The **stb-titlepage** Package [*]

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Abstract

The stb-titlepage package redefine the standard title page of the LaTeX classes to add a logo at the top and an address line at the bottom. Options are provided to specify the type block sizes

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[*]This document corresponds to stb-titlepage v1.0, dated 2023/01/05.

1 User Interface

1.1 Loading the **stb-titlepage** packages

The stb-titlepage package is loaded in the document preamble, for example:

```
\usepackage[⟨key=value list⟩]{stb-titlepage}
```

1.2 Options

The package input parameters are entered with key-values. The parameters, with default options and initial values are:

- titlepage = [true], false

  This option corresponds with the global LaTeX class option titlepage. Specifies whether a new page should be started after the document title or not. The article class does not start a new page by default, while report and book do. The default initial setup is titlepage = false.

- logo   = none, [stb-logo-vert], ⟨logo file name⟩

  Selection of the specific logo at the top of the title page. See USlogo-doc for a list of logos

- scale   = [0.4]

  Scale factor when logo graphics file is imported. The default initial setup is to scale the logo text and slogan to 8pts.

- vshift   = [0cm]

  The logo can be shifted up or downwards with the amount vspace.

- typeblock = a5, golden, wide, [std]

  The following typeblocks are provided:

a5:	ISO A4 paper with A5 type block,
golden:	ISO A4 paper with golden ratio type block,
wide:	Type block with 25 mm borders,
std:	Standard LaTeX type block [default].

1.3 User macros

Only one command, \address, is provided in addition to the standard LaTeX title page commands, \title, \author and \date.

Table 1: Page layout parameters

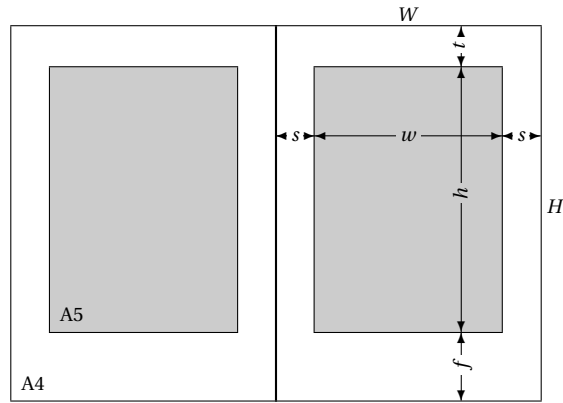|	A5 type block (a5)			Golden section type block (golden)		
Page width	W		$= 210.2\,\text{mm}$	W	$=$	$210.2\,\text{mm}$
Page height	$H = \sqrt{2}\,W$		$= 297.3\,\text{mm}$	$H = \sqrt{2}\,W$	$=$	$297.3\,\text{mm}$
Block width	$w = H/2$		$= 148.7\,\text{mm}$	$w = 2W/3$	$=$	$140.1\,\text{mm}$
Block height	$h = W$		$= 210.2\,\text{mm}$	$h = H - W/3$	$=$	$227.2\,\text{mm}$
Side margin	s	$= (W-w)/2 =$	$30.8\,\text{mm}$	$s = W/6$	$=$	$35.0\,\text{mm}$
Top margin	t	$= 3(H-h)/8 =$	$32.7\,\text{mm}$	$t = 3W/24$	$=$	$26.3\,\text{mm}$
Foot margin	f	$= 5(H-h)/8 =$	$54.4\,\text{mm}$	$f = 5W/24$	$=$	$43.8\,\text{mm}$

