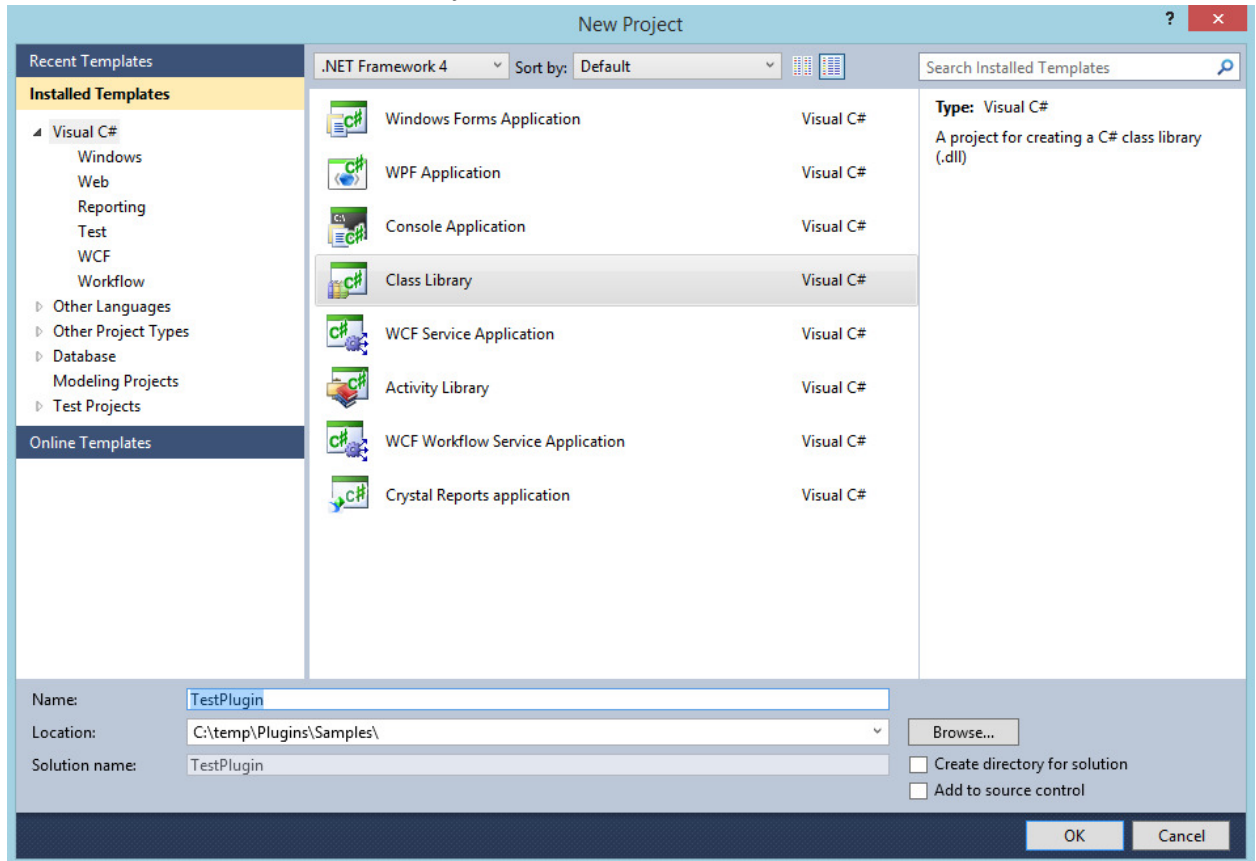


How to make DMC plugin

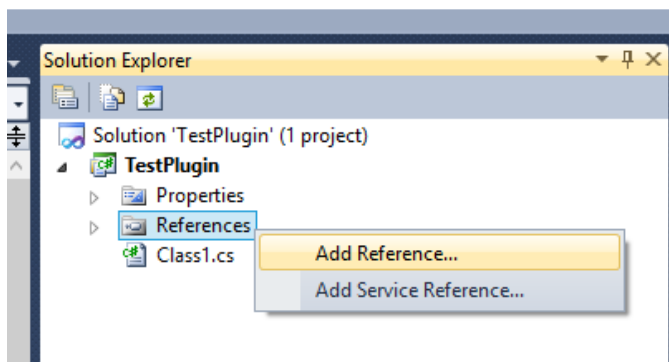
Visual Studio C# is needed to create plugin for DMC.

