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The **stb-titlepage** Package *

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Abstract

The `stb-titlepage` package redefines 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` v1.1, dated 2023/07/22.

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

The commands `\address` and `\Copyright` are provided in addition to the standard \LaTeX title page commands, `\title`, `\author` and `\date`.

```
\address{<adress text>}  
\Copyright{<date>}{<copyright holder>}
```

Table 1: Page layout parameters

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

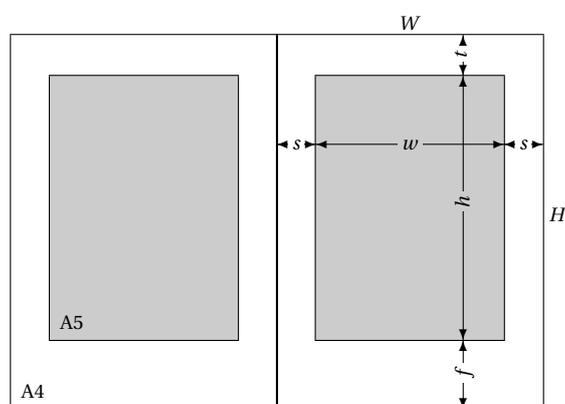


Figure 1: ISO A4 paper with A5 type block

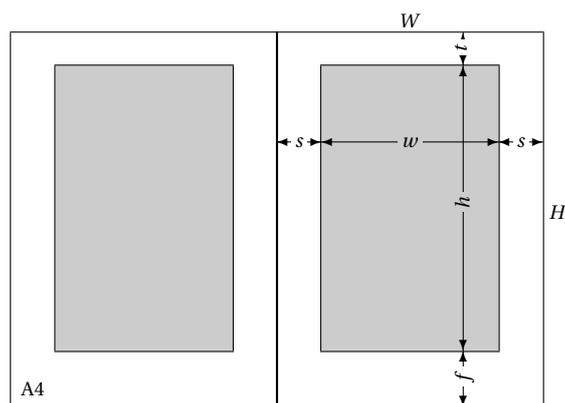


Figure 2: ISO A4 paper with golden ratio type block

1.4 Examples

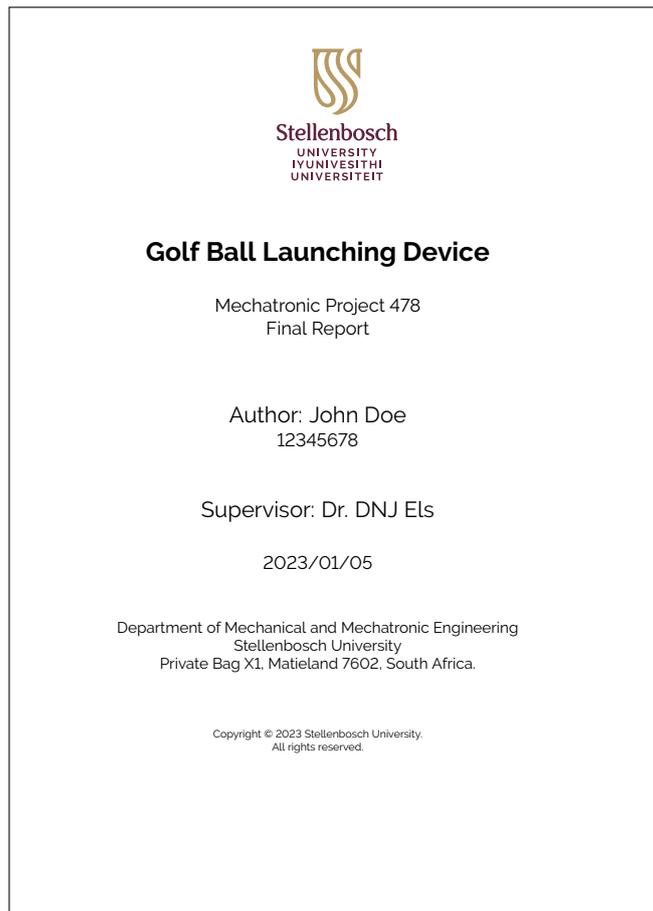
Article type document:

```
\documentclass[12pt,a4paper]{article}
\usepackage{stb-titlepage}
\usepackage[default]{raleway}
\usepackage{textcomp}
\usepackage{graphicx}
\title{\textbf{Gear Parameter Selection}\small%
\large\textsl{Machine Design B344}\small}
\author{Danie Els}
\address{Department of Mechanical and Mechatronic Engineering\small
\small Stellenbosch University \small
\small Private Bag X1, Matieland 7602,\small \small South Africa.}
\date{2023/01/05}
\Copyright{2023}{Stellenbosch University.\small \small All rights reserved.}
\begin{document}
\maketitle
\tableofcontents
\end{document}
```



