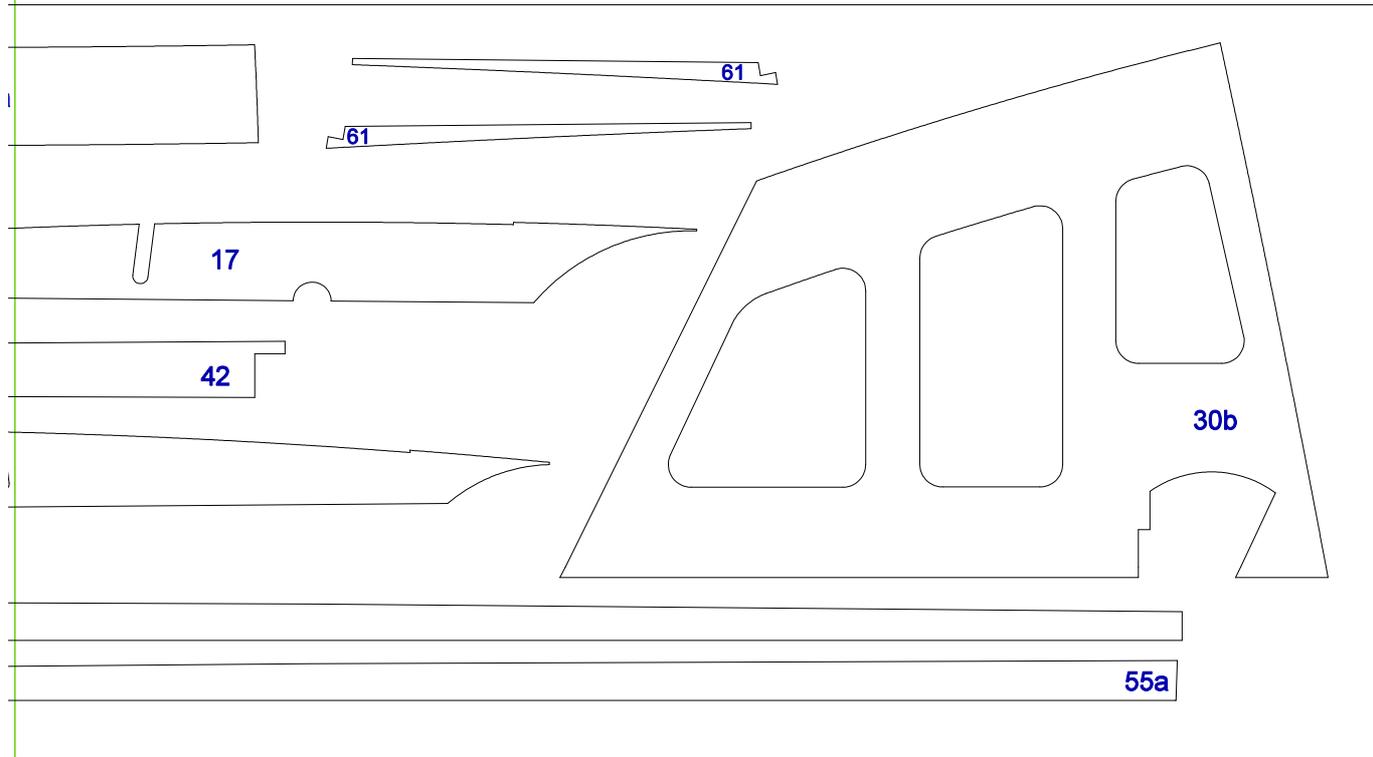
Seiten 32-34:



