

## DAFTAR PUSTAKA

Grunbauer, Johann. *What Makes Castellated Beams So Desirable As a Constructional Element.* <http://www.grunbauer.nl/eng/inhoud.htm> . 28 Januari 2011.

**Suhendro, Bambang, 2000, Metode Elemen Hingga dan Aplikasinya, UGM, Yogyakarta.**

**Amayreh, L and Saka M.P, 2005, “Failure Load Prediction of Castellated Beams Using Artificial Neural Networks”, Department of Civil Engineering, University of Bahrain, Bahrain.**

Sumber : <http://tazziemania.wordpress.com/link-tazzie/>

**Blodgett Omer W., 1985, Design of Welded Structure in Wide Flage Beam , The James F. Limcoln Arc Welding Foundation, Ohio,**

.([http://en.wikipedia.org/wiki/Deflection\\_engineering](http://en.wikipedia.org/wiki/Deflection_engineering)).

Sumber : <http://bambangpurwantana.staff.ugm.ac.id/KekuatanBahan>

([http://en.wikipedia.org/wiki/Deflection\\_engineering](http://en.wikipedia.org/wiki/Deflection_engineering)).

Wahyudi, Rubiono, G., dan Mujianto, H. *Defleksi dan Hal-hal Yang Mempengaruhi.* E-Jurnal Teknik Mesin, Vol. 5 No. 1. Jurusan Teknik Mesin, Fakultas Teknik. Universitas Gajah Mada. Desember 2011.

Azwir, H., Purwanto, A., dan Wibowo, H. *Gaya Geser dan Momen Lentur Pada Balok.* E-Jurnal Teknik Mesin, Vol. 3 No. 1. Jurusan Teknik Mesin, Fakultas Teknologi Industri. Institut Pertanian Bogor. Desember 2014

(Steenie E. Wallah, Servie O. Dapas, 2015).



# LAMPIRAN

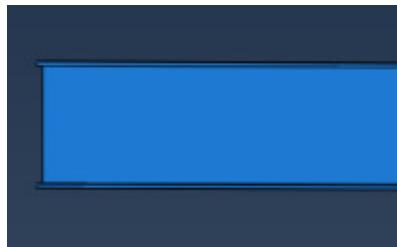
(Hail Output Castellated Beam Sebelum dan Setelah Running di  
Abaqus)



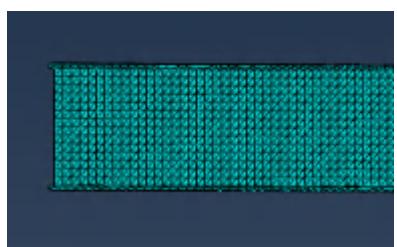
## KETERANGAN GAMBAR



BEAM SEBELUM  
MATERIAL DIINPUT



BEAM SETELAH  
MATERIAL DIINPUT



BEAM SETELAH DI  
MESH



BEAM SETELAH  
RUNNING

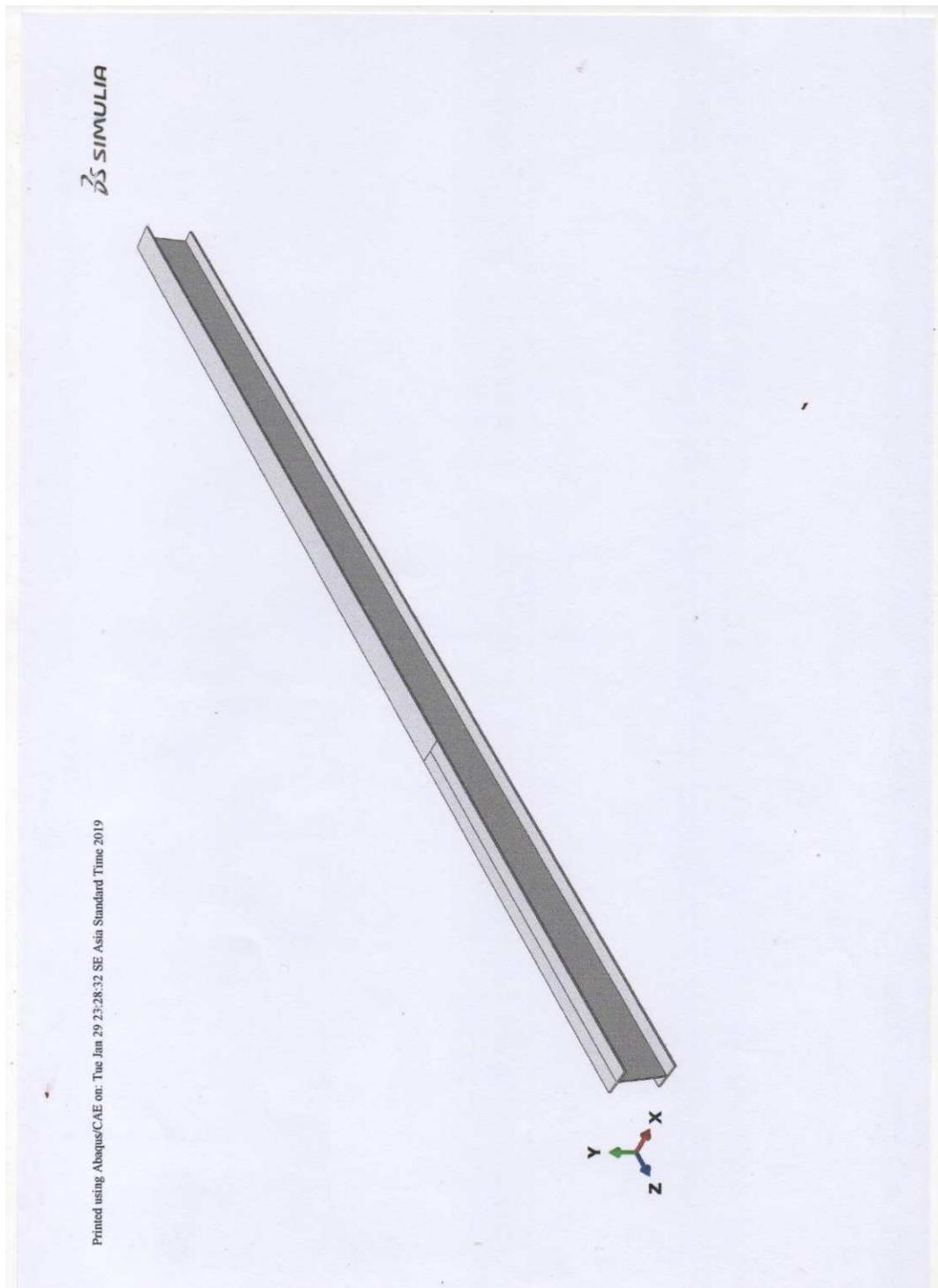


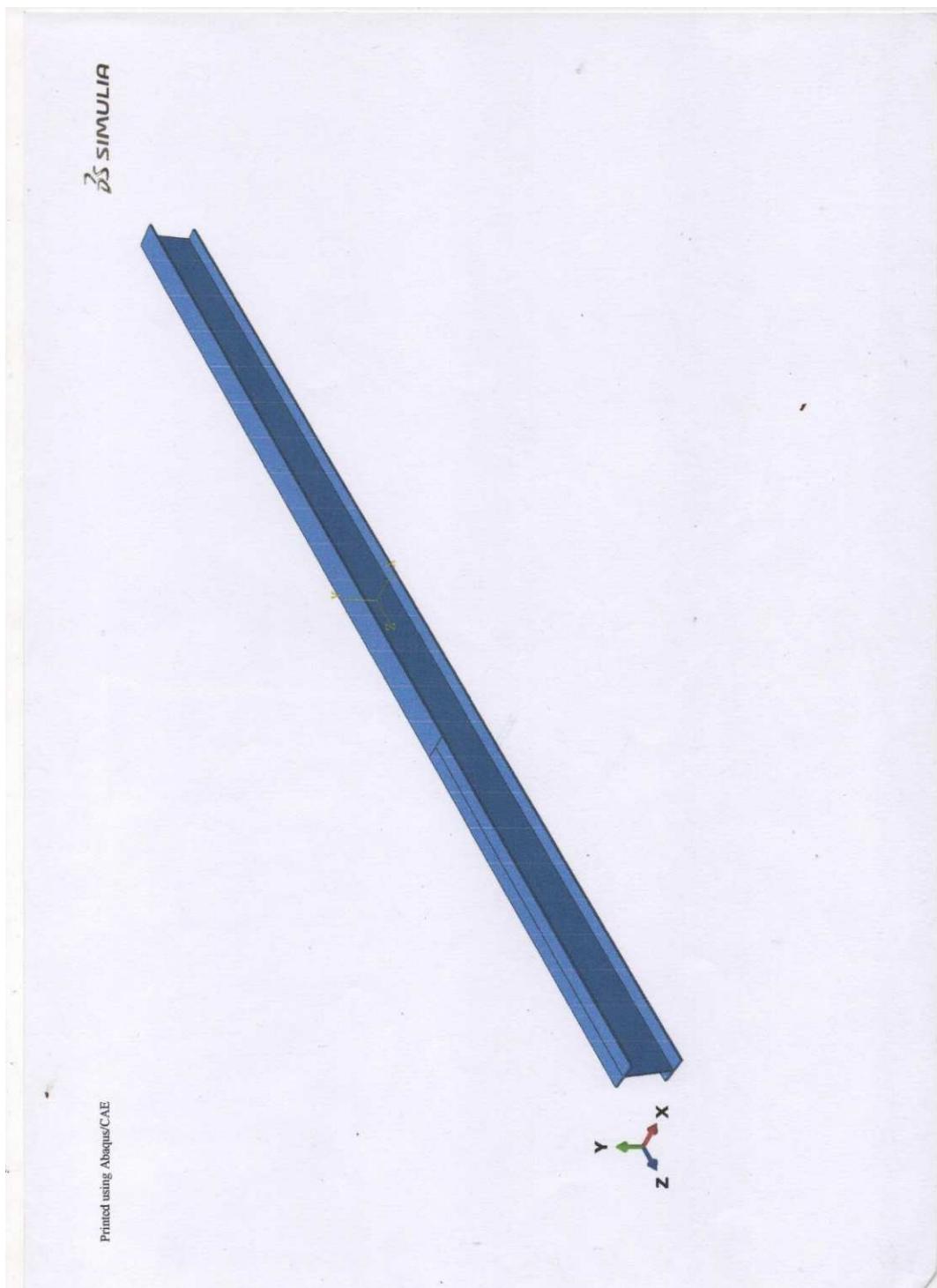
Optimization Software:  
[www.balesio.com](http://www.balesio.com)