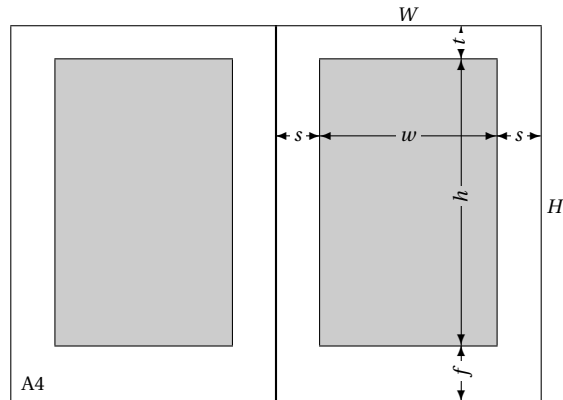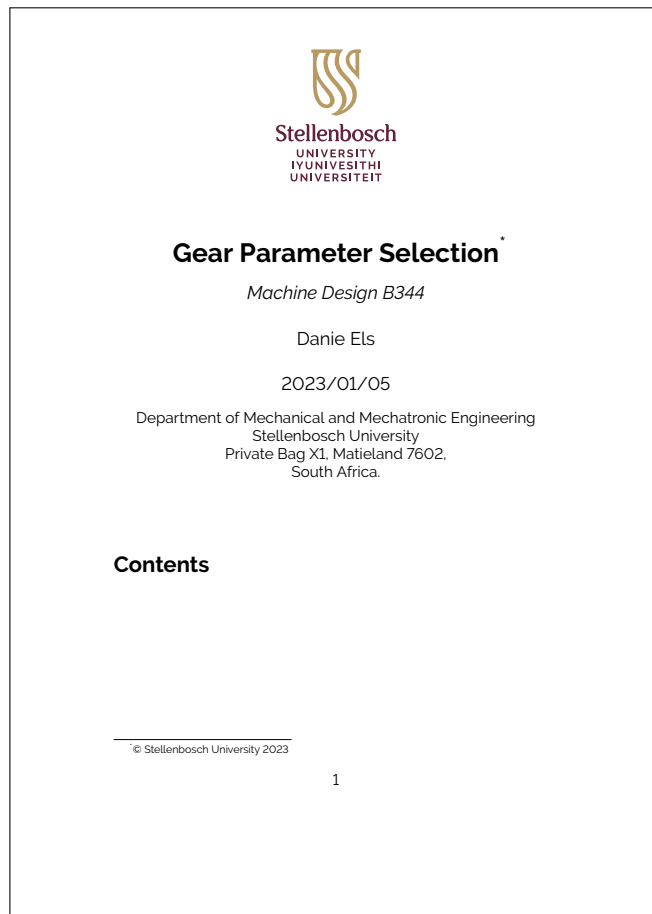
Figure 1: ISO A4 paper with A5 type block

Figure 2: ISO A4 paper with golden ratio type block

1.4 Examples

Article tipe document:

```
\documentclass[12pt,a4paper]{article}
\usepackage{stb-titlepage}
\usepackage[default]{raleway}
\usepackage{textcomp}
\usepackage{graphicx}
\title{\textbf{Gear Parameter Selection}%
        \thanks{\textcopyright\ Stellenbosch University 2023}\\[1ex]
        \large\textsl{Machine Design B344}\\[2ex]}
\author{Danie Els}
\address{Department of Mechanical and Mechatronic Engineering\\
        Stellenbosch University \\
        Private Bag X1, Matieland 7602,\\ South Africa.}
\date{2022/10/21}
\begin{document}
   \maketitle
   \tableofcontents
\end{document}
```


Gear Parameter Selection[*]

Machine Design B344

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2023/01/05

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Booktype final year report:

```
\documentclass[12pt,a4paper]{book}
\usepackage[typeblock=golden]{stb-titlepage}
\usepackage[default]{raleway}
\usepackage{graphicx}
\title{\textbf{Golf Ball Launching Device}\\[2ex]
       \large Mechatronic Project 478\\Final Report\\[2ex]}
\author{\Large Author: John Doe\\
        \large 12345678 \\[5ex]
        \Large Supervisor: Dr. DNJ Els}
\address{Department of Mechanical and Mechatronic Engineering\\
        Stellenbosch University \\
        Private Bag X1, Matieland 7602, South Africa.}
\date{2023/01/05}
\begin{document}
   \maketitle
   :
\end{document}
```

Stellenbosch
UNIVERSITY
IYUNIVESITHI
UNIVERSITEIT

Golf Ball Launching Device

Mechatronic Project 478
Final Report

Author: John Doe
12345678

Supervisor: Dr. DNJ Els

2023/01/05

Department of Mechanical and Mechatronic Engineering
Stellenbosch University
Private Bag X1, Matieland 7602, South Africa.