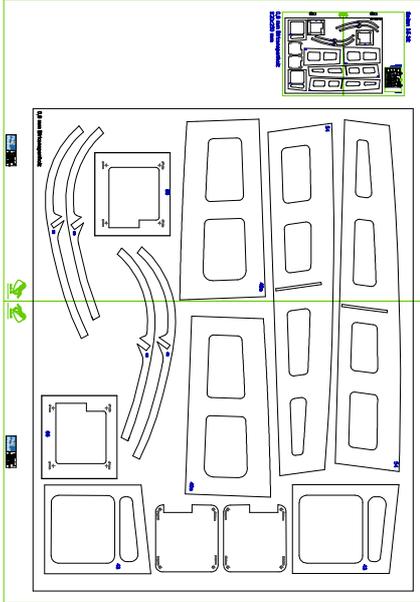
3 mm Balsa
2 Stück à 500x100 mm



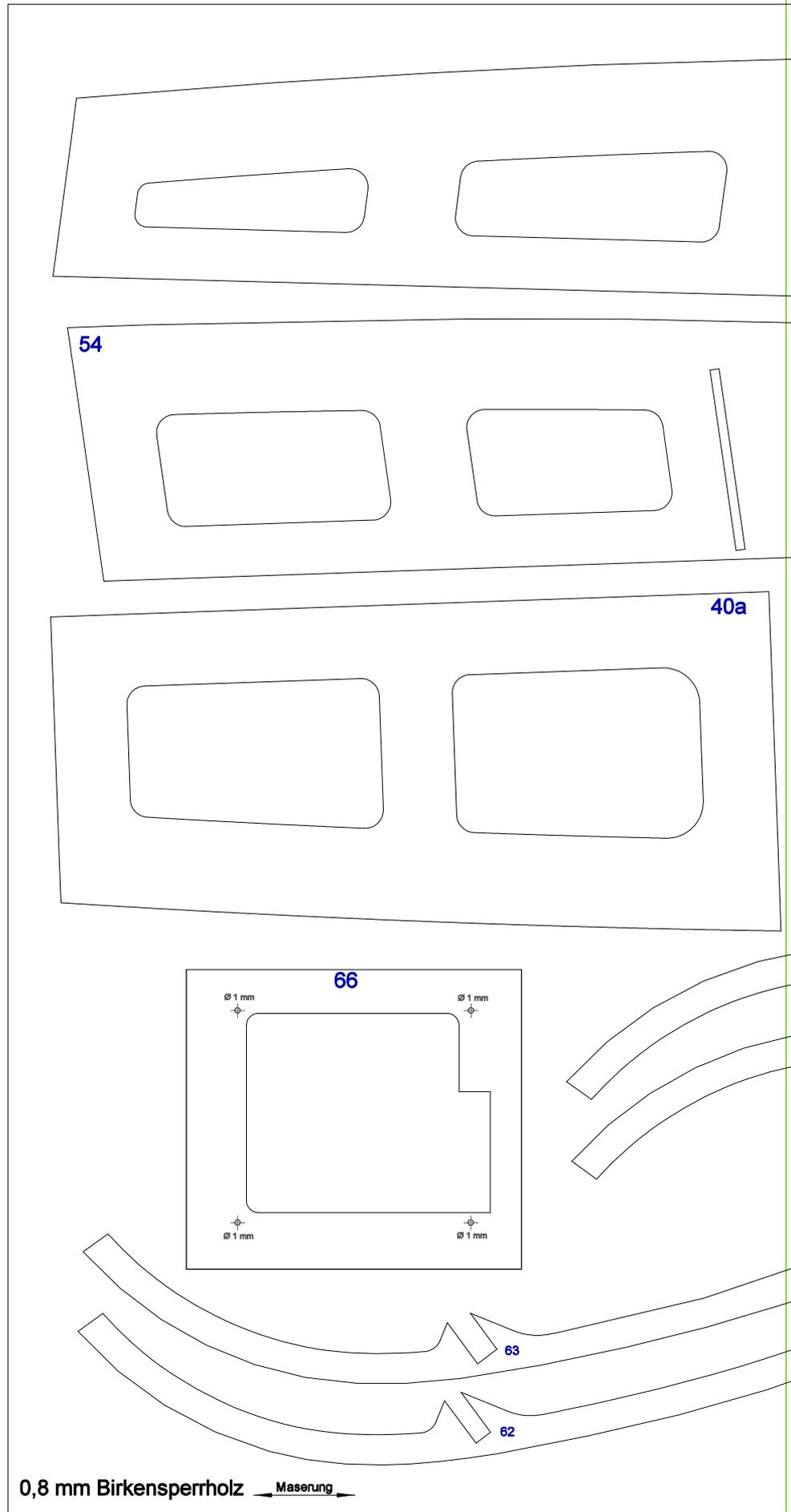




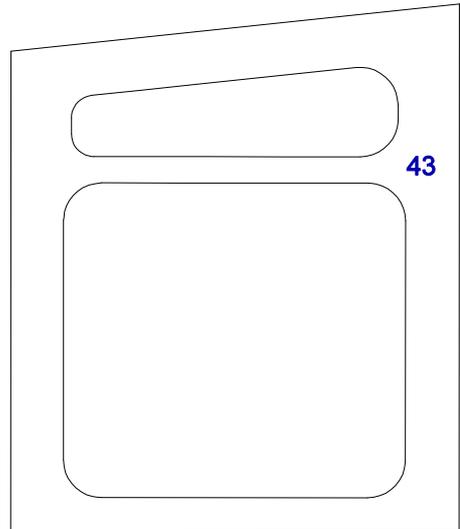
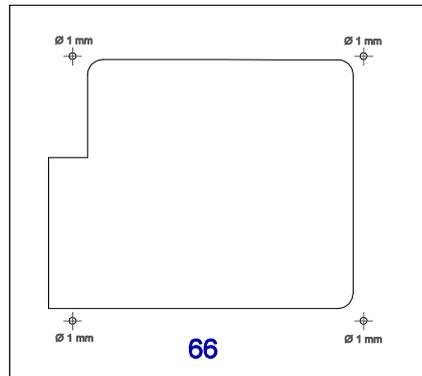
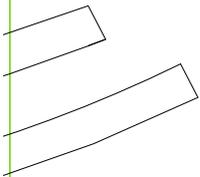
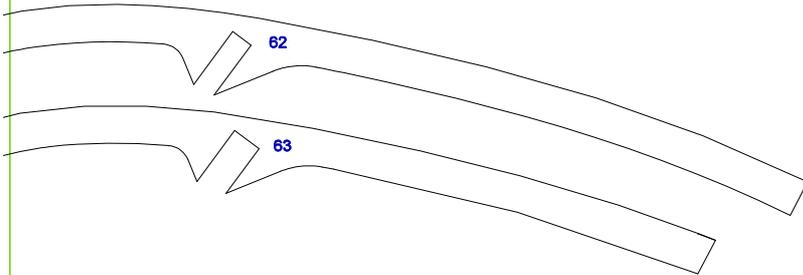