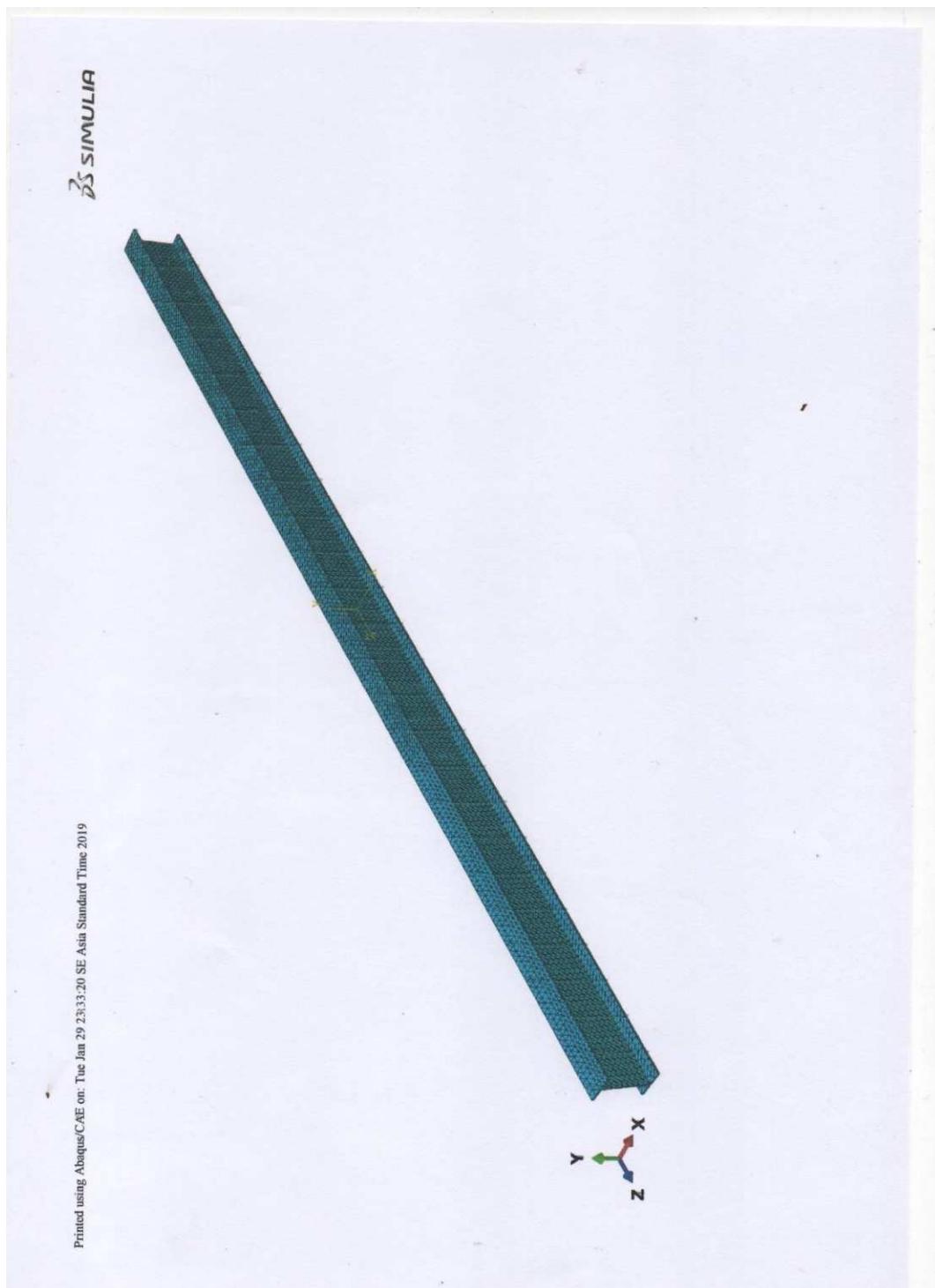
# IWF 200 mm

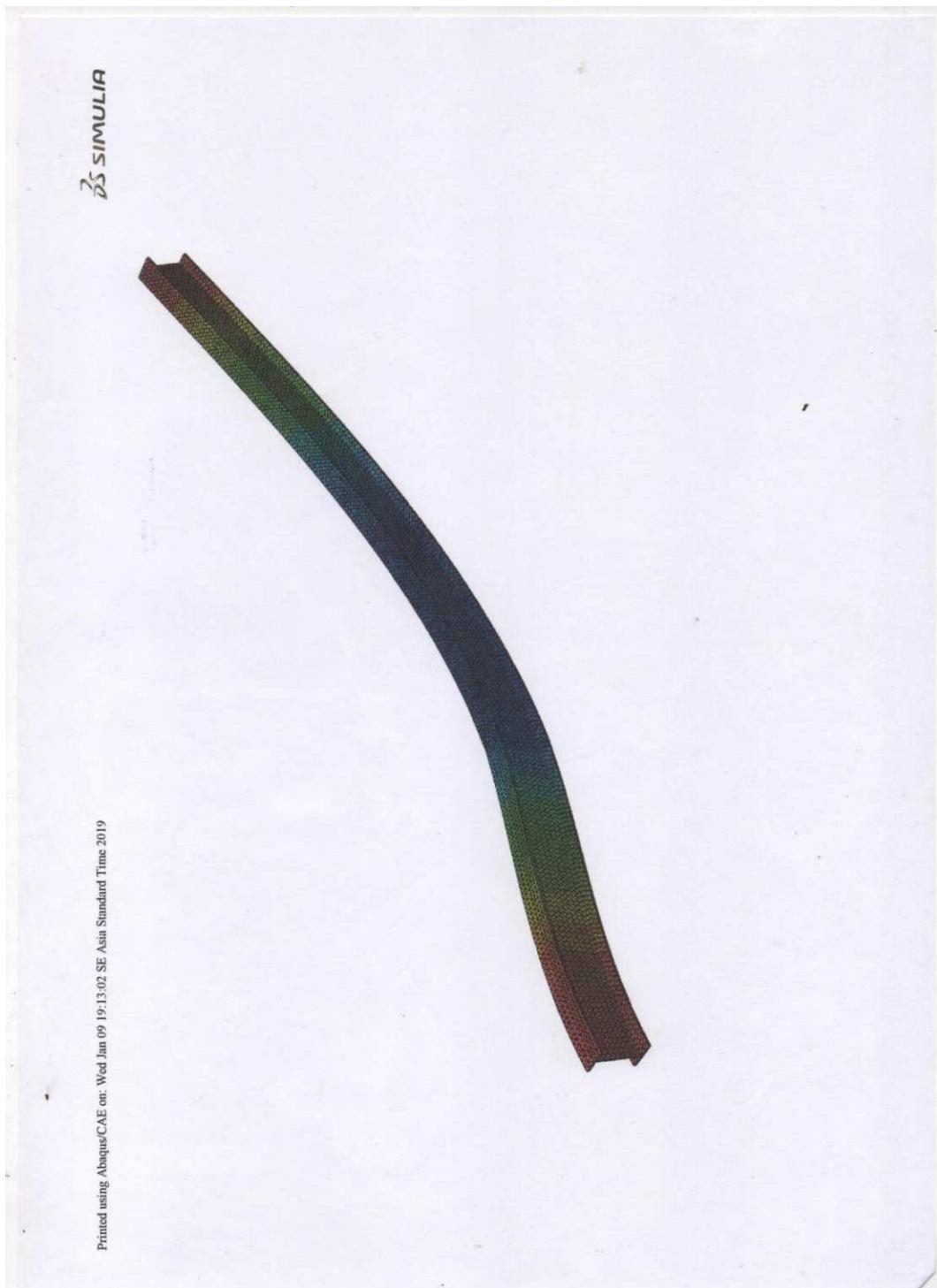


Optimization Software:  
[www.balesio.com](http://www.balesio.com)