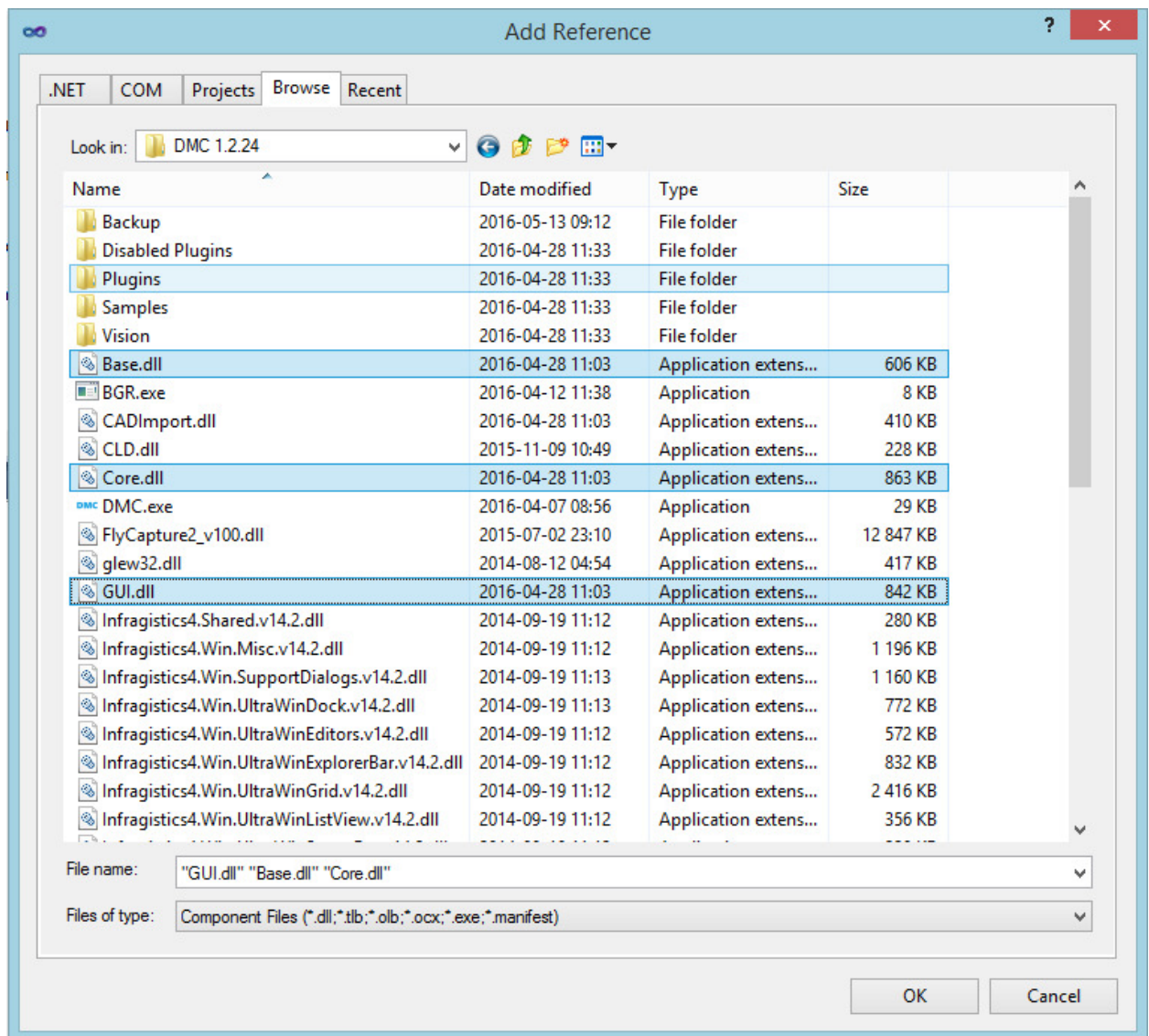
1. Run Visual Studio and create new Project.