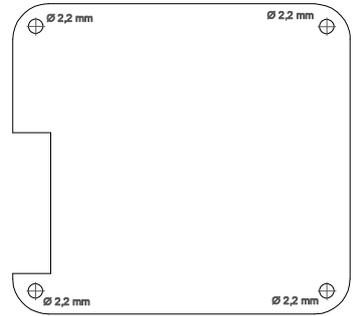
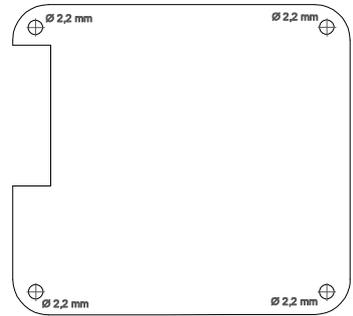
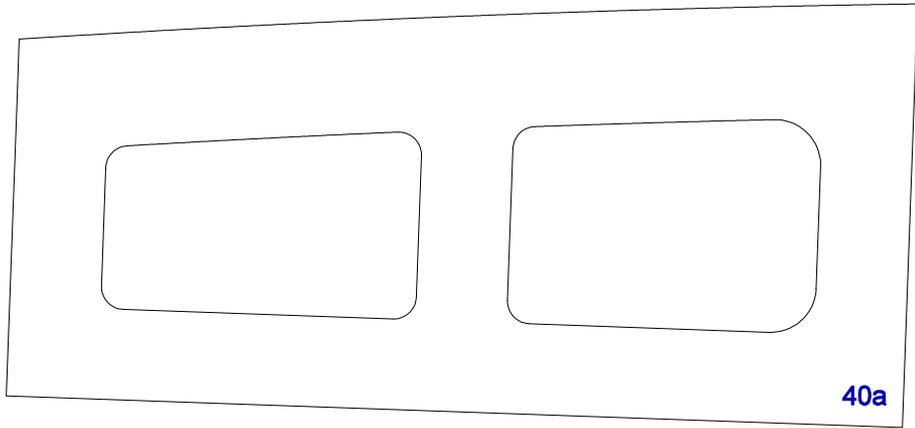
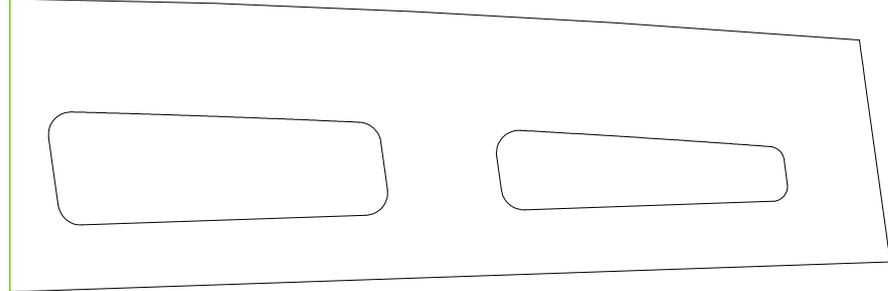
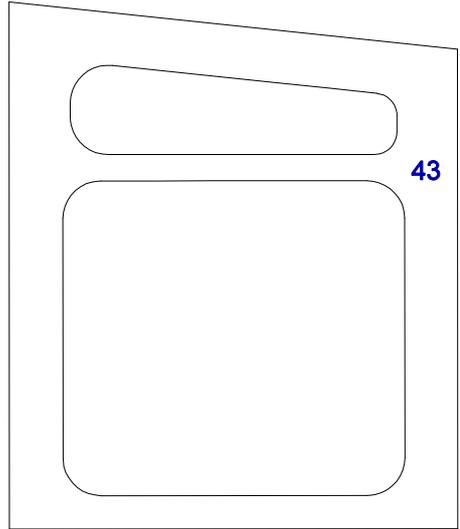
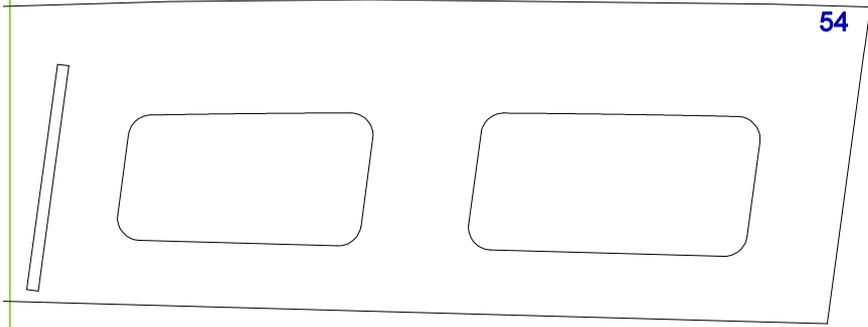
Seiten 35-36:



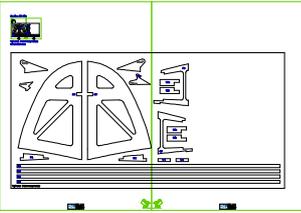
0,8 mm Birkensperholz
320x250 mm



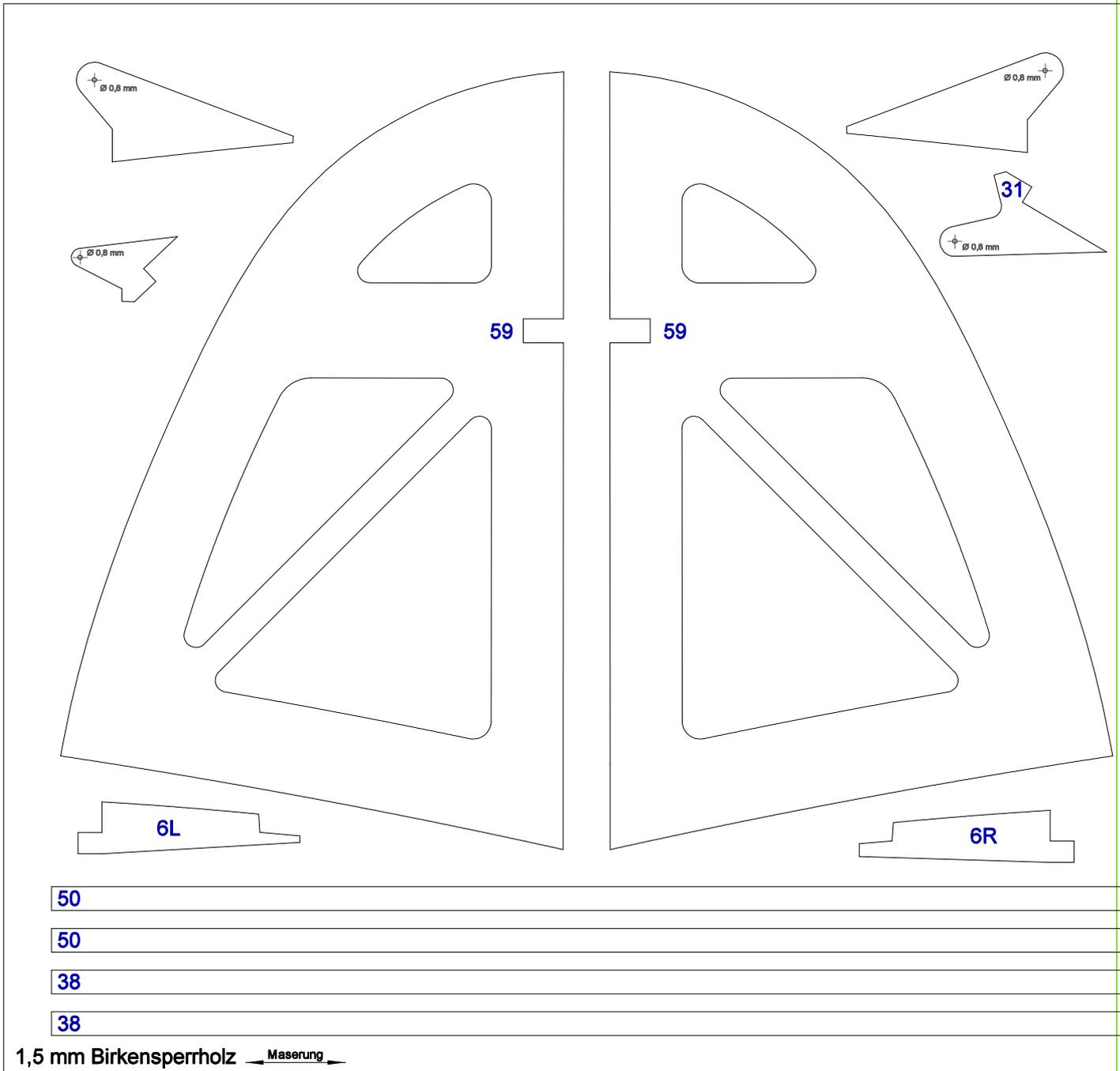
0,8 mm Birkensperholz ← Maserung →

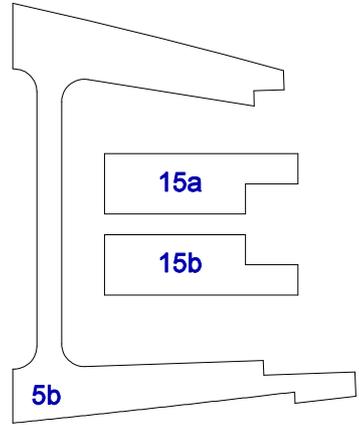
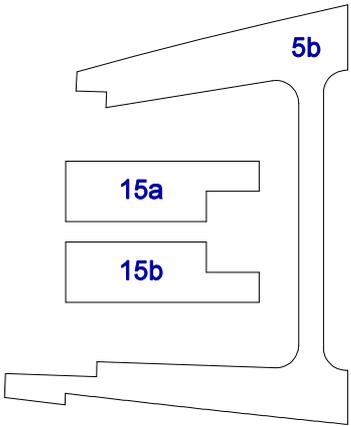


Seiten 37-38:



1,5 mm Birkensperrholz
360x180 mm

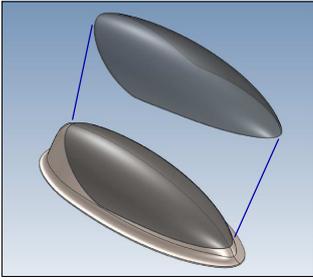




71

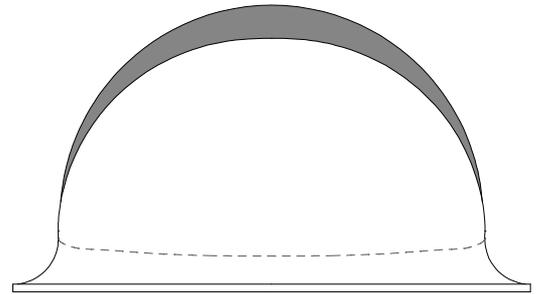
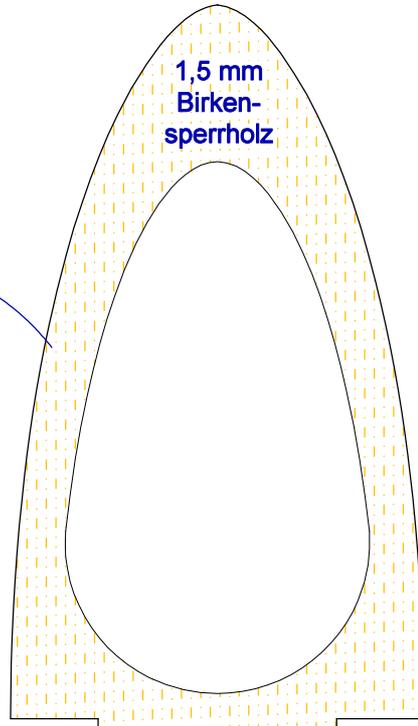
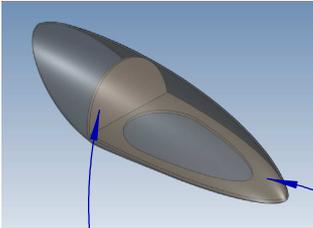
71



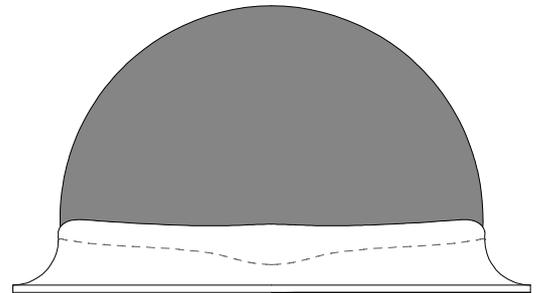


Wer möchte, kann sich eine Kabinenhaube im Tiefziehverfahren herstellen. Das dazugehörige Urmodell ist hier im Maßstab 1:1 dargestellt. Geeignete Materialstärke: 0,25 bis 0,7 mm

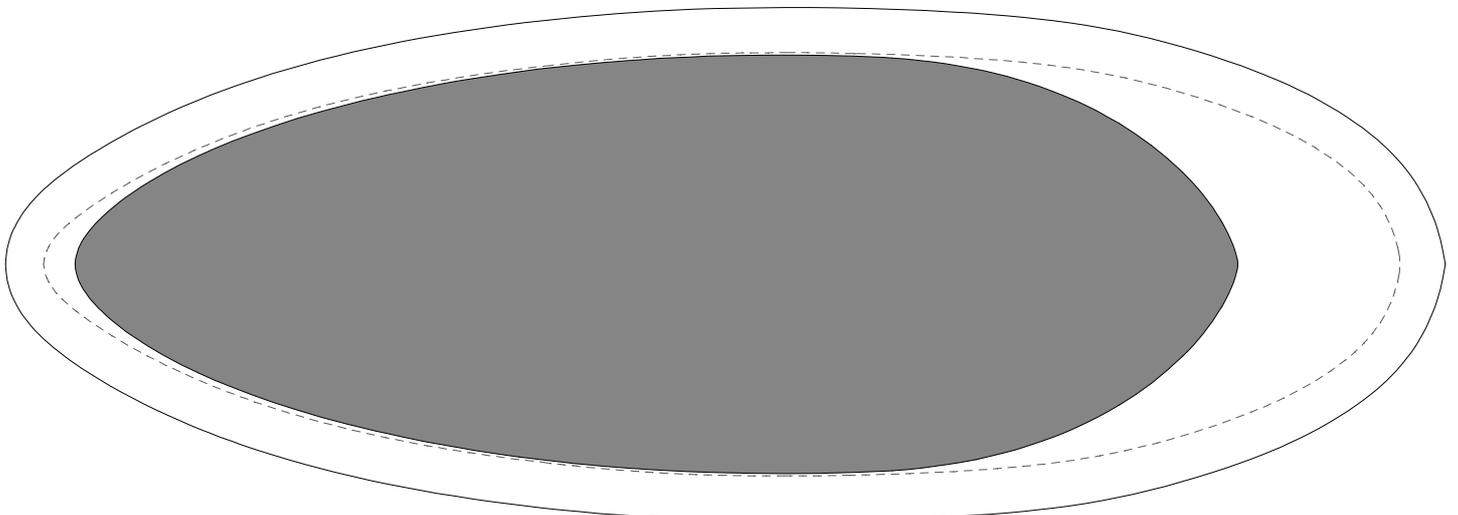
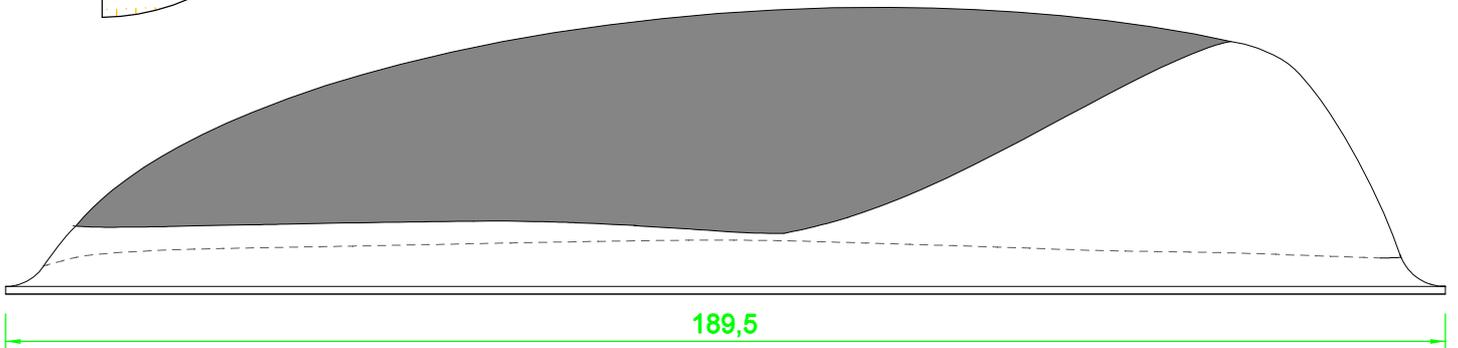
If you want, you can make a canopy using the vacuum forming process. The corresponding mold is shown here on a scale of 1:1. Suitable material thickness: 0.25 to 0.7 mm

