

Code d'application des sections dans Robot

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;
using RobotOM;
using Excel = Microsoft.Office.Interop.Excel;
using System.Runtime.InteropServices;

namespace ApplySectionVasarely
{
    public partial class Form1 : Form
    {
        public Form1()
        {
            InitializeComponent();
        }

        private void button1_Click(object sender, EventArgs e)
        {
            Excel.Application xlApp = new Excel.Application();
            Excel.Workbook xlWorkbook =
xlApp.Workbooks.Open(@"D:\BCANTENEUR\Bureau\Passerelle Vasarely\Etude Structurale\Valeurs
sections.xlsx", 0, false);
            Excel.Sheets xlSheets = xlWorkbook.Worksheets;
            string currentSheet = "Feuil1";
            Excel.Worksheet xlWorksheet =
(Excel.Worksheet)xlSheets.get_Item(currentSheet);
            IRobotApplication robotApp = new RobotApplication();
            IRobotLabelServer lab_serv = robotApp.Project.Structure.Labels;

            progressBar1.Value = 0;
            progressBar1.Maximum = 151;
            progressBar1.Minimum = 0;
            progressBar1.Step = 1;

            for (int i = 1; i < 152; i++)
            {
                string secName = xlWorksheet.Cells[i+1, 1].Value.ToString();
                double secAx = double.Parse(xlWorksheet.Cells[i+1, 2].Value.ToString());
                double secIx = double.Parse(xlWorksheet.Cells[i + 1, 3].Value.ToString());
                double secIy = double.Parse(xlWorksheet.Cells[i + 1, 4].Value.ToString());
                double secIz = double.Parse(xlWorksheet.Cells[i + 1, 5].Value.ToString());
                double secVy = double.Parse(xlWorksheet.Cells[i + 1, 6].Value.ToString());
                double secVpy = double.Parse(xlWorksheet.Cells[i + 1,
7].Value.ToString());
                double secVz = double.Parse(xlWorksheet.Cells[i + 1, 8].Value.ToString());
                double secVpz = double.Parse(xlWorksheet.Cells[i + 1,
9].Value.ToString());

                IRobotLabel sec = lab_serv.Create(IRobotLabelType.I_LT_BAR_SECTION,
secName);
```

```

        IRobotBarSectionData data = sec.Data;
        data.Type = IRobotBarSectionType.I_BST_STANDARD;
        data.ShapeType = IRobotBarSectionShapeType.I_BSST_UNKNOWN;

        data.SetValue(IRobotBarSectionDataValue.I_BSDV_AX, secAx);
        data.SetValue(IRobotBarSectionDataValue.I_BSDV_IX, secIx);
        data.SetValue(IRobotBarSectionDataValue.I_BSDV_IY, secIy);
        data.SetValue(IRobotBarSectionDataValue.I_BSDV_IZ, secIz);
        data.SetValue(IRobotBarSectionDataValue.I_BSDV_VY, secVy);
        data.SetValue(IRobotBarSectionDataValue.I_BSDV_VPY, secVpy);
        data.SetValue(IRobotBarSectionDataValue.I_BSDV_VZ, secVz);
        data.SetValue(IRobotBarSectionDataValue.I_BSDV_VPZ, secVpz);

        lab_serv.Store(sec);

        IRobotBar bar = (IRobotBar)robotApp.Project.Structure.Bars.Get(i);

        bar.SetLabel(IRobotLabelType.I_LT_BAR_SECTION, secName);

        progressBar1.PerformStep();

    }

    Marshal.FinalReleaseComObject(xlWorksheet);
    Marshal.FinalReleaseComObject(xlSheets);
    xlWorkbook.Close(false);
    Marshal.FinalReleaseComObject(xlWorkbook);
    xlApp.Quit();
    Marshal.FinalReleaseComObject(xlApp);

    MessageBox.Show("Toutes les sections ont bien été appliquées!", "Travail
terminé !", MessageBoxButtons.OK);
    }
}

```