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}
\Copyright{2023}{Stellenbosch University.\ All rights reserved.}
\begin{document}
\maketitle
:
\end{document}
```



2 Implementation: stb-titlepage

2.1 Identification

```
1 <*pkg>
2 \NeedsTeXFormat{LaTeX2e}
3 \ProvidesPackage{stb-titlepage}[2023/07/22
4                               v1.1
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 Provide address command
\@address 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}}}}

\ifSTB@cpyr Provide command to set the copyright on title pages
\STB@cpyrName 38 \newif\ifSTB@cpyr
\STB@cpyrDate 39 \newcommand\STB@cpyrName{}
              40 \newcommand\STB@cpyrDate{}

\Copyright Set copyright notice
          41 \newcommand\Copyright[2]{%
          42   \STB@cpyrtrue
          43   \ifstrempy{#1}%
          44     {\renewcommand\STB@cpyrDate{\the\year}}{\renewcommand\STB@cpyrDate{#1}}%
          45   \renewcommand\STB@cpyrName{#2}}

\STB@cpyrText Construct the copyright notice
          46 \newcommand\STB@cpyrText{Copyright \textcopyright\ \STB@cpyrDate\ \STB@cpyrName}

\maketitle Redefine the standard LATEX \maketitle command to include a logo, address and copy right notice.
          47 \if@titlepage
          48   \renewcommand\maketitle{%
          49     \begin{titlepage}%
          50       % \let\footnotesize\small
          51       \let\footnoterule\relax
          52       \let \footnote \thanks
          53       \STB@putlogo
          54       \null\vfil
          55       \vskip 30mm
          56       \begin{center}%
          57         \ifSTB@cpyr
          58           \insert\footins{\centering\footnotesize\STB@cpyrText}%
          59         \fi
```

```

60     {\LARGE \@title \par}%
61     \vskip 3em%
62     {\large
63     \lineskip .75em%
64     \begin{tabular}[t]{c}%
65         \@author
66     \end{tabular}\par}%
67     \vfill
68     {\large \@date \par}%
69     \vskip 1.5em%
70     \ifx\@address\relax\else
71         \vskip 1.5em%
72         {\normalsize\@address\par}
73     \fi
74     \vskip 2em%
75     \end{center}\par
76     \@thanks
77     \vfil\null
78 \end{titlepage}%
79 \setcounter{footnote}{0}%
80 \global\let\thanks\relax
81 \global\let\maketitle\relax
82 \global\let\@thanks\@empty
83 \global\let\@author\@empty
84 \global\let\@date\@empty
85 \global\let\@title\@empty
86 \global\let\title\relax
87 \global\let\author\relax
88 \global\let\date\relax
89 \global\let\and\relax}
90 \else
91     \renewcommand\maketitle{\par
92     \begingroup
93         \renewcommand\thefootnote{\@fnsymbol\c@footnote}%
94         \def\@makefnmark{\rlap{\@textsuperscript{\normalfont\@thefnmark}}}%
95         \long\def\@makefntext##1{\parindent 1em\noindent
96             \hb@xt@1.8em{%
97                 \hss\@textsuperscript{\normalfont\@thefnmark}}##1}%
98         \iftwocolumn
99             \ifnum \col@number=\@ne
100                 \@maketitle
101             \else
102                 \twocolumn[\@maketitle]%
103             \fi
104         \else
105             \newpage
106             \global\@topnum\z@ % Prevents figures from going at top of page.
107             \@maketitle
108         \fi
109         \thispagestyle{plain}\@thanks
110     \endgroup
111     \STB@putlogo
112     \setcounter{footnote}{0}%

```

