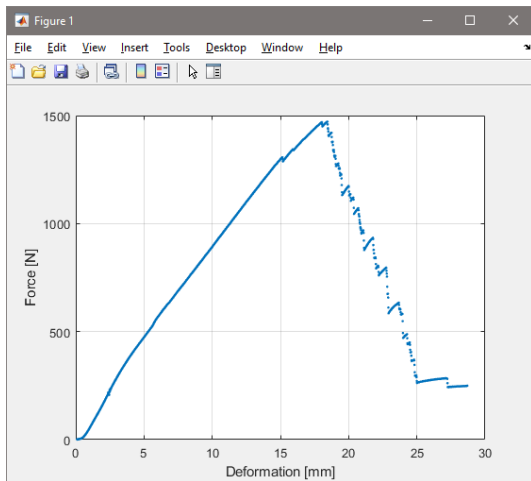


Solution

- 1 Write a script to draw a force-deformation curve of the electric fence that is on the first sheet (*sample1*) of the file *fences.xlsx*
 - use and study the command `xlsread` to retrieve data from the file
 - insert axis labels

```
1 clear,clc,close all
2
3 data = xlsread('fences.xlsx','sample1','A:B');
4 plot(data(:,2),data(:,1),'.')
5 xlabel('Deformation [mm]')
6 ylabel('Force [N]')
7 grid on
```

Script m-files



Solution

- 2 Create a function (*distan.m*) to calculate the distance of two points in the plane $[x, y]$

```
1 function v=distan(A,B)
2 % distan - Euclidean distance of two points
3 % A, B - two points with coordinates x, y
4 v=sqrt((B(2)-A(2))^2+(B(1)-A(1))^2);
```

```
>> A=[1 1]
A =
     1     1

>> B=[2 2]
B =
     2     2

>> distan(A,B)
ans =
     1.4142
```