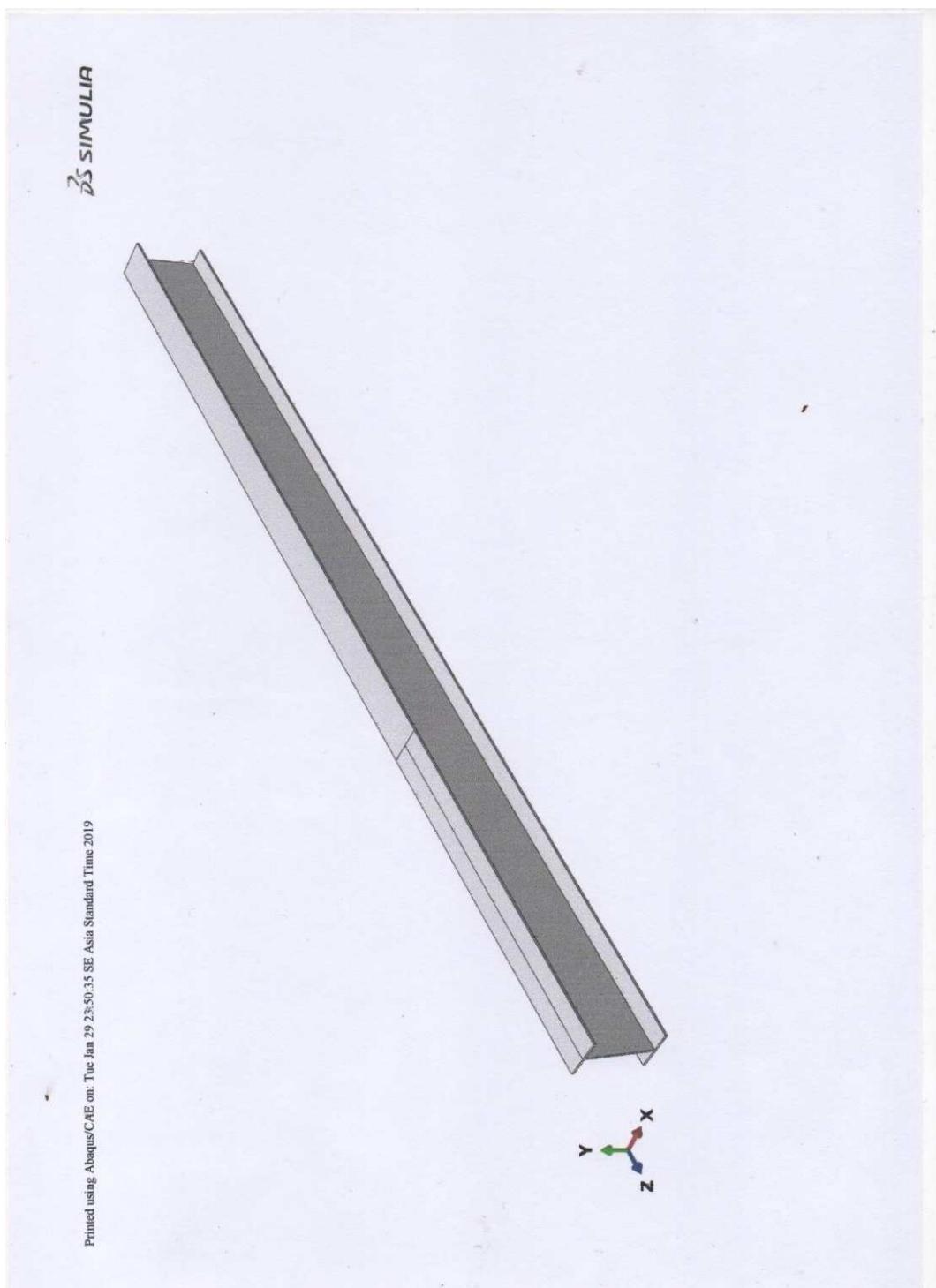


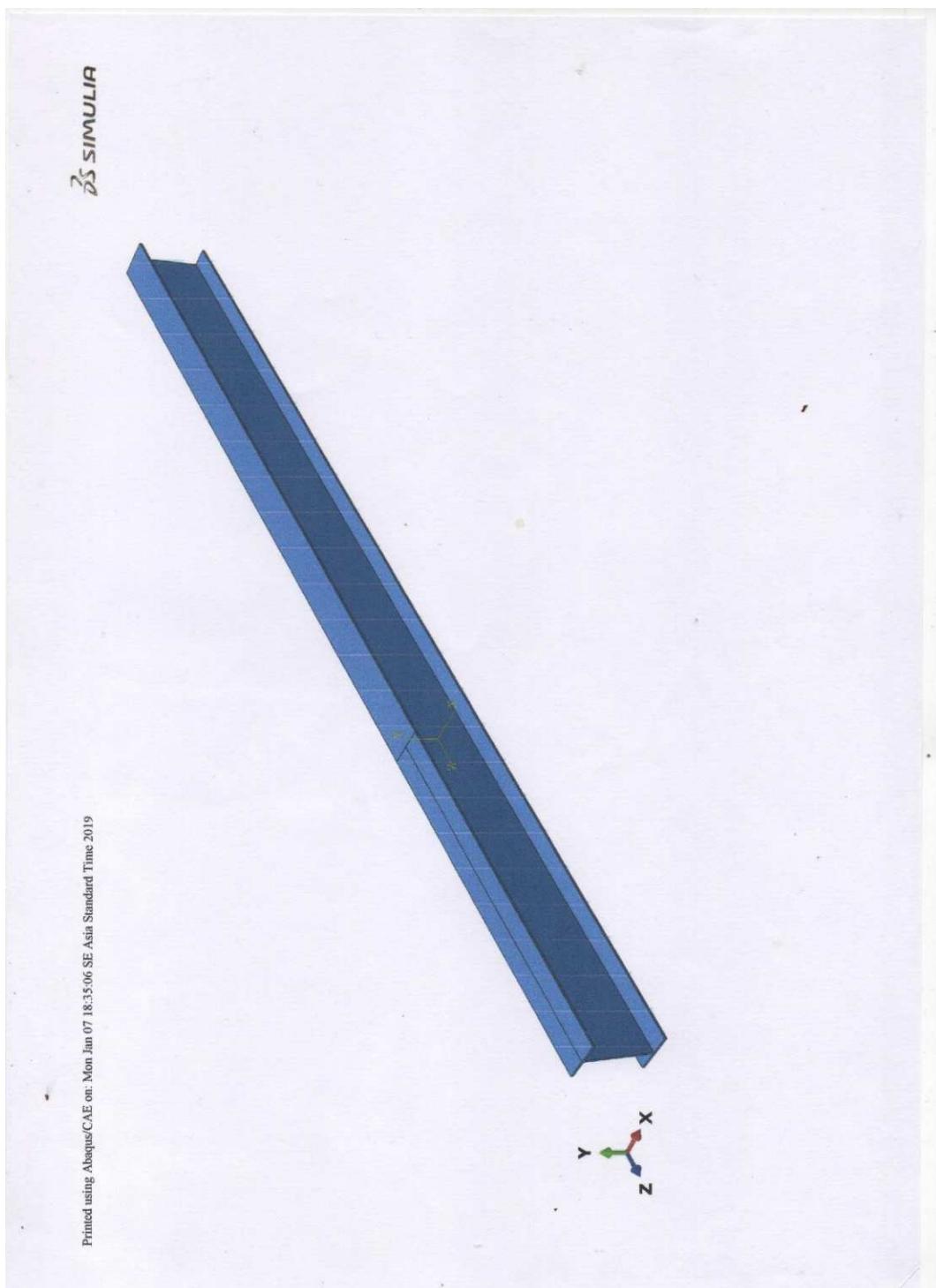


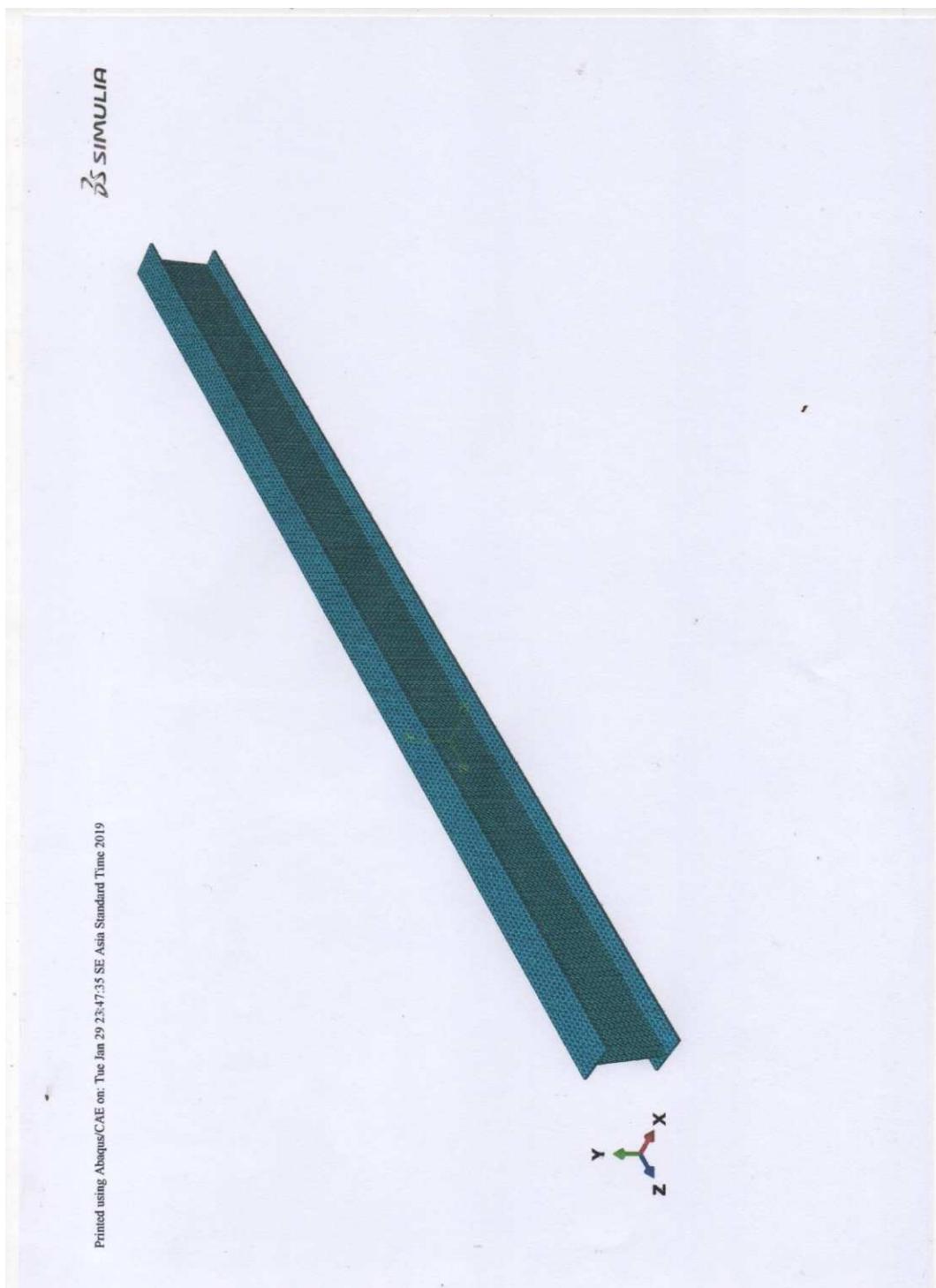
# IWF 300 mm



Optimization Software:  
[www.balesio.com](http://www.balesio.com)