2 Implementation: **stb-titlepage**

2.1 Identification

```
1 ⟨*pkg⟩
```

```
2 \NeedsTeXFormat{LaTeX2e}[1999/12/01]
```

```
3 \ProvidesPackage{stb-titlepage}[2023/01/05
4                                 v1.0
5                                 Stellenbosch Title Page Package (DNJ ELS)]
```

2.2 External packages

The following packages are required by stb-titlepage.

```
6 \RequirePackage{etoolbox}
7 \RequirePackage{ifthen}
8 \RequirePackage{kvoptions}
9 \RequirePackage{geometry}
```

The eso-pic loads xcolor internally causing option clashes.

```
10 \AtEndPreamble{\RequirePackage{eso-pic}}
```

We do not load the graphicx package, but requests its loading in the document preamble to prevent global option conflicts.

```
11 \AtBeginDocument{%
12     \@ifpackageloaded{graphicx}{}{%
13         \PackageError{stb-titlepage}{You must load the graphicx package}{}}}
```

2.3 Option declarations with **kvoptions**

```
14 \SetupKeyvalOptions{
15     family=STB,
16     prefix=STB@}
```

\ifSTB@titlepage Key value: titlepage, notitlepage

```
17 \DeclareBoolOption{titlepage}
18 \DeclareComplementaryOption{notitlepage}{titlepage}
```

\STB@scale Key value: scale

```
19 \DeclareStringOption[0.4]{scale}
```

\STB@vshift Key value: vshift

```
20 \DeclareStringOption[0cm]{vshift}
```

\STB@logo Key value: logo

```
21 \DeclareStringOption[stb-logo-vert]{logo}
```

\STB@typeblock Key value: typeblock

```
22 \DeclareStringOption[std]{typeblock}
```

Process options.

```
23 \ProcessKeyvalOptions*
```

2.4 Title Page

`\address`
`\@address` Provide address command

```
24 \let\@address\relax
25 \newcommand\address[1]{\def\@address{#1}}

26 \newlength{\STB@xpos}
27 \newlength{\STB@ypos}
28 \newsavebox{\STB@logobox}
```

`\STB@setlogo` Process logo options. Must be valid graphics file or none.

```
29 \newcommand{\STB@setlogo}{%
30     \ifthenelse{\equal{\STB@logo}{none}}{}{%
31         \savebox{\STB@logobox}{\includegraphics[scale=\STB@scale]{\STB@logo}}}%
32     \setlength{\STB@xpos}{\dimexpr .5\paperwidth - .5\wd\STB@logobox}%
33     \setlength{\STB@ypos}{\dimexpr -\ht\STB@logobox - \STB@vshift}}

34 \AtBeginDocument{\STB@setlogo}
```

`\STB@putlogo` Insert logo.

```
35 \newcommand{\STB@putlogo}{%
36         \AddToShipoutPictureBG*{\AtStockUpperLeft{%
37                 \put(\STB@xpos,\STB@ypos){\usebox{\STB@logobox}}}}}
```

`\maketitle` Redefine the standard LaTeX `\maketitle` command to include a logo and and address.

```
38 \if@titlepage
39     \renewcommand\maketitle{%
40     \begin{titlepage}%
41         \let\footnotesize\small
42        %\let\footnoterule\relax
43         \let \footnote \thanks
44         \STB@putlogo
45         \null\vfil
46         \vskip 30mm
47         \begin{center}%
48             {\LARGE \@title \par}%
49             \vskip 3em%
50             {\large
51             \lineskip .75em%
52             \begin{tabular}[t]{c}%
53                 \@author
54             \end{tabular}\par}%
55             \vfill
56             {\large \@date \par}%
57             \vskip 1.5em%
58             \ifx\@address\relax\else
59                 \vskip 1.5em%
60                 {\normalsize\@address\par}
61             \fi
62         \end{center}\par
63         \@thanks
64         \vfil\null
65     \end{titlepage}%
66     \setcounter{footnote}{0}%
```