- Select project type “Class Library”
- Define project name. **Project name must contain word “Plugin”**. Only dll files with name containing word “Plugin” will be loaded.
- Select location where to save project

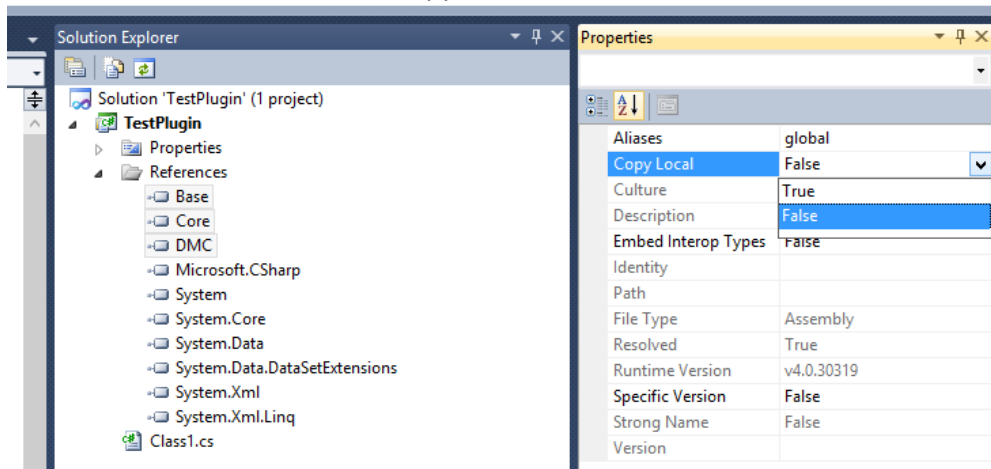
2. Add references to created project.



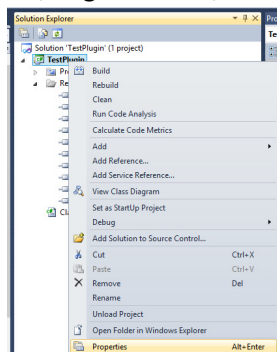


- **Base.dll.** Contains settings, interfaces (IAxis, , communicates with hardware, states.
- **Core.dll.** Contains interfaces of commands, commands (Line, Arc, ...).
- **GUI.dll.** Contains top level functions that are used in main DMC window (Connect to hardware, Compile, Run, Stop, ...), also has methods for adding/hiding custom buttons.

3. Select added references and set Copy Local to False.



4. Go to Project settings and change project "Output path" to DMC path + Plugin directory. E.g C:\Program Files\DMC\DMC 1.1.9\Plugins\



Build*

Build Events

Debug

Resources

Services

Settings

Reference Paths

Signing

Code Analysis

Configuration: Active (Debug) Platform: Active (Any CPU)

☐ Allow unsafe code

☐ Optimize code

Errors and warnings

Warning level: 4

Suppress warnings:

Treat warnings as errors

☒ None

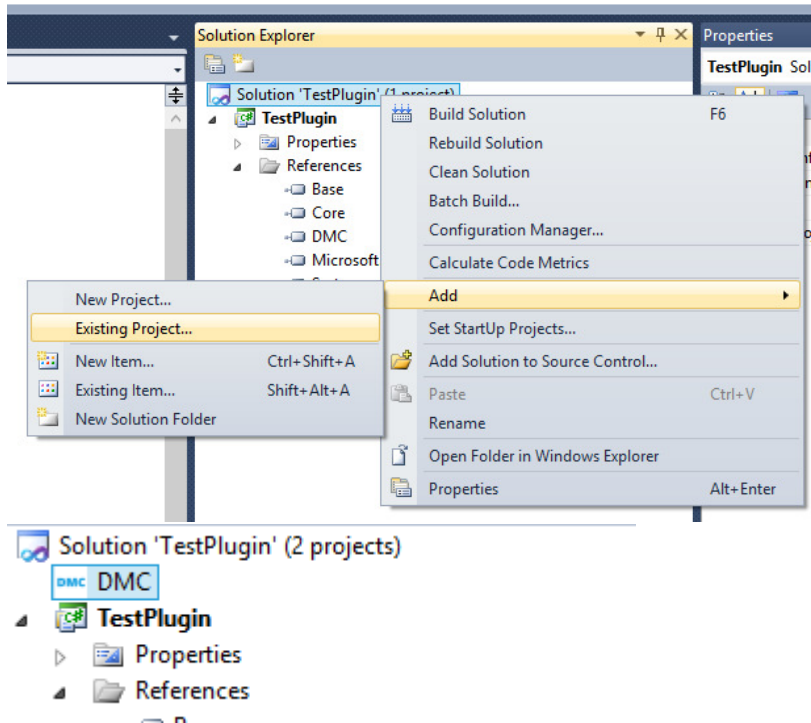
☐ All

☐ Specific warnings:

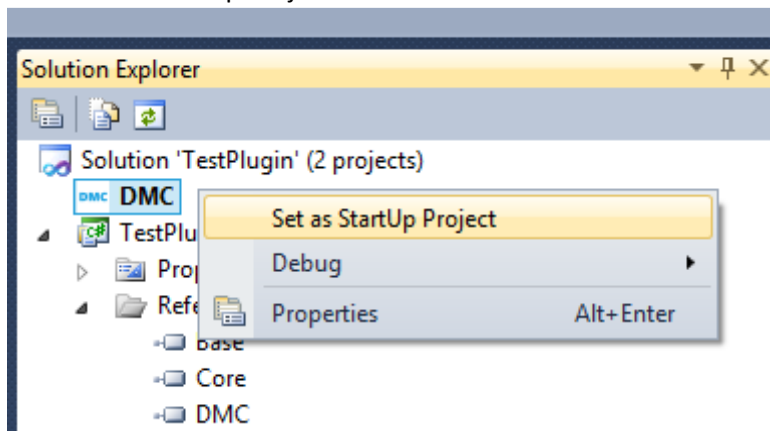
Output

Output path: C:\Program Files\DMC\DMC 1.1.9\Plugins\ Browse...

5. Add DMC.exe to solution. Right click on solution, click Add->Existing project and browse for DMC.exe.



6. Set DMC as StartUp Project



7. Add Reference System.Windows.Forms and make code:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using Base;

namespace TestPlugin
{
    // Class name must be public, contain Plugin word, must inherit IDevice interface,
    // can't be abstract
    public class MyPlugin : IDevice
    {
        public MyPlugin()
        {
            // Change DMC main form title
            DMC.Form1.main.Text += " with my plugin";
        }

        // Action when user clicks Connect to hardware and IsEnabled is true
        public bool Connect() { return true; }

        // Action when user clicks Disconnect from hardware
        public void Disconnect() { }

        // Action when user clicks Stop button
        public void Stop() { }

        public string GetName() { return "My Plugin"; }

        // Action when changes to settings are confirmed or loaded during DMC startup
        public bool ApplySettings() { return true; }

        // Needs to return if device is connected
        public bool IsConnected() { return false; }

        // Is device is enabled
        public bool IsEnabled() { return false; }

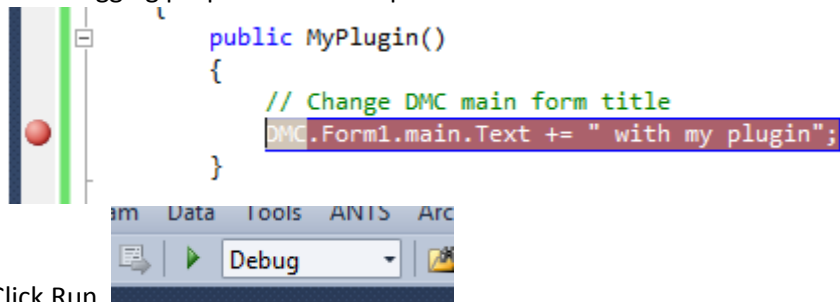
        // Called before starting recipe
        public bool OnRecipeStart() { return true; }

        // Called after recipe is finished or stopped
        public void OnRecipeFinish() { }

        // Get device settings
        public IDeviceSettings GetSettings() { return null; }

        // Get error message ( is called if Connect returns false )
        public string GetErrorMessage() { return Base.Functions.GetLastErrorMessage(); }
    }
}
```

8. For debugging purpose add breakpoint.



9. Click Run.