Printed using Abaqus/CAE on: Tue Jan 29 23:47:35 SE Asia Standard Time 2019



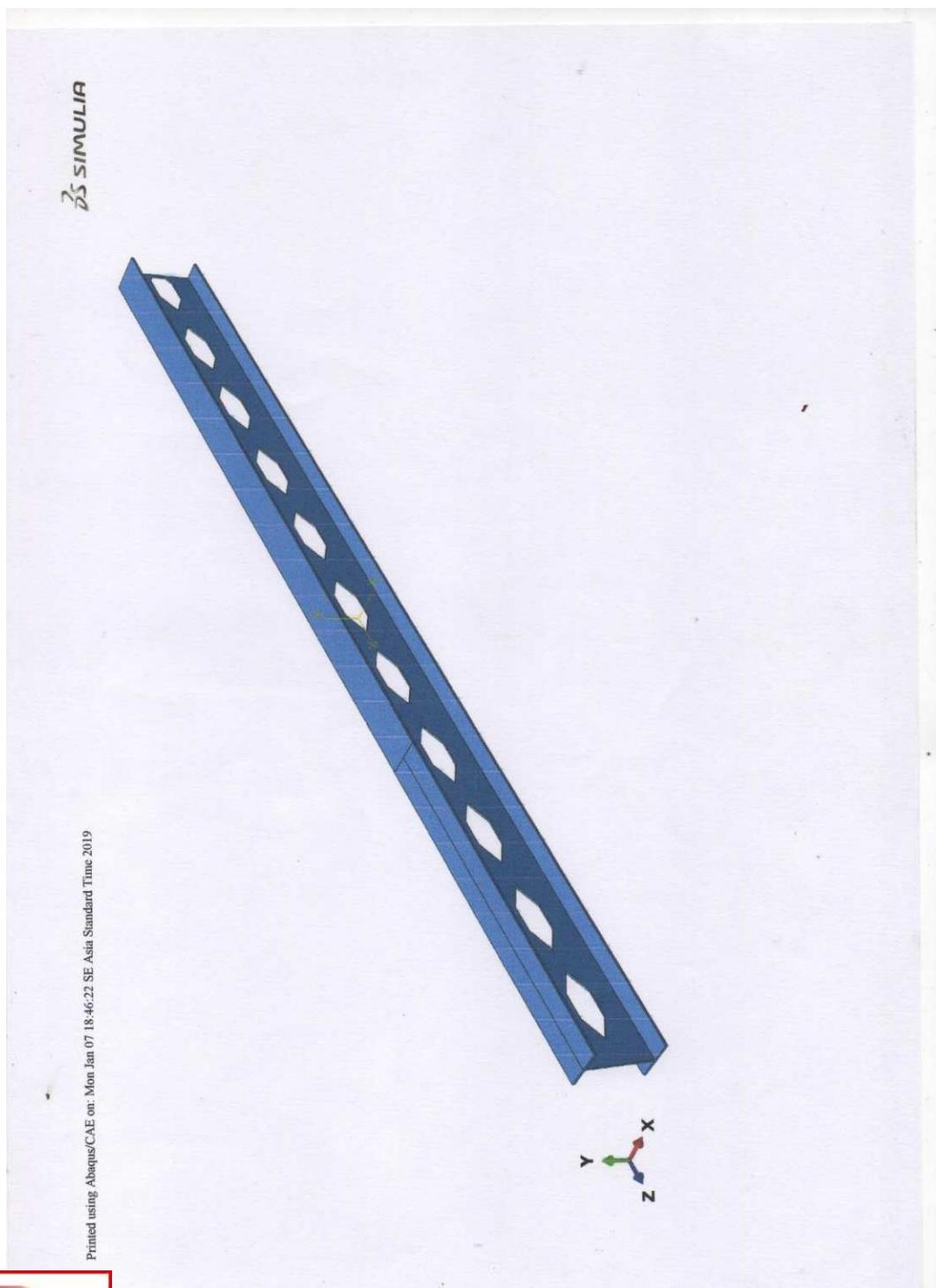


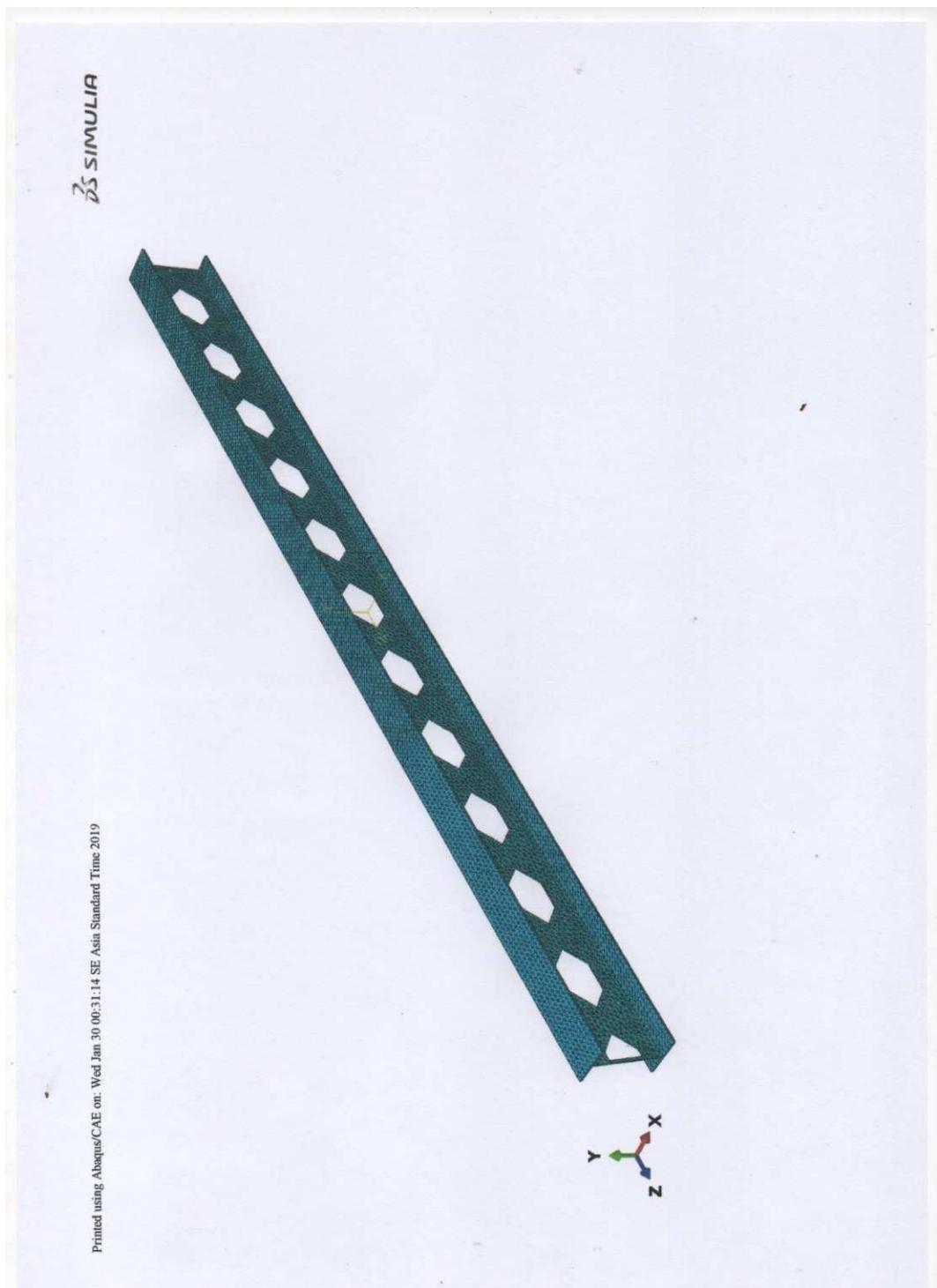
Optimization Software:  
[www.balesio.com](http://www.balesio.com)

# CASTELLATED BEAM 30°



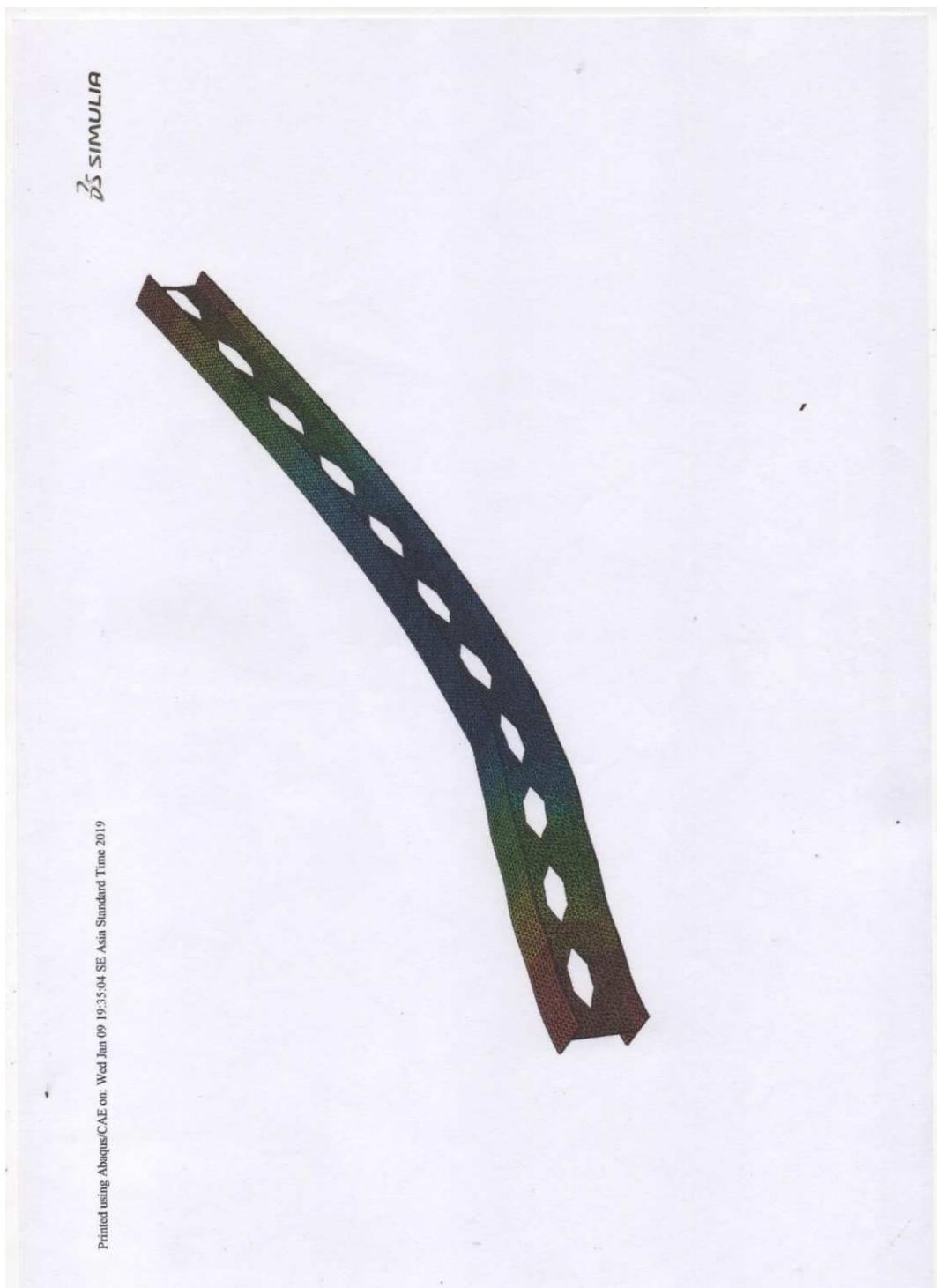
Optimization Software:  
[www.balesio.com](http://www.balesio.com)





Printed using Abaqus/CAE on: Wed Jan 30 00:31:14 SE Asia Standard Time 2019





Optimization Software:  
[www.balesio.com](http://www.balesio.com)

# CASTELLATED BEAM 45°



Optimization Software:  
[www.balesio.com](http://www.balesio.com)