```

113 \global\let\thanks\relax
114 \global\let\maketitle\relax
115 \global\let\@maketitle\relax
116 \global\let\@thanks\@empty
117 \global\let\@author\@empty
118 \global\let\@date\@empty
119 \global\let\@title\@empty
120 \global\let\title\relax
121 \global\let\author\relax
122 \global\let\date\relax
123 \global\let\and\relax}
124 \def\@maketitle{%
125     \newpage
126     \null
127     \vskip 30mm%
128     \begin{center}%
129         \let \footnote \thanks
130         {\LARGE \@title \par}%
131         \vskip 1.5em%
132         {\large
133         \lineskip .5em%
134         \begin{tabular}[t]{c}%
135             \@author
136         \end{tabular}\par}%
137         \vskip 1.5em%
138         {\large \@date}%
139         \ifx\@address\relax\else
140             \vskip 1em%
141             {\normalsize\@address\par}
142         \fi
143     \end{center}%
144     \par
145     \vskip 1.5em
146     \ifSTB@cpyr
147         \insert\footins{\noindent\footnotesize\STB@cpyrText\medskip}%
148     \fi}
149 \fi

```

2.5 Type Block

STB@typeblock@eval Evaluate typeblock option settings

```

150 \newcommand\STB@typeblock@eval{%
151     \ifthenelse{\equal{\STB@typeblock}{golden}}{\@nameuse{STB@typeblock@golden}}{%
152     \ifthenelse{\equal{\STB@typeblock}{a5}}    {\@nameuse{STB@typeblock@a5}}    {%
153     \ifthenelse{\equal{\STB@typeblock}{wide}}  {\@nameuse{STB@typeblock@wide}}  {%
154     \ifthenelse{\equal{\STB@typeblock}{std}}   {\@nameuse{STB@typeblock@std}}   {%
155         \PackageWarning{ustitle}{logo='STB@typeblock' is invalid, default to 'std'}%
156         \@nameuse{STB@typeblock@std}%
157     }}}}

```

Type block: golden

```

158 \namedef{STB@typeblock@golden}{%----- Golden type block -----
159     \geometry{text={0.6667\paperwidth, 1.0787\paperwidth}}

```

```

160 \geometry{hmarginratio=1:1}
161 \geometry{vmarginratio=2:3}
162 \geometry{marginparwidth=50pt}
163 \PackageInfo{stb-titlepage}{Golden ratio type block}}

```

Type block: a5

```

164 \@namedef{STB@typeblock@a5}{%----- A5 type block -----
165 \geometry{text={0.5\paperheight, \paperwidth}}
166 \geometry{hmarginratio=1:1 }
167 \geometry{vmarginratio=2:3 }
168 \geometry{marginparwidth=50pt}
169 \PackageInfo{stb-titlepage}{A5 type block}}

```

Type block: wide

```

170 \@namedef{STB@typeblock@wide}{%----- Wide type block -----
171 \geometry{margin=25mm }
172 \geometry{marginparwidth=50pt}
173 \PackageInfo{stb-titlepage}{Wide type block}}

```

Type block: std

```

174 \@namedef{STB@typeblock@std}{%----- Latex default type block -----
175 \PackageInfo{stb-titlepage}{Latex default type block}}

```

Initialize type block

```

176 \STB@typeblock@eval
177 </pkg>

```

The end of this package.

Change History

v1.0		\Copyright: Add command \Copyright 7
	General: Initial version 1	\maketitle: Add copyright notice 7
v1.1		
	General: Change licence to CC BY 4.0 1	