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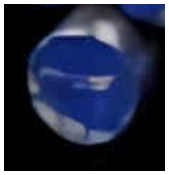
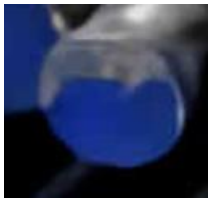
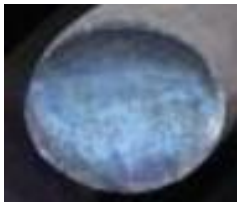
EKSTRAKSI CITRA BESI

1. Data Citra Besi

NO	CITRA	HASIL EKSTRAKSI CITRA BESI	
		Perimeter	Luas
1		6824.88	1009.63
2		2954.25	656.125
3		11881.4	710.625
4		6926.13	2313.5
5		3543	397.875

6		10961.1	675.25
7		7638.13	409.375
8		2339.75	341.625
9		5790.63	748.125
10		7089.88	633.75
11		5344.25	716.5

12		202648	3621.63
13		9335.25	1284.75
14		7452.5	1384.38
15		11645.8	872
16		14654.9	907
17		2272.75	317.375

18		4168	441
19		5146	480.75
20		4207.88	709.5

2. Source Code :

```
% --- Executes on button press in pushbutton1.
function pushbutton1_Callback(hObject, eventdata, handles)
% hObject    handle to pushbutton1 (see GCBO)
% eventdata  reserved - to be defined in a future version of MATLAB
% handles    structure with handles and user data (see GUIDATA)
[filename,pathname] = uigetfile('*.jpg');

if ~isequal(filename,0)
    Img = imread(fullfile(pathname,filename));
    axes(handles.axes1)
    imshow(Img)
else
    return
end

handles.Img = Img;
guidata(hObject, handles)

% --- Executes on button press in pushbutton2.
function pushbutton2_Callback(hObject, eventdata, handles)
% hObject    handle to pushbutton2 (see GCBO)
% eventdata  reserved - to be defined in a future version of MATLAB
% handles    structure with handles and user data (see GUIDATA)
Img = handles.Img;

Img_gray = rgb2gray(Img);
axes(handles.axes2)
```

```
imshow(Img_gray)


handles.Img_gray = Img_gray;
guidata(hObject, handles)

% --- Executes on button press in pushbutton3.
function pushbutton3_Callback(hObject, eventdata, handles)
% hObject    handle to pushbutton3 (see GCBO)
% eventdata  reserved - to be defined in a future version of MATLAB
% handles    structure with handles and user data (see GUIDATA)
open=guidata(gcbo);
gray = handles.Img_gray;
t=graythresh(gray);
biner=im2bw(gray,t);
set(open.figure1,'CurrentAxes',open.axes3);
set(imagesc(biner));colormap('gray');
set(open.axes3,'Userdata',biner);
open=guidata(gcbo);
a = handles.Img;
b = rgb2gray(a);
level = graythresh(b);
c = im2bw(b,level);
area = bwarea(c);
perim = bwperim(c);
perimeter = sum (sqrt(sum(area,2)));
set(open.edit2,'string',area);
set(open.edit1,'string',bwarea(perim));
```