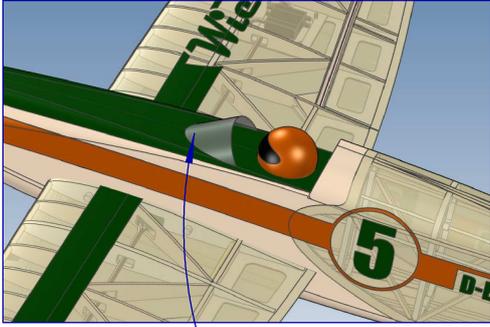


Ansicht von hinten
back view



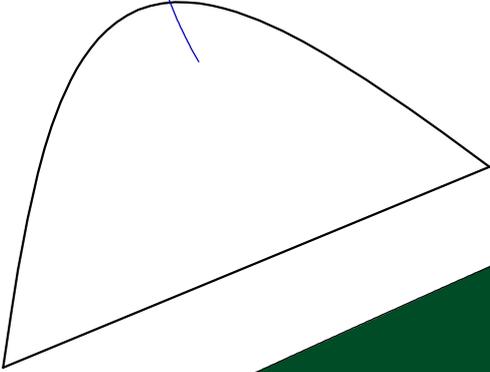
Ansicht von vorn
front view

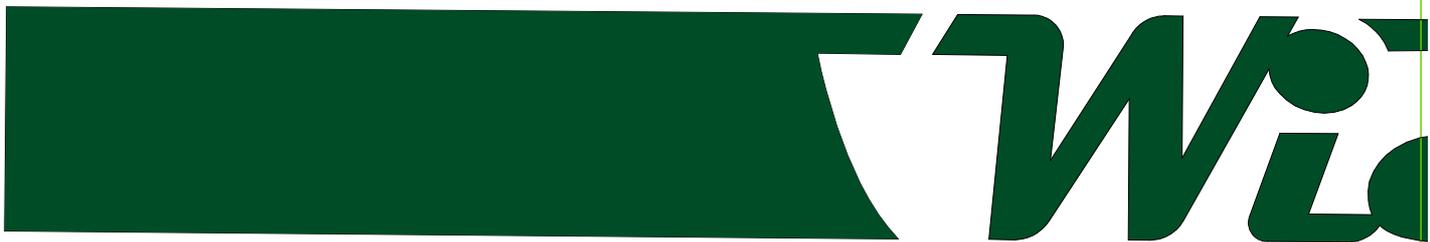
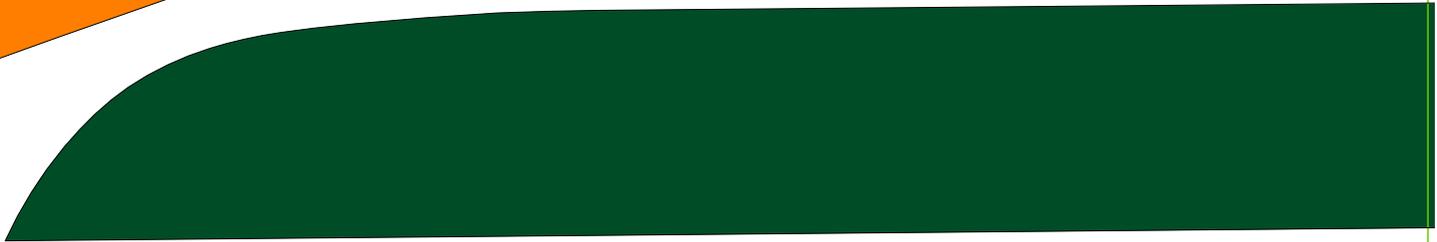


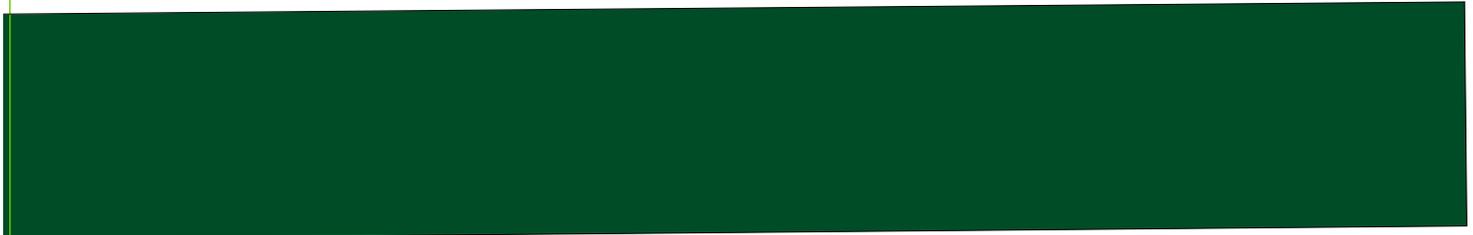


Alternative: eine einfache Windschutzscheibe aus Overheadfolie. Die dazugehörige Kontur ist unter dem Bild dargestellt.

Alternative: a simple clear film windscreen. The corresponding contour is shown below the picture.

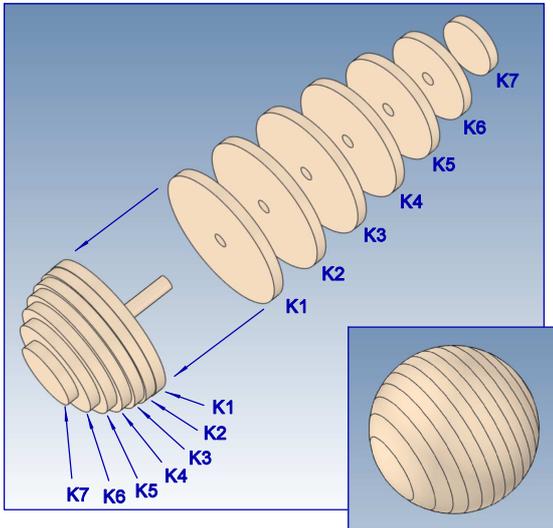




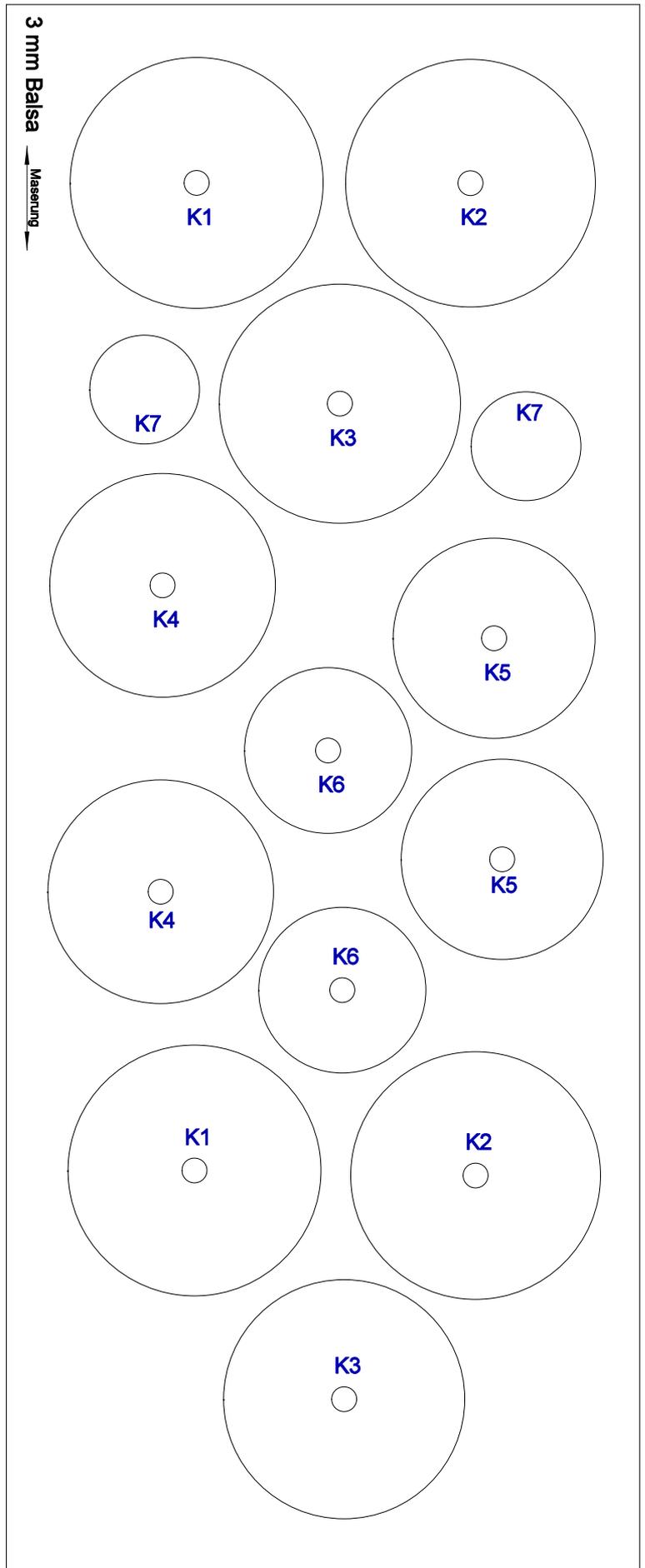
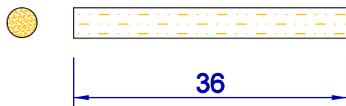


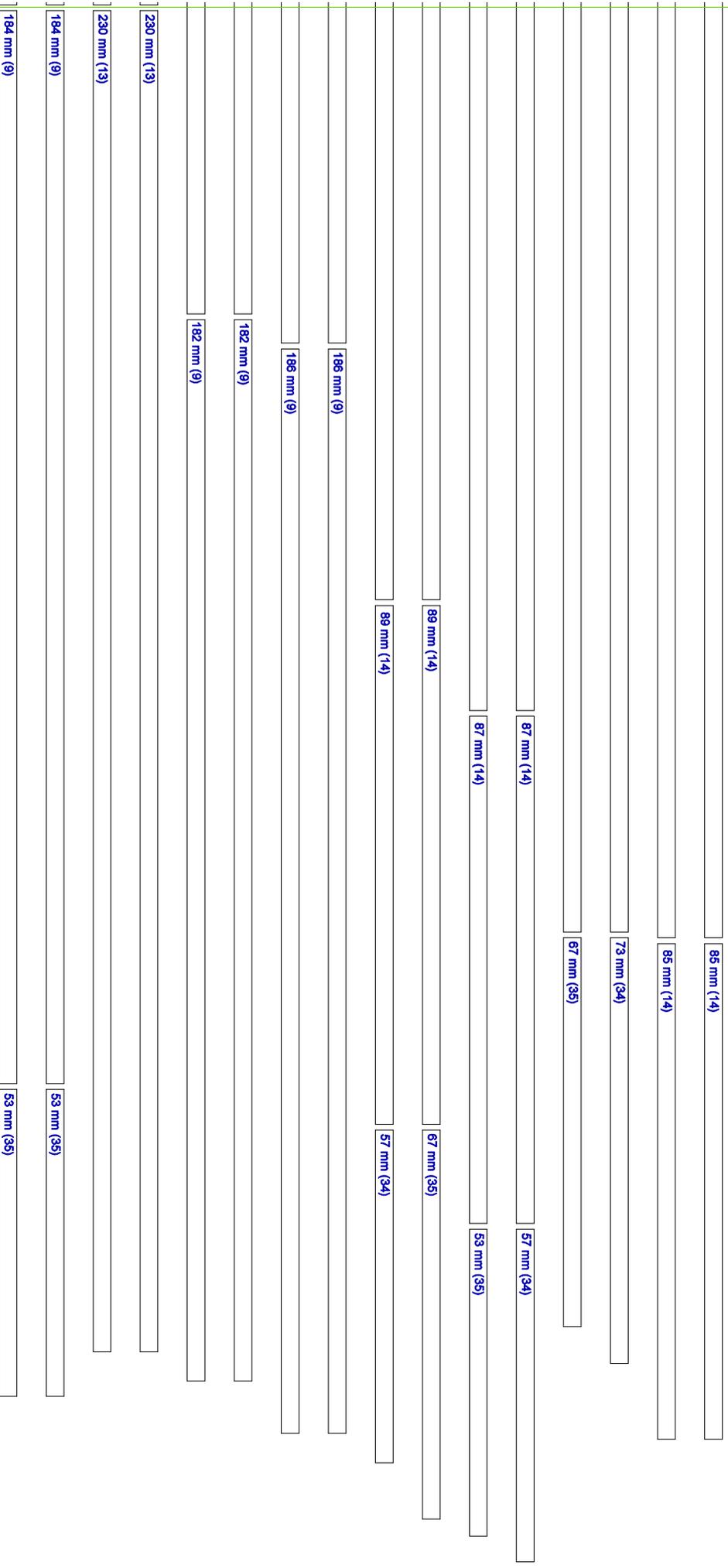
Alternative zur Styroporkugel: eine Kugel aus Balsascheiben. Diese werden auf einen Rest des Buchenholzstabes konzentrisch aufgefädelt und zur Kugelform verschliffen.

alternative to the styrofoam ball: a ball made of balsa discs. These are concentrically threaded onto a remainder of the beech wood stick and sanded to a spherical shape.



Buchenrundstab Ø 4 mm





500 mm