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```latex
67      \global\let\thanks\relax
68      \global\let\maketitle\relax
69      \global\let\@thanks\@empty
70      \global\let\@author\@empty
71      \global\let\@date\@empty
72      \global\let\@title\@empty
73      \global\let\title\relax
74      \global\let\author\relax
75      \global\let\date\relax
76      \global\let\and\relax}
77  \else
78      \renewcommand\maketitle{\par
79      \begingroup
80          \renewcommand\thefootnote{\@fnsymbol\c@footnote}%
81          \def\@makefnmark{\rlap{\@textsuperscript{\normalfont\@thefnmark}}}%
82          \long\def\@makefntext##1{\parindent 1em\noindent
83              \hb@xt@1.8em{%
84              \hss\@textsuperscript{\normalfont\@thefnmark}}##1}%
85          \if@twocolumn
86              \ifnum \col@number=\@ne
87                  \@maketitle
88              \else
89                  \twocolumn[\@maketitle]%
90              \fi
91          \else
92              \newpage
93              \global\@topnum\z@   % Prevents figures from going at top of page.
94              \@maketitle
95          \fi
96          \thispagestyle{plain}\@thanks
97      \endgroup
98      \STB@putlogo
99      \setcounter{footnote}{0}%
100     \global\let\thanks\relax
101     \global\let\maketitle\relax
102     \global\let\@maketitle\relax
103     \global\let\@thanks\@empty
104     \global\let\@author\@empty
105     \global\let\@date\@empty
106     \global\let\@title\@empty
107     \global\let\title\relax
108     \global\let\author\relax
109     \global\let\date\relax
110     \global\let\and\relax}
111     \def\@maketitle{%
112         \newpage
113         \null
114         \vskip 30mm%
115         \begin{center}%
116             \let \footnote \thanks
117             {\LARGE \@title \par}%
118             \vskip 1.5em%
119             {\large
```

```
120            \lineskip .5em%
121            \begin{tabular}[t]{c}%
122                \@author
123            \end{tabular}\par}%
124            \vskip 1.5em%
125            {\large \@date}%
126            \ifx\@address\relax\else
127                \vskip 1em%
128            {\normalsize\@address\par}
129            \fi
130        \end{center}%
131        \par
132        \vskip 1.5em}
133 \fi
```

2.5 Type Block

\STB@typeblock@eval Evaluate typeblock option settings

```
134 \newcommand\STB@typeblock@eval{%
135     \ifthenelse{\equal{\STB@typeblock}{golden}}{\@nameuse{STB@typeblock@golden}}{%
136     \ifthenelse{\equal{\STB@typeblock}{a5}}    {\@nameuse{STB@typeblock@a5}}     {%
137     \ifthenelse{\equal{\STB@typeblock}{wide}}  {\@nameuse{STB@typeblock@wide}}   {%
138     \ifthenelse{\equal{\STB@typeblock}{std}}   {\@nameuse{STB@typeblock@std}}    {%
139         \PackageWarning{ustitle}{logo='\STB@typeblock' is invalid, default to 'std'}%
140         \@nameuse{STB@typeblock@std}%
141     }}}}}
```

Type block: `golden`

```
142 \@namedef{STB@typeblock@golden}{%----- Golden type block   -----------------
143     \geometry{text={0.6667\paperwidth, 1.0787\paperwidth}}
144     \geometry{hmarginratio=1:1}
145     \geometry{vmarginratio=2:3}
146     \geometry{marginparwidth=50pt}
147     \PackageInfo{stb-titlepage}{Golden ratio type block}}
```

Type block: `a5`

```
148 \@namedef{STB@typeblock@a5}{%--------- A5 type block ---------------------
149     \geometry{text={0.5\paperheight, \paperwidth}}
150     \geometry{hmarginratio=1:1   }
151     \geometry{vmarginratio=2:3   }
152     \geometry{marginparwidth=50pt}
153     \PackageInfo{stb-titlepage}{A5 type block}}
```

Type block: `wide`

```
154 \@namedef{STB@typeblock@wide}{%-------- Wide type block -------------------
155     \geometry{margin=25mm       }
156     \geometry{marginparwidth=50pt}
157     \PackageInfo{stb-titlepage}{Wide type block}}
```

Type block: `std`

```
158 \@namedef{STB@typeblock@std}{%--------- Latex default type block ----------
159     \PackageInfo{stb-titlepage}{Latex default type block}}
```

Initialize type block

```
160 \STB@typeblock@eval
```

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161 ⟨/pkg⟩

The end of this package.

Change History

v1.0
    General: Initial version   1