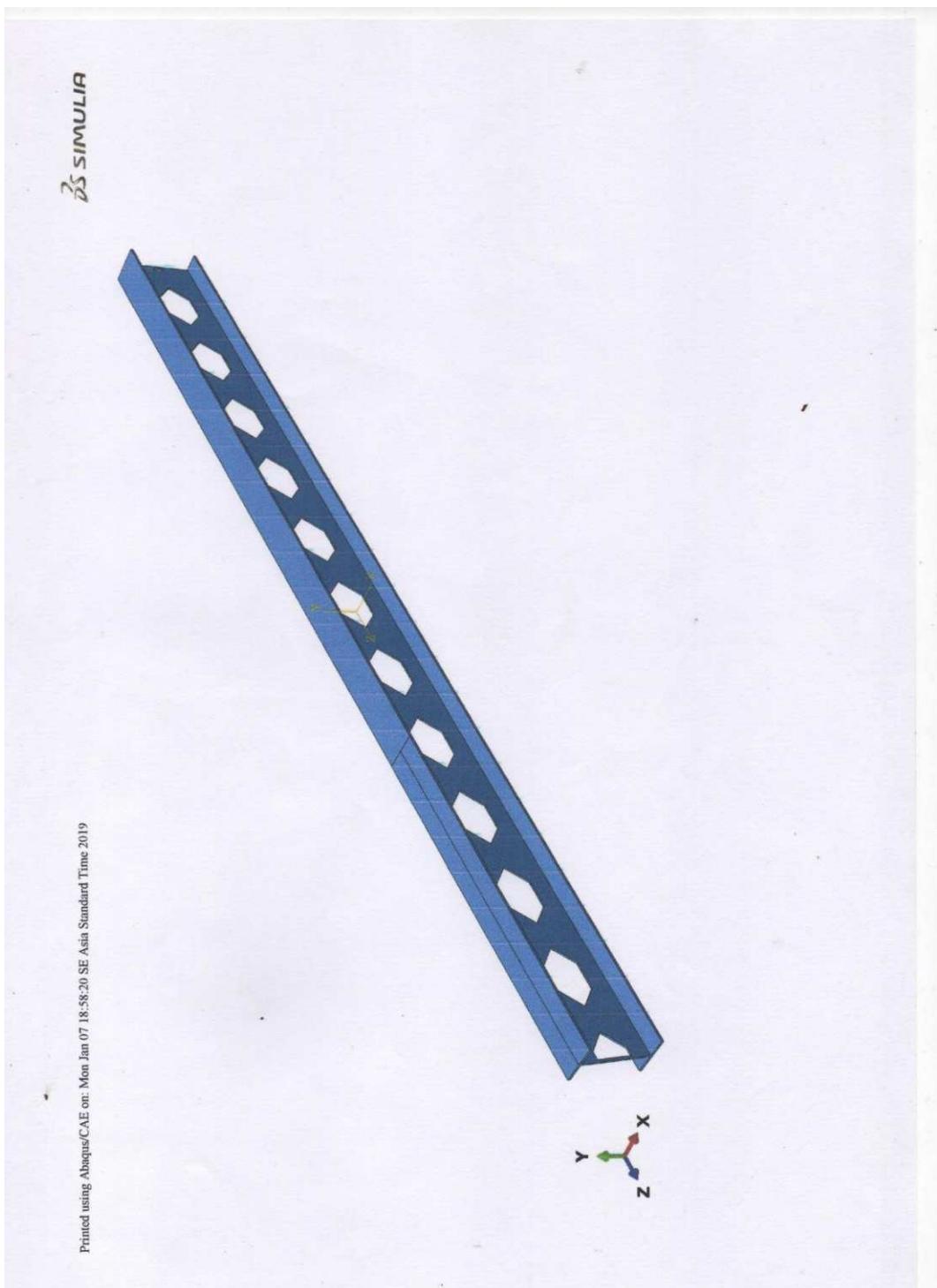
*DS SIMULIA*

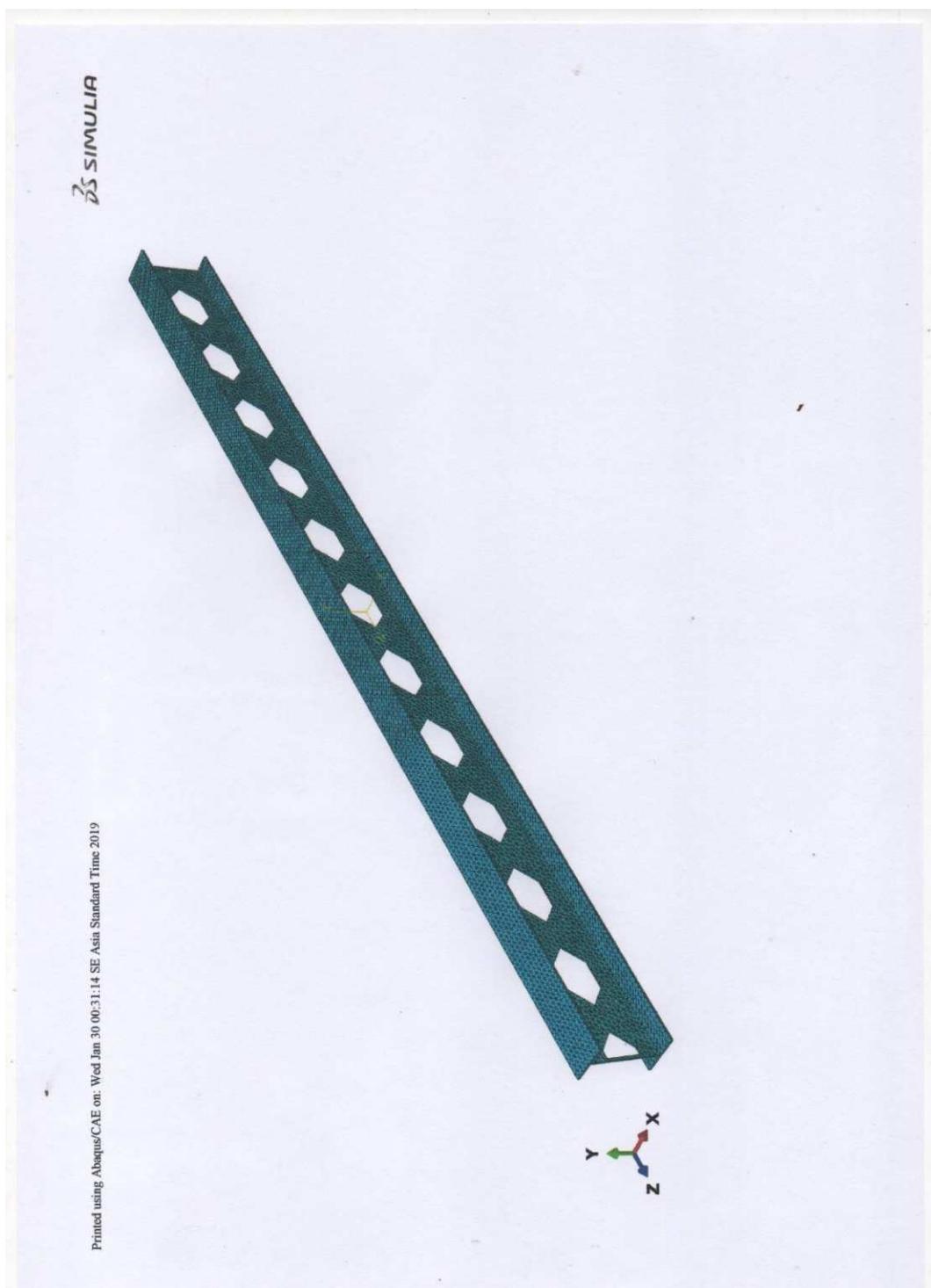


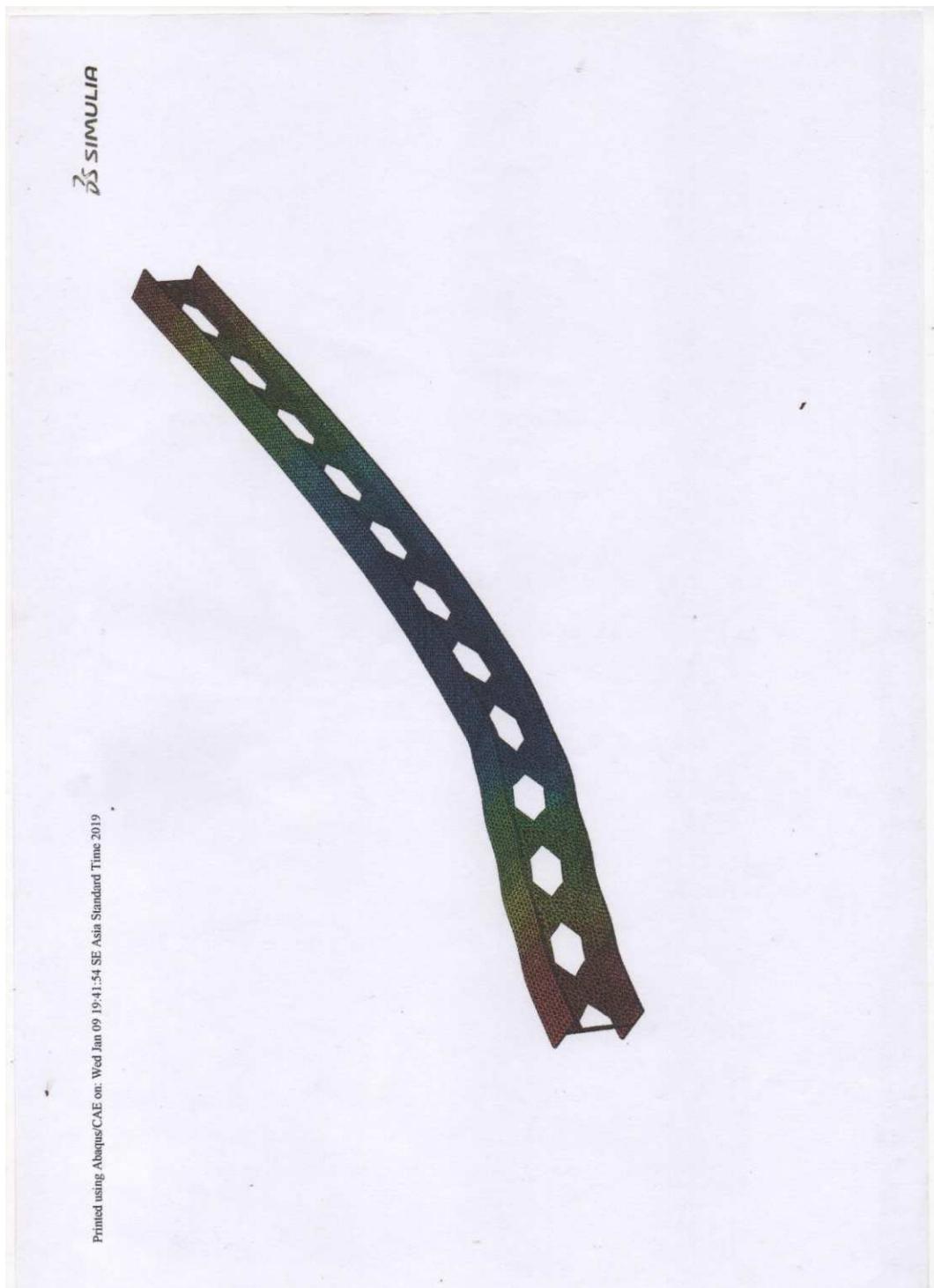
Printed using Abaqus/CAE on: Wed Jan 30 00:35:50 SE Asia Standard Time 2019



Optimization Software:  
[www.balesio.com](http://www.balesio.com)

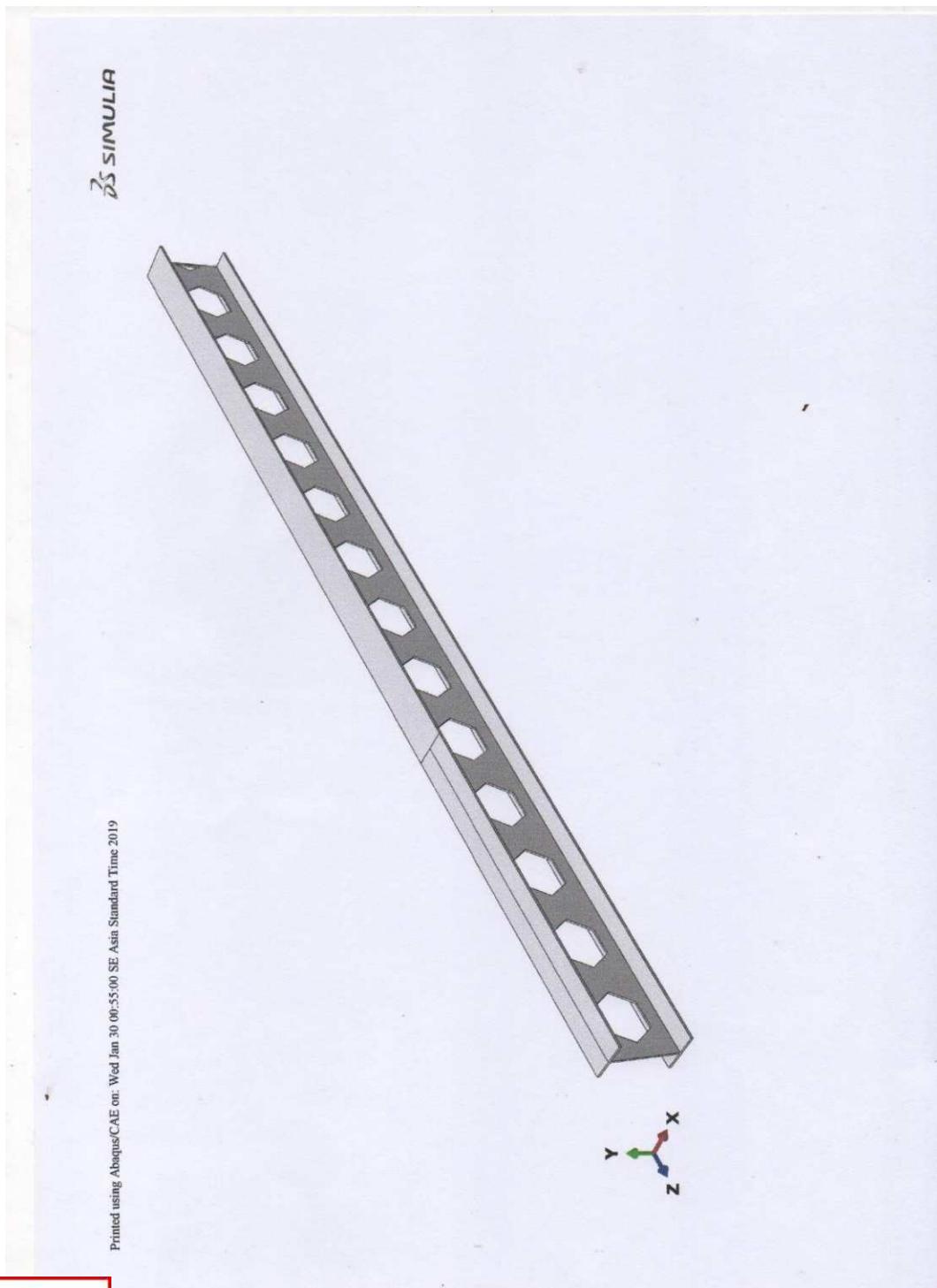


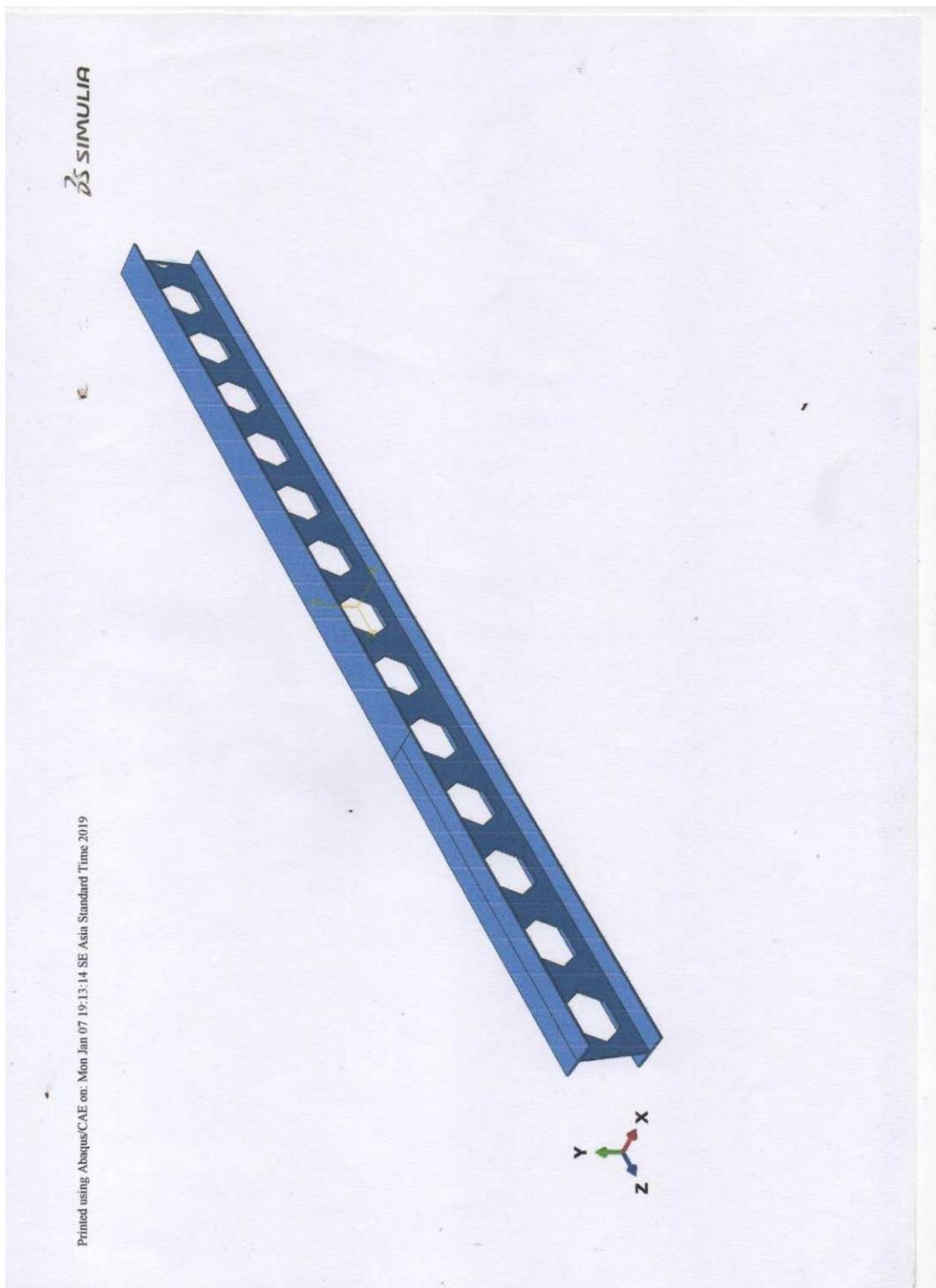




# CASTELLATED BEAM 60°

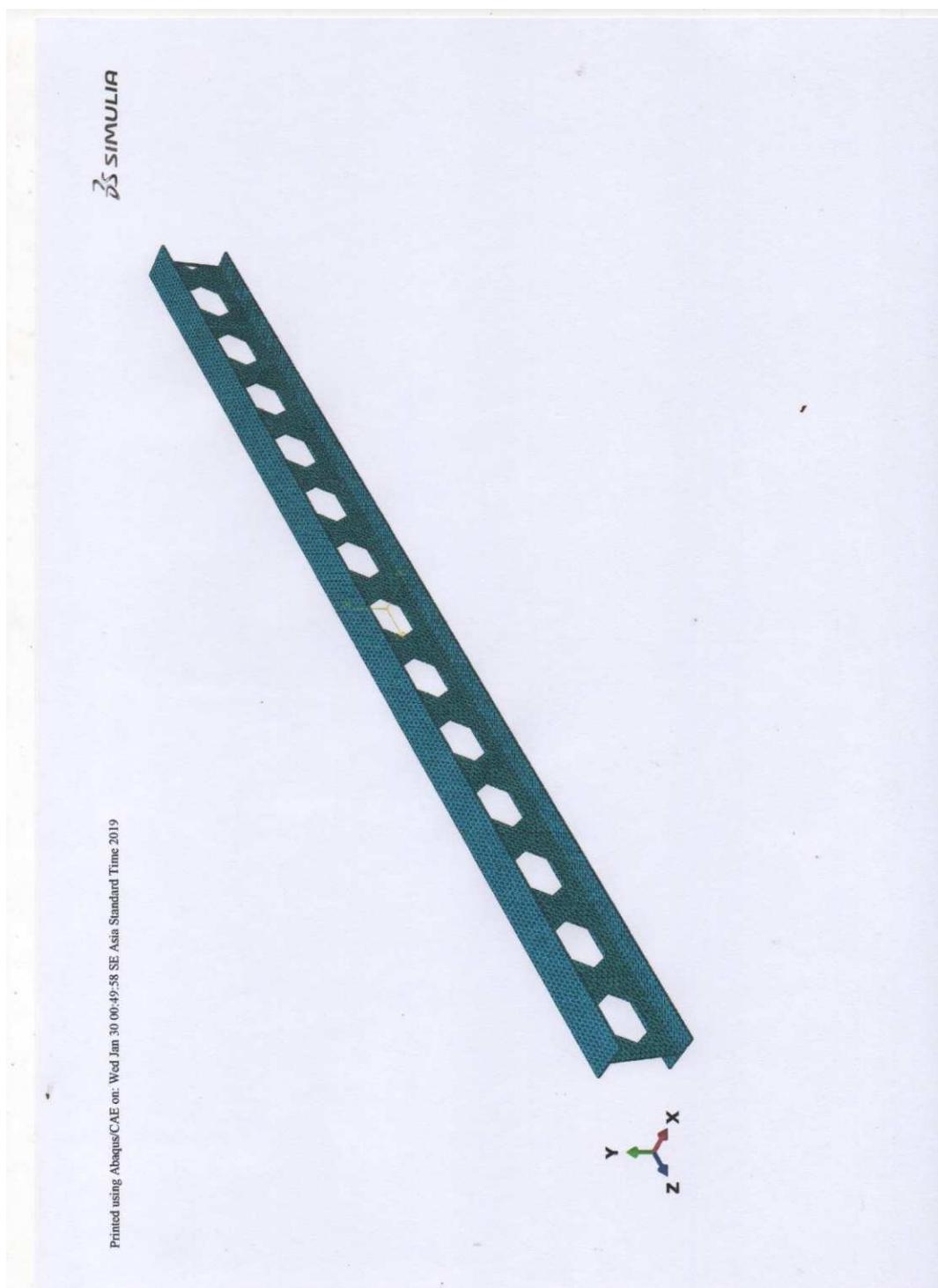


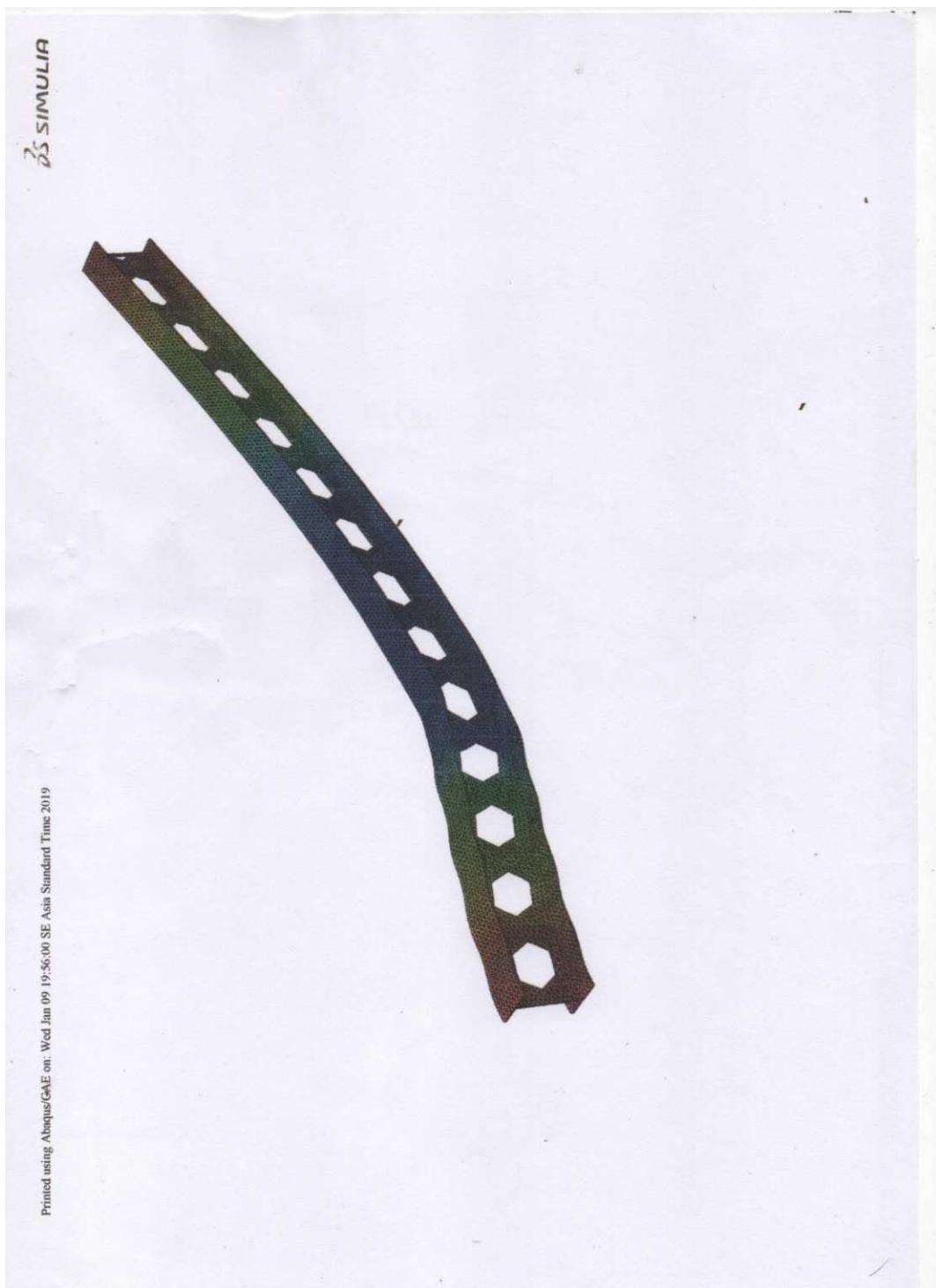




Printed using Abaqus/CAE on: Mon Jan 07 19:13:14 SE Asia Standard Time 2019







Printed using Abaqus/GaE on: Wed Jan 09 19:56:00 SE Asia Standard Time 2019



Optimization Software:  
[www.balesio.com](http://www.